

فاعلية استخدام الصف المعكوس في تدريس اللغة الإنكليزية لتنمية

الفهم القرائي لدى طالبات الصف الاول متوسط

**The Effectiveness of Using the Flipped Classroom in Teaching English Language to Develop Reading Comprehension among First Intermediate Class Female Students**

**Rana Akram M.Ali Al-Rjbo**

**Assistant Teacher**

**Ministry of Education-**

**Ninawa Directorate of**

**Education**

**رنا أكرم محمد علي أحمد الرجبو**

**مدرس مساعد**

**وزارة التربية - مديرية تربية نينوى**

**ranaakram2015@gmail.com**

**تاريخ القبول**

**٢٠٢٣/٩/٣**

**تاريخ الاستلام**

**٢٠٢٣/٧/٥**

**الكلمات المفتاحية: الصف المعكوس، الفهم القرائي، مهارات الفهم القرائي، طالبات**

**الصف الاول متوسط**

**Keywords: inverse classroom, reading comprehension, reading comprehension skills, fifth grade students**

**الملخص**

تهدف الدراسة الى الكشف عن فاعلية استخدام الصف المعكوس في تدريس اللغة الإنكليزية لتنمية الفهم القرائي لدى طالبات الصف الاول متوسط في مدرسة متوسطة الحريري للبنات في محافظة نينوى، وذلك من خلال مقارنتها بالطريقة الاعتيادية في التدريس التي طبقت بمدرسة متوسطة زبيدة للبنات، واتبعت الدراسة المنهج شبه التجريبي على عينة تكونت من (٤٠) طالبة، ووزعت العينة عشوائيا في مجموعتين متساويتين بالعدد، حيث درست طالبات المجموعة التجريبية مجموعة من النصوص القرائية الإنكليزية باستخدام استراتيجية الصف المعكوس، بينما درست طالبات المجموعة الضابطة النصوص نفسها بالطريقة الاعتيادية، ولتحقيق أهداف الدراسة، أعدت الباحثة اختبار تحصيلي من نوع اختيار من متعدد لقياس مستوى الفهم القرائي (الحرفي، والاستنتاجي، والنقدي، والإبداعي) للمجموعتين، وبعد تطبيق الاختبار على مجموعتي الدراسة (قبلي وبعدي) على مجموعتي الدراسة، أظهرت النتائج وجود فروق ذات دلالة إحصائية عند مستوى الدلالة ( $= 0.05$ ) بين درجات المجموعتين على اختبار الفهم القرائي وعلى جميع المهارات ولصالح طالبات المجموعة التجريبية، كون هذه الاستراتيجية تركز على التعلم الذاتي طالبات. ساهم في تنمية مهارات الفهم القرائي لدى طالبات المجموعة التجريبية في وأوصت الدراسة باستخدام استراتيجية الصف المعكوس في تدريس اللغة الإنكليزية ومهاراتها المختلفة، وفي مراحل التعليم الأخرى المختلفة.

### Abstract

The current study aims to reveal the effectiveness of using the Flipped classroom in teaching English to develop reading comprehension among First-grade students at Al- Hariri intermediate school for girls (experimental group), by comparing it with the tradition method of teaching in Al Zubaida intermediate school for girls (control group) in Nineveh governorate. The study adopted the semi-experimental approach on a sample consisting of (40) students, and the sample was randomly distributed divided into two groups of equal number. The students in the experimental group studied a group of English reading texts use the inverse classroom strategy, while the students of the control group studied the same texts in the traditional way.

The present study prepares an achievement test to achieve the objectives of the study, from a multiple-choice type to measure the level of reading comprehension (literal, deductive, critical, and creative) of the two study groups. After applying the test on the two study groups (before and after), the results showed that there were statistically significant differences at the significance level ( $= 0.05$ ) between the scores of the students of the two study groups on the reading comprehension test and on all skills, and for the benefit of the experimental group students who studied using the inverse classroom. The results also showed that the inverse classroom, as this strategy focuses on self-learning of students, and makes it the focus of learning, from the English language subject. The present study contributed to the development of reading comprehension skills among the students in the experimental group in the study recommended the use of the inverse classroom strategy in teaching the English language and its various skills, and in the various other stages of education.

## 1. Introduction

Language is a means known to humanity to achieve communication between its races. It has ensured intellectual communication and the cultural link between peoples. With language, man was able to express his needs, desires, and feelings, and to translate his thoughts. All of this happens in linguistic communication based on four main language skills represented in: listening, speaking, reading and writing. These four skills are interrelated and complementary, and in terms of these interdependence and integration, language communication is achieved as required. Therefore, reading received the attention of studies and research that focused on analyzing it and interpreting its processes <sup>(1)</sup>. With it, to become an activity-based process in my mind, the personality of the reader intervenes in it, with the aim of standing on the meaning and understanding the reader <sup>(2)</sup>.

In order to achieve a deep understanding of the meaning and the development of various skills in general, and creative reading skills in particular, as well as the educational field's need for modern teaching methods that keep pace with the digital age in which we live so as to contribute to raising the educational competence of male and female teachers and in a manner that meets the needs of learners. This strategy in teaching and knowing the possibility of using it to improve the methods used in teaching English <sup>(3)</sup>.

In light of this, it was possible to develop creative reading skills in the subject of the English language through the use of the reverse classroom strategy that is based on the ideas of constructivist theory and active learning mechanisms that focus on the student, his positive

---

(1) Nashwan, 2016.

(2) Galvan, 2015.

(3) Johnson & Renner, 2012.

interaction, his active participation and responsibility for the learning process, building his abilities and developing his various skills. And make him less dependent on memorization, and more able to process information and exercise higher-order thinking skills. The strategy of the reversed class achieves the principles of modern education. The curriculum is adapted to the reality of the student's life and future, and helps him learn through the use of appropriate modern methods rather than indoctrination.

### 1.1 Problem of The Study

Our current era witnesses a rapid development and change in all fields of knowledge and the methods of its application. English language books in the intermediate stage have witnessed several changes. This change has been also reflected in the methods of obtaining them, which had an impact on the methods and methods of teaching and developing reading comprehension. (Literal, deductive, critical, and creative) in the English language, as it has become necessary to stand on the teaching methods used to deliver information to students, especially intermediate school students, so that the student at this stage has an open mind, and is able to absorb facts and understand the information within his curriculum, And from the exchange of opinions with specialized supervisors and school principals as well as English language teachers, it became clear to the researcher that the English language book for the first grade of intermediate school contains many concepts and terms that may seem unfamiliar to students, especially since the English language curriculum for this stage is among the new curricula approved by the Ministry of Education <sup>(1)</sup>. Therefore, the researcher decided to find an appropriate

---

(1) Nashwan, 2016.

and simplified teaching method that makes them able to understand and interpret the reading easily.

In order to improve their performance level and make them able to practice the English language without the slightest difficulty, in addition to developing their capabilities in the educational situation, as well as encouraging teamwork among them and increasing the spirit of camaraderie. And cooperation with each other on the one hand and between them and the teacher on the other hand, as this method (the teaching method represented by the flipped learning strategy) will help encourage students to ask questions, propose solutions, exchange ideas, create a lively classroom atmosphere and exchange information <sup>(1)</sup>.

After reviewing, perusing, and extrapolating previous studies, this study did not find within the limits of its knowledge and familiarity with studies that examine the effect of flipped learning on reading comprehension (literal, deductive, critical, and creative). This generated the researcher's feeling that there is a need to study the impact of this strategy on the scientific survey and the effectiveness of reading comprehension for the fifth grade of primary school, Some previous studies recommended conducting studies that investigate the impact of flipped learning in different subjects and age stages, such as: the study of <sup>(2)</sup>, and the study of <sup>(3)</sup>.

Therefore, the researcher believes that the flipped learning strategy, whose idea is based on allowing students to think and encourage their ideas about the topic of the lesson, and then sharing them, is one of the strategies that develop students' learning skills. In addition to arousing their enthusiasm and then encouraging them to

---

(1) Strayer, 2007.

(2) Hamdallah, 2015.

(3) Al-Mashni, 2015

think and increase the level of their scientific exploration and develop their reading comprehension skill by activating their minds to understand what is presented during the lesson in a good and correct manner.

### 1.2 Significance of the study

Today, the world witnesses how closely science is linked to the life and renaissance of nations, as it lives in an era full of scientific developments and technology, which in turn affected its future and thinking <sup>(1)</sup>, And the scientific progress achieved by man in the modern era is one of the greatest achievements that man has achieved in his life since ancient times, and the era in which we live has become distinguished by the effects of this clear progress, which invites us to call it the era of science <sup>(2)</sup>.

From the foregoing, the importance of the study stems from the following points:

1. This study contributes to the development of the English language book by enriching it with activities that are based on the strategy of flipped learning, which develop scientific inquiry and the effectiveness of reading comprehension among students.
- 2- This study helps to provide modern strategies for teachers of English, as well as for planners of curricula and teaching methods to develop more effective educational models and strategies, in order to better enrich the educational process.
- 3- Guidance towards the use of modern technology in teaching the English language in the classroom, in a way that enriches the educational and learning process, and facilitates the learning of the

---

(1) Al-Kubaisi and Al-Dahry, 2000.

(2) Abdul Hussein, 2008.

English language, by focusing on the learning process using the strategy of teaching by reverse learning inside and outside the classroom.

4- Meeting the needs of the educational field in the Arab world in general by adopting a new type of education in the various educational stages and for the various disciplines, in line with the trends of the digital generation, which helps transform the education process into learning.

5- The necessity of benefiting from the educational applications that emerged from teaching theories or educational models, especially the flipped learning strategy, which may contribute to improving the educational process and giving a prominent role in making students the focus of the educational process and reducing the disadvantages of traditional teaching methods in which the teacher is the focus of the educational process.

6- The current study is the first of its kind in Iraq in the subject of the English language in the fifth primary stage, as far as the researcher knows.

7- Teachers and supervisors of the development of English language curricula in the primary stage may benefit from this research by informing them of its results and study plans.

### **1.3 Objectives of the study**

The current research objectives are to identify:

1- The effect of the flipped learning strategy in the scientific survey among the first-grade students in the English language subject.

2- The effect of the flipped learning strategy in developing the effectiveness of reading comprehension among fifth grade students in the English subject.

#### 1.4 Hypotheses of the Study

This study assumed a set of hypotheses to achieve its goal as shown below:

- 1- There is no statistically significant difference at the significance level ( $0.05\alpha$ ) between the mean scores of the experimental group and the scores of the control group in the post application of reading comprehension skills.
- 2- There is no statistically significant difference at the significance level ( $0.05\alpha$ ) between the mean scores of the experimental group in the pre and post applications of reading comprehension skills test.
- 3- There is no statistically significant difference at the significance level ( $0.05\alpha$ ) between the mean scores of the experimental group and the scores of the control group in the post application of the reading comprehension skills test in its main detailed levels.

#### 1.5 Limitation of the study

The current study determined by the following:

- 1- The human limit: students of the first intermediate school who are continuing to work (day schools) in the Nineveh Education Directorate for the academic year (2022-2023). Intermediate school for girls (a sample consisting of (40) students), in the city of Mosul (Nineveh Governorate Center) for the academic year (2022-2023).
- 2- The time limit: The first semester of the academic year (2022-2023).
- 3- Subject limit: The first and second units of the English book for the first grade of intermediate school (English in Iraq), (2022), written by the staff of the Iraqi Ministry of Education, scheduled for the academic year (2022-2023).



## 2. Definitions and Procedural of the Study terms

- The strategy was defined procedurally: a set of procedures that the teacher (researcher) adopts in the classroom; To teach the research sample members (students in the experimental group) starting from the formulation of behavioral objectives to evaluation methods.
- Flipped Class: An educational model based on the use of modern technologies and the Internet in a way that allows the teacher to prepare the lesson through video clips, audio files, or other media, for students to view at home or anywhere else using their computers, smart phones, or computers. Their tablets before attending the lesson <sup>(1)</sup>.
- This article defines it procedurally in this study: a teaching strategy that centers around the student rather than the teacher, in which the students watch English language lessons through a short video at home before class time, while the teacher takes advantage of the time in class by providing an active interactive environment in which the students are directed and apply what they learn.
- Reading Comprehension: (Al-Najmi, 2018: 136) defined it as “enabling students to know the meaning of a word, the meaning of a sentence, linking meanings in an orderly, logical and sequential manner, retaining these meanings and ideas, and employing them in different life situations.”.
- (Muhaidat and Al-Samadi, 2020: 241) defined it as: “Students make a link between what they read (written symbols) and what they understand within the context (meaning) during their interaction with reading texts.
- The researcher defines it procedurally in this study as: a linguistic skill characterized by the student in her literal, deductive and critical

---

(1) Abdul Hussein, 2008: 2.

understanding of the read text. It is measured by the degree obtained by the student on the reading comprehension test used in the study.

- Reading Comprehension Skills: (Al-Ghamdi, 2009: 15) defined them as: “the mental performances that students make using their previous reading experiences and features of the reader to reach the meanings included in the read text, represented in the levels of comprehension skills (literal, deductive, critical, and creative).

### 3. Samples of The Study

The study members were chosen from the first intermediate students, a sample consisting of (40) students. The sample was distributed randomly into two groups, the first was an experimental group from Al-Harrerri intermediate school that consisted of (20) students, and the second was a control group from Al- Zubada intermediate school that consisted of (20) students.

### 4. Study Procedures

The present study adopted the requirements of the flipped classroom in teaching a number of reading texts in the English language to achieve the objectives of the study, and prepared a number of video clips, each clip lasting between (5-10) minutes, according to the following steps:

- 1- Determining and planning the targeted reading comprehension skills from the required reading texts.
- 2- Providing the requirements of the flipped classroom, computers, the Internet, video production applications, and a medium for transmitting the educational video produced by the students.
- 3- Preparing video clips: The researcher prepared, in cooperation with some female teachers with experience in this field, a set of video clips

was prepared, each video lasting between (5-10) minutes, and the quality of the video output was taken into account, and its consideration of specific reading texts.

4- Producing a video for each reading text, editing it and adding the required sound and light effects.

5- Adding educational activities and interactive questions to the recorded text.

6- Uploading the text included in the videos to the teacher's link and sharing it via social media with the students of the experimental group.

7- Showing the students of the experimental group at home the educational content of each video prepared by the teacher in advance.

8- The teacher in the classroom discussed the educational material included in each video that they watched at home, asked questions and inquiries about it, carried out pre-planned educational activities, and recorded the results, in order to obtain a deeper understanding of the content, and monitor and evaluate learning.

## **5. Tools of the Study**

### **- Reading Comprehension Skills Test**

In preparing the list, the researcher relied on the opinions of English language teachers, and reviewed and reviewed a number of previous studies and literature related to the subject of the study. The list consisted of four main skills: (literal reading comprehension, deductive reading comprehension, critical reading comprehension, and creative reading comprehension). A number of sub-skills emerged from it. Table (1) shows that.

Table (1)

**Levels of Reading Comprehension Skills**

Reading comprehension levels	sub skills
Literal understanding	5
Deductive understanding	5
Critical Understanding	5
Creative Understanding	5
The Total	20

-The aim of the test: measuring the level of basic grade students' acquisition of reading comprehension skills.

- Exam type: multiple choices.

- Formulation of test questions: where the questions are coded with sequential numbers (1-20), and for the alternatives (a, b, c, d).

- Consideration was taken in the formulation of the test questions: the suitability of the linguistic formulation of the test vocabulary to the level of the fifth-grade students, the equality of the alternatives in difficulty, and the absence of overlap between them. And random distribution of correct answers. And the questions are devoid of any hints of the correct answer. The questions include the four levels of reading comprehension. The difficulty of the questions varied.

- Calculating the ease and difficulty coefficients for the test items: The ease and difficulty coefficients for the test questions were calculated using the formula for calculating the ease and difficulty coefficients. The ease coefficients for the test questions ranged between (0.42-0.57).

- While the difficulty coefficients ranged between (0.28 - 0.54), and accordingly, these questions are considered uneven in terms of ease and difficulty, as it was taken into account in their preparation that some of them are students with low achievement, and the majority of them are for middle and above average students in achievement. Some of them

are for high school students' achievement, in order to take into account, the individual differences among students.

## **6. Validity of the Test**

The validity of the test means that the test measures what was set to measure it, and there are various ways to calculate the test validity coefficient, and it means the external picture or the general form of the test in terms of the type of vocabulary, how it is formulated, and the extent of the clarity of these vocabularies. The test instructions, their accuracy, and their objectivity. The test was presented to a group of arbitrators, who agreed that each item of the test measures what it was set to measure. The arbitrators agreed with a percentage of (96%) on the adequacy and appropriateness of the selected text, and with a percentage of (92%) on the appropriateness of its level for eighth grade students, after making any required amendments in the wording.

## **7. Theoretical Framework and Previous Studies**

The reversed class strategy is based on active learning, which is a reflection of the ideas of constructivist theory, where proponents of constructivist thought stress the necessity of building knowledge and not transferring it, meaning that the learner's previous knowledge and experiences are at the starting point for any new learning, and that learning is an active process that takes place Through authentic tasks, the learner has an active role in the learning process through building knowledge, and the role of the teacher is not indoctrination, but rather a directive, guide and facilitator of the learning process <sup>(1)</sup>. The idea of the reversed class is based on the fact that the student accomplishes what he is supposed to accomplish during the class session at home

---

(1) - Smith 2014.

instead of in the classroom, and on the contrary, the homework is done in the class <sup>(1)</sup>, that is, the learning processes are reversed between the class and the home, and the teacher records the explanation of the lesson.

### **Previous Studies:**

The related studies were divided into two axes, the first deals with the most prominent studies that dealt with the reversed chapter strategy, while the second axis focused on investigating some studies that were concerned with the issue of developing reading comprehension, specifically.

The first axis is the studies dealt with the strategy, and many studies were conducted on the use of the flipped classroom strategy in teaching, and the following are some studies that dealt with this strategy:

In 2019, Al-Ruwaili conducted a study aimed at the effectiveness of the flipped classroom strategy in developing creative reading skills in teaching English. The study relied on a semi-experimental approach on a sample of (67) third-grade students, divided into two groups, one of which is experimental (32). The other is a control (35) female student. The study used a creative reading skills exam in English language, and a five-point Likert scale to measure participation and development. The study concluded the effectiveness of the proposed inverted model in developing students' higher-order thinking skills. And it increased their reading learning, the results revealed.

Al-Sawat, (2016) focused on a study aimed at developing the model of English separation and students' satisfaction with the course. The study relied on a semi-experimental approach on a sample of (67)

---

(1) Tawfik & Lilly 2015.

postgraduate students at Taif University, divided into two groups, one of which is experimental (33), and the other is controlling. (34) female students, and the study used a test of higher-order thinking skills, and a five-point Likert scale to measure participation and satisfaction.

Hung (2015) studied a study to reveal the potential effects of the reversed class on the academic performance of English language teachers, their attitudes towards learning, and their levels of participation in learning. The study used the semi-experimental approach and testing as a study tool. This study showed that the regular and irregular flipped classroom lessons were effective instructional designs, more than the one in which the flipped classroom was not used, and that both the regular and irregular flipped classroom lessons helped students achieve better learning outcomes. And to develop better attitudes towards their learning experiences, and put more effort into the learning process.

While Sage and Patty, (2015) investigated a study aimed at identifying the effect of flipped learning in improving the level of reading and social participation among university students, and to achieve the goal of the study, the semi-experimental approach and testing were used as a study tool, and a sample of (27) male and female students was selected. Students from the University of Chicago, the results of the study showed that there is an effect of flipped learning in improving the level of reading skills, and the results also showed that there is an effect of flipped learning in improving communication skills between students themselves, between students and their teacher, and between students and the local community, which was reflected positively on the level of social participation as a whole.

The second axis is the studies concerned with the issue of developing reading comprehension.

Many studies dealt specifically with the development of reading comprehension, and one of these studies was a study conducted by K

A study by Al-Jabri, (2019) examined the effect of using guided exploration on developing reading comprehension among third-grade intermediate students in Jizan city. The semi-experimental approach and testing were used as a tool for the study. Two groups were selected, the first was a control group consisting of (28) male and female students, and the control group consisted of (27) students. And a female student, the test tool consisted of the achievement test prepared by the researcher, and the arithmetic mean, standard deviation, Pearson's coefficient, and Cronbach's alpha were used.

Liu, et al, (2014) aimed to identify the effect of using mobile technologies (mobile phones) in enhancing creative reading skills in the Department of Physical Fitness at Kung National University. To achieve the aim of the study, the semi-experimental approach and testing were used as a study tool. Two groups were chosen, the first was a control group consisting of (25) male and female students, and the control group consisted of (25) female students. Other all of the directories. And Shahin

(Akdalk Sahim, 2014) emphasized on A study aimed at identifying the impact of creative reading on creative writing among fifth-grade students in Turkey. To achieve the goal of the study, the semi-experimental approach and testing were used as a study tool. Turkey, the first is an officer consisting of (23) students who studied in the traditional way described in the teacher's guide, and the second experimental consisting of (22) students who studied using the creative reading approach based on critical and analytical reading, and understanding between the lines, and the results of the study showed the presence of significant differences Statistics between the level of



performance of the students of the two groups, in favor of the performance of the students of the experimental group.

Commenting on the competition studies by reviewing all previous studies, we find the following: The majority of previous studies focused on undergraduate levels, (Al-Sawat, 2016) was based on postgraduate students, a study was conducted by Hung (2015), Sage & Patti, (2015), and (Liu, ale, 2014). (Hwang Kuo & Lee, 2014), while the current study focused on female school students, and there were many tools that were applied in previous studies, where the achievement test was for the study of Al-Ruwaili, 2019, and the study of Al-Jabri, (2019), While some studies used the thinking test, including the study of Alsowat 2016, while the study of sage & Patti, 2015 used a standardized scale, and thus the current study is spent with the study of Al-Ruwaili, (2019), and the study of Al-Jabri, 2019 using a test of thinking and differs from it in the subject and content of the test Where the current study relied on the reading comprehension test as a tool for data collection, and the current study agreed with all previous studies in using the experimental approach with a quasi-experimental design.

The current study also compared with a number of studies in the scientific field - the English language, but it differed in the academic stage and its uniqueness in the variety of reading comprehension skills. Tool construction and current of the study materials, it also relied on the results of some of them in confirming the problem of the study and in discussing the results that were reached. As for what distinguishes the current study from most of the previous studies, the current study relied on using a test in developing the reading comprehension of intermediate first-grade students prepared by the researcher as a study tool. Any study in Iraq is exposed to it within the limits of the

knowledge of the researcher - by referring to specialized libraries and Arab and foreign search engines.

### **8. Implementation of the Study Experiment**

To answer the hypotheses of the study, the researcher did the following:

- 1- The pre-application of the reading comprehension test on the experimental and control the study sample of (20) female students for each group. After that correction, the scores were monitored, their averages and variance were calculated, and the difference between their averages was indicated using the "T" test for two uncorrelated means.
- 2- Applying the study by using the flipped classroom, according to the program schedule, and its implementation continued during (21) days, at a rate of three lessons per week, with (21) classroom lessons.
- 3- post-application of the test after completing the implementation of the specific reading texts, the post-application of the reading comprehension test was carried out by the students of the experimental and control groups separately, in conditions similar to the pre-application.

### **9 Methods of the study and Procedures**

Equivalence of the two search groups:

The final test for the variables of age calculated in months, the score of the English language subject for the final-year exam for the first intermediate grade for the academic year (2021-2022), and the grade average for the final-year exam for the first intermediate grade for the academic year (2021-2022)

Table (2)

the Pre-test to Test Reading Comprehension for the Equivalence  
of the Two Research Groups Table

group	number	variation	Arithmetic mean	standard deviation	T value	
					calculated	T
experimental	30	Age in months	153,6	8.653	0,702	2,002
control	30		155,2	9.002		
experimental	30	English mark	78,475	6,745	0,872	
control	30		77,012	6,239		
experimental	30	General	83,147	8,458	0,567	
control	30	Average	81,934	8,120-		
experimental	30	Pre- test	12,743	3,856	1,108	
control	30		11,699	3,432		

It is clear from Table (2) that the calculated t-value for all variables is less than the tabulated value of (2.002) at a level of significance (0.05) and a degree of freedom (38). Accordingly, the two groups are equivalent in the equivalence variables.

**Table (3)**  
**The Results of the Chi-square Test for the Educational Level of the**  
**Two Research Groups**

Educational level	group	Primary and less	secondary	Institution and university	Kai square	
					Calculated	tabular
Father	experimental	16	16	8	1, 079	5,99 in sense level (0,05) and free degree (2)
	control	12	8	10		
Mother	experimental	15	9	6	1,121	
	control	11	12	7		

The above table stated that the calculated value is less than the tabular value, so the equivalence of the two research groups in the educational level of the parents.

#### 10. Test Stability

Stability is measured statistically by calculating the correlation coefficient between the scores obtained by students in the pre-application and the results of the test in the post-application. Were inconsistent, the stability coefficient and the test are inconsistent, The researcher used more than one method to calculate the stability coefficient of the test, to calculate the correlation coefficient of the test items with each other, the split-half method was used, and the internal consistency coefficient was calculated by the Cronbach alpha equation, and the stability coefficient for the test was (86.0), and this value is considered sufficient for reliability Comprehension skills test the application's reader.

After taking into account the observations and opinions of the arbitrators, the researcher prepared the test in the light of reading

comprehension skills (literal, deductive, critical, and creative), and it consisted of (20) multiple-choice questions, and one score was calculated for each question, and the total score for the test was (20) degree.

## 11. Test Correction

The test was corrected by giving one point for the correct answer, and zero for the incorrect answer, then the scores were collected to give the total score for the students' answer to the test, and the test scores ranged from (1-20).

### - The Study Design

The current study followed the semi-experimental design (pre-post) for two groups (an experimental group and a control group), as follows:

(EG) = the experimental group (studied using the flipped class strategy).

(CG) = control group (studied using the usual method).

(O1) = pre and post application of reading comprehension test.

(X) Experimental treatment (teaching the experimental group students according to the flipped classroom strategy).

### - The Study Variables

- The independent variable: the teaching strategy, and it has two levels: the flipped classroom, and the usual method.

- The dependent variable: reading comprehension skills (literal, deductive, critical, creative).

- **Statistical Methods:** In analyzing the data, the researcher used (the statistical bag (spss), Ca-square 2, Couder-Richard 21 equations, discrimination coefficient, difficulty coefficient and ease)

## Results and Discussion

To answer the first question: What is the effectiveness of using the flipped classroom in teaching English to develop reading comprehension among first intermediate grade students? The students in the experimental group who studied reads texts in English using the flipped classroom strategy, and the students of the control group who studied the same texts using the usual method in the post application to test reading comprehension skills). By calculating the arithmetic mean and standard deviation of the scores of the experimental and control study groups in the post application of the reading comprehension skills test, then using the "T" test for two uncorrelated means ( $n_1 = n_2$ ) to know the trend of the difference and its statistical significance, and a table shows 2) These results.

The results related to silver, which states: "There is no statistically significant difference at the level (0.05) between the average difference in the scores of the students in the experimental group that studied according to the flipped learning strategy and the students of the control group that studied according to the usual method in the reading comprehension test."

**Table (4) Results of the post-difference Test for the Two Research Groups in the Reading Comprehension Test**

group	Sample size	Average of differences	standard deviation	T value		Level of sense
				calculated	tabled	
experimental	30	5,911	1,121	7,059	2,002	Statistically significant at the level of significance (0.05) and the degree of freedom (58)
control	30	3,955	1,023			

Table (4) shows that there is a statistically significant difference at the significance level ( $\alpha = 0.05$ ) between the mean scores of the experimental group students and the control group students in the reading comprehension skills test in favor of the experimental group students, as the total arithmetic mean of the control group was (3.955), And (5.911) for the experimental group, and the calculated "T" value was (7.059).

While the tabular "F" value of the significance of both parties was found to be (2.002), at the level of significance (0.05). And to isolate the tribal differences statistically between the two groups on a test. This means that there are statistically significant differences between the performance averages of the experimental and control groups in the post application of the English language reading comprehension test at the evaluation level. By comparing the arithmetic means, it is clear that the differences are in favor of the experimental group. Thus, the null hypothesis was rejected and the alternative hypothesis was accepted, which states: There are statistically significant differences at the level of significance (0.05) between the mean scores of the students of the experimental group and the control group in the post achievement test at the valid evaluation level of the experimental group.

This result is consistent with the majority of previous studies that dealt with the effectiveness of using the flipped classroom in developing reading comprehension skills or academic achievement among students in various academic subjects, as it agrees with the study of (Al-Ruwaili 2019; Al-Sawat, 2016; and Hung, 2015) and (Al-Jabri, 2019). The results of this study did not differ with the results of studies that dealt with the effectiveness of the flipped classroom strategy in developing students' reading comprehension skills and academic achievement.

This result is consistent with the majority of previous studies that dealt with the effectiveness of using the flipped classroom in developing reading comprehension skills or academic achievement among students in various academic subjects, as it agrees with the study (Al-Jabri, 2019; Liu, Hwang Kuo & Lee, 2014; and Akdal & Sahin, 2014). The results of this study did not differ with the results of studies that dealt with the effectiveness of the flipped classroom strategy in developing students' reading comprehension skills and academic achievement.



---

**Conclusion**

From the results of the previous hypotheses, it is clear that the flipped classroom strategy is effective in developing reading comprehension among first-stage female students in the modern curriculum. It showed that there were statistically significant differences at the level (0.05) between the mean scores of the experimental group and the scores of the control group at all levels in favor of the experimental group, which indicates that there is an effect of applying the flipped classroom strategy in the modern curriculum, as this led to improving the level of reading comprehension for female students intermediate first grade at the post-test. Thus, the flipped education strategy confirms the effective role of students in the educational process to face life consciously in light of informational reading and technological progress and to achieve the quality of teachers and its implications for the quality of education to achieve overall quality in education.

### Recommendations and Suggestions

In light of the findings of the study, the present study recommends the following:

1. Employing the flipped classroom strategy in teaching English, and in the various other stages of education.
2. Training female students on methods and mechanisms for acquiring reading comprehension skills at all levels at all levels of study.
3. Training teachers on the strategy of the question-and-answer relationship intentionally in the various rehabilitation programs, and to benefit from the teacher's guide in employing the strategy of the question-and-answer relationship prepared by the researcher in the current study.
4. Directing those in charge of preparing books to include them with reading comprehension skills at all levels.
5. Conducting studies related to the training of English language teachers on how to implement lessons using the flipped classroom strategy.
6. Conducting studies on the effectiveness of the question-and-answer relationship strategy in teaching literary texts, and in developing the attitude towards reading, in developing listening comprehension skills.

## References

### In Arabic:

- ❖ Al-Kubaisi, Waheeb Majeed, and Al-Dahri, Salih Hassan, (2000): Introduction to Educational Psychology, Vol. 1, Jordan: Dar Al-Kindi.
- ❖ Abdul Hussein, Furat Kazem (2008): In order to understand the world of modern teaching, Human Sciences Journal, Issue (36), Baghdad.
- ❖ Al-Ghamdi, Basina (2009): The Effectiveness of Metacognition Strategy in Developing Quranic Comprehension Skills for Female First Grade Secondary Students in Makkah Al-Mukarramah, *Arabic Studies in Education and Psychology*, 3(4).
- ❖ Al-Jabri, Ahmed Abdel-Rahman Jaber, (2019): The effect of using the guided discovery method in developing reading comprehension skills in the English language among third-grade intermediate students in Jizan City, *Scientific Journal for Research and Scientific Publishing*, Volume 35 / Issue (12), Faculty of Education, Assiut, Egypt.
- ❖ Al-Mashni, Youssef. (2015): The effect of using flipped learning on seventh-grade students' achievement in science and their creative thinking. (*Unpublished master's thesis*), Middle East University, Jordan.
- ❖ Al-Najmi, Mai (2018): The effect of silent reading on some English language topics in developing reading comprehension skills among middle school students in Jeddah, Saudi Arabia. *Journal of the Faculty of Specific Education*, 34 (11), 206-229.
- ❖ Al-Omari, Bahaa; And an interview, Nasr (2020): The effect of the flipped classroom strategy on tenth grade students' performance in grammatical and morphological rules, an unpublished doctoral dissertation, Yarmouk University.

- ❖ Hamdallah Amal (2015): The effect of flipped learning on the development of inductive thinking among eighth-grade female students in Arabic grammar in the city of Salt, *an unpublished master's thesis*, Faculty of Graduate Studies, Middle East University, Amman, Jordan.
- ❖ Muhaidat, Mohammad and Al-Samadi, Amal, 2020: The effect of using "Read.Ask.Paraphrase"- RAP Strategy on Improving the Reading Comprehension Skill among Students with Learning Disabilities in Jordan, Yarmouk University, Jordan, 17 (2), 241.
- ❖ Nashwan, Ahmed (2016): The effectiveness of using flipped learning in teaching English on developing reading comprehension skills among sixth graders in Riyadh, King Khalid University, *Journal of Educational Sciences*, 4 (1), 170-192.

#### **In English:**

- ❖ Akdal, D. & Sahin, A. (2014). The Effects of Intertextual Reading *Journal of Educational Research (EJER)*, 54(1), Pp.171-186.
- ❖ Al-Ruwaili, Wafa Faleh, 2019, The effectiveness of using the strategy of flipped classroom in learning creative English reading skills by third grade intermediate school female students, *Journal of Educational and Psychological Sciences*, Volume (3), Issue (26) : 30 Nov 2019, P: 122 – 146.
- ❖ Alsowat, H. (2016). An EFL Flipped Classroom Teaching Model: Effects on English Language Higher-order Thinking Skills, Student Engagement and Satisfaction. *Journal of Education and Practice*, 7(9), Pp.108-121.

- ❖ Galvan, N. (2015). Reading. Proceedings of the International Forum: Generation of Iqra. Center for Generation of Scientific Research, Algeria, *Generation Center for Scientific Research*, 14 (4), 55-62.
- ❖ Hung, H. (2015). Flipping the classroom for English language learners to foster active learning. *Science & Education, Academic Publish Computer Assisted Language Learning*, 28(1), Pp.81-96.
- ❖ Johnson, L. & Renner J. (2012). Effect of the Flipped Classroom model on a secondary computer applications course: Student and teacher perceptions, questions and student achievement" (Doctoral Dissertation). University of Louisville Louisville Kentucky.
- ❖ Liu, G., Hwang, G., Gwo, J., Kuo, Y. & Lee, C. (2014). Designing dynamic English: a creative reading system in a context-aware fitness center Using a smart phone and QR codes. *Digital Creativity*, 25(2), Pp. 169-186.
- ❖ Sage, M. & Patti, S. (2015). Reflective Journaling as a Flipped Classroom Technique to Increase Reading and Participation with Social Work Students, *Journal of Social Work Education*, 51(4), Pp.668-681.
- ❖ Sage, M. & Patti, S. (2015). Reflective Journaling as a Flipped Classroom Technique to Increase Reading and Participation with Social Work Students, *Journal of Social Work Education*, 51(4), Pp.668-681.
- ❖ Strayer, J. (2007): The effects of the Classroom Flip on the Learning environment: a comparison of learning activity in a traditional classroom and a flip classroom that used an intelligent tutoring system. (*Doctoral Dissertation*), The Ohio state University.

- ❖ Tawfik, A. & Lilly, C. (2015). Using a flipped classroom approach to support problem-based learning. *Technology, Knowledge, & Learning* , (20)3, 299-315.