











Contents available at: https://jls.tu.edu.iq/index.php/JLS



THE EFFECT OF 7E STRATEGY ON PREPARATORY SCHOOL PUPILS' **ACHIEVMENT**

Nuha Abdullah Rashid Tikrit University \College of Education for Women nuha.rashid736@st.tu.edu.iq

&

Asst. Prof. Muthana Mohammed Badie (M.A)* Tikrit University \College of Education for Women muthana_albazi@tu.edu.iq

Received: 20 \4\2024, Accepted: 26\6\2024, Online Published: 30 /11/ 2024

Abstract

The current study aims at investigating the effect of 7E strategy on EFL Iraqi pupils' achievement. To achieve the aim of this research, the hypothesis is assumed to be established. Which is, there is no statistically significance difference between the mean score of the experimental group who is taught according to 7E strategy(elicit, engage, explore, explain, elaborate, evaluate, extend) and the mean score of the control group who is taught according to the conventional method in post pupils' achievement test. To carry out the aim of this research, and validate its hypothesis, a sample of sixty pupils have been randomly chosen from the forth-preparatory class in Om Al-Mumineen School for Girls, during the academic year 2023-2024. The two groups are equally divided into, group (A)

[©] This is an open access article under the CC by licenses http://creativecommons.org/licenses/by/4.0



Corresponding Author: Muthana Mohammed, Email: muthana albazi@tu.edu.iq **Affiliation**: Tikrit University - Iraq

represents experimental group that consists of (30) pupils who have been taught according to 7E strategy (elicit, engage, explore, explain, elaborate, evaluate, extend). Group (B) signifies control group which also includes (30) pupils who have been taught according to the traditional method. Making a pre and post achievement test. Both groups have been equalized in such variables as English scores achievement in preceding schooling year, and the pre-test of both groups. Seven questions are composed to combine a post-test. The data collected from the results of posttest have been analyzed statistically by using t-test for measuring pupils' achievement. The result shows that there is a statistically significant difference between the mean scores of the experimental group who is taught 7E strategy and control group who is taught conventional method in the posttest. This indicates that 7E strategy (elicit, engage, explore, explain, elaborate, evaluate, extend) is more effective than the conventional strategy. The study ends up with some conclusions,

Keywords: 7E Strategy, Advantages, Background, Disadvantages, Theoretical Framework

اثر الاستراتيحية E7 على تحصيل طلاب المرحلة الاعدادية في اللغة الاإنكليزية لغة اجنبية

نها عبد الله رشید
کلیة التربیة للبنات / جامعة تکریت
و
ا. م مثنی محمد بدع
کلیة التربیة للبنات / جامعة تکریت

المستخلس

تهدف الدراسة الحالية الى معرفة تأثير استراتيجية TEعلى تحصيل الطلاب العراقيين في اللغة الإنكليزية لغة اجنبية و لتحقيق اهداف هذه الدراسة تم افتراض الفرضية: لا يوجد فرق ذو دلالة إحصائية بين متوسط درجات أفراد العينة التجريبية، أي: المجموعة التي يتم تدريسها على وفق استراتيجيه E7, و متوسط درجات المجموعة الضابطة التي يتم تدريسها على وفق الطريقة التقليدية في الاختبار التحصيلي البعدي للتلاميذ. لتحقيق اهداف هذه الرسالة، و التحقق من صحة فرضيتها، تم اختيار عينه مكونه من (60) تلميذا بطريقه عشوائية من الصف الرابع الاعدادي في مدرسة المؤمنين للبنات خلال العام الدراسي (2024_2023).

وتم تقسيم المجموعتان بالتساوي على المجموعة (أ) التي تمثل المجموعة التجريبية التي تتكون من (30) تلميذا ويتم تدريسهم وفق الاستراتيجية 75. المجموعة (ب) تعني المجموعة الضابطة، والتي تضم (30) تلميذا وتم تدريسهم بالطريقة التقليدية، وان اجراء الاختبار التحصيلي القبلي و البعدي، وقد تم التعادل في كلا المجموعتين في مثل هذه المتغيرات، وتحصيلهم للغة الإنكليزية في السنه السابقة, و الاختبار القبلي للمجموعتين.

يتكون الاختبار البعدي من سبعة اسئلة, تم تحليل النتائج البيانات المجموعة من نتائج الاختبار البعدي الحصائيا باستخدام اختبار (T) لقياس تحصيل التلاميذ . حيث اظهرت النتائج التالية الى

1. توجد فروق ذو دلالة احصائية بين متوسط درجات المجموعة التجريبية التي تدرس الاستراتيجية 7E والمجموعة الضابطة التي تدرس الطريقة التقليدية في الاختبار البعدي لصالح المجموعة التجريبية.

يشير هذا الى ان الاستراتيجية TEالاكثر فاعلية من الاستراتيجية التقليدية، وبعدها انتهت هذه الدراسة الى بعض الاستنتاجات.

الكلّمات الدالة: الاستراتيجية 7, المزايا, الخلفية النظرية, العيوب, الاطار النظري

1.1The Statement of the Problem

7E strategy is an effective way for students to develop integrated knowledge systems when dealing with challenging education content. It helps students build important skills and increase their knowledge to effectively solve problems. The 7E Instructional Strategy is a comprehensive instructional model that accommodates various methods, such as cooperative learning, group work, lectures, laboratory investigations and direct instruction (Bulbul,2010). It enables pupils to explore their beliefs and allow them to construct new knowledge, while discarding their misconceptions, by clearing their thought processes, the 7E learning cycle is a student-centered, inquiry learning strategy that lays the foundation for proper conceptualization by pupils through various activities, spread across seven phases (Eisenkraft, 2003).

These phases, Elicit, Engage, Explore, Explain, Elaborate, Evaluate and Extend, according to Gok et al. (2014), allows students to correct their misconceptions through exploration, and facilitate clarification by the teacher, and aided by explanations by the pupils themselves. The 7E model of instructional delivery similarly deepen understanding of concepts by other activities, such as evaluating pupils' conception against acceptable scientific explanations, as well as the extension (application) of obtained knowledge to new situations. This method encompasses various methods that aid pupils to construct new knowledge, such as cooperative learning, group work, laboratory investigations and direct instruction, by clearing their thought processes (Bulbul, 2010).

The main purpose of English as FL for pupils is to be able to communicate and express their ideas professionally in the four skills of English language, but pupils encounter numerous challenges in learning the language and are unable to develop the higher levels of practice since they think in their mother tongue. So 7E strategy(elicit, engage, explore, explain, elaborate, evaluate, extend) is chosen to investigate its effect on pupils` achievement.

1.2 Aim of the Research

The study aims to find out the effect of the 7E strategy on EFL pupils' achievement.

1.3 Hypothesis of the Research

1. There is no statistically significance difference between the mean score of the experimental group who is taught according to 7E strategy and the mean score of the control group who is taught according to the conventional method in post pupils' achievement test.

1.5 Definitions of 7E Strategy

7E strategy is a hierarchical educational model developed from the 5E learning cycle, which emphasizes discovery and expansion of concepts. This approach helps students systematically construct their knowledge and develop their thinking styles and practical skills (Zeitoun, 2007).

Operational Definition: 7E strategy is the process of learning and education consists of seven stages, which are procedural, sequential, and regular. Teachers use these stages in their classrooms to help their students build scientific concepts independently while also acquiring new.

7Estrategy: is a series of organized steps based on constructivist theory that the researcher will use with the experimental group. These steps involve preparing pupils to explain and interpret the topic, applying concepts to new situations, exchanging ideas and experiences, and correcting any misconceptions. In the end, pupils will be tested to assess their understanding of the concepts and skills they have learned (Gul, et al., 2010). These are 7E phases

Elicit - elicit prior understanding

Engage - raise questions in participant minds

Explore - participant observation and data recording

Explain - teacher introduction to known models/laws

Elaborate - participants amend prior notions

Evaluate - formative/summative evaluation

Extend - participants create new scenarios which hold to objectives learned in the lesson

2.1 The Concept of 7E Strategy

The 7Estrategy is an approach that is consistent with the nature of the exploratory and analytical of language teaching. In the strategy, firstly student through a simple activity or talk about that is excited in order to actively engage in learning; in continue to gain experience teacher will guide them in such a way that by participating in group activities engage in seeking knowledge (Fitzpatrick, 2001).

The discovery learning approach presented in the context of leading structuralism theories such as Piaget, Bruner, and Vygotsky, emphasizes that students should be involved in creating and building their knowledge (Fitzpatrick, 2001). The 7E strategy in different curricula with regular stages of 3E, 5E, and 7E have been used. The 7E strategy was used

in this study. 7E includes activities that attract pupils' attention and interest, arousing their curiosity and eagerness for assignments. These activities are generally related to daily events that happen to pupils. Lack of knowledge of pupils about the affairs through the use of activities of this cyclical model will be changed. There are many studies showing that the 7E strategy is more effective than other strategies and has many applications in teaching and learning. For example, researchers such as (Akkar,2005)have carried out researches on this field and their findings suggest that the applying of this strategy and its superiority over the older versions. 7E strategy consists of steps such as understanding, engaging, explore, explain, extend, generalize, and evaluation (Balbal, 2010). One of the differences between 7E and 5E models is that engaging stage is divided into two categories, which are called deduction and engaging. As well as the development and evaluation stages have been extended to three components: expansion, extension and evaluation (Balbal, 2010).

The deduction gives the learner the possibility to evaluate every idea or wrong information about different concepts; this stage also concentrates on forcing learners to retrieve and modify existing experiences that are associated with new knowledge. In the engaging stage teacher may evaluate a related scenario or a simple experience for attracting attention of students by asking questions in their minds and use their prior knowledge about the subject matter of the course. The purpose of this step is to thrill pupils and interest them in any possible way as matter of course. Students are encouraged to struggle with materials and concepts throughout the explore stage, investigate how items function, and communicate with one another as well as the instructor or group leader.

This stage provides an opportunity for pupils to observe and record data, propose hypotheses and organize their findings (Shaheen et al., 2015). Teachers can organize questions, propose the method and assess the knowledge (Shaheen, et al., 2015)

In the explanation stage, pupils are informed about patterns, laws and theories. Teacher consistently leads pupils to organize compatible generalizations and assists pupils with distinguished academic vocabulary and provides some questions that will assist the pupils to use this vocabulary to explain the results of their exploration. In the expansion stage, pupils have the opportunity to apply their knowledge for new areas that can be included posing new questions and hypotheses for study (such as language structures, rules and grammar, and providing different subjects). The details associated with mental structure called the transfer of learning. The evaluation stage includes strategies that will help the continuing of final and developmental evaluation of pupils learning (Abdi, 2015).

2.2 Background of 7E Strategy

7Estrategy was originated from Piaget's mental functioning model. The first version of the strategy included three phases initially called preliminary exploration, invention and discovery (Karplus & Their, 1967) but they were revised to exploration, concept introduction and concept application to increase the expressiveness. The developers of the model suggested that pupils' substantial knowledge impacts their learning and also they need to be allowed to explore the phenomena on their own prior to the introduction of new terms associated with the scientific concepts. Another requirement was about the necessity of application of the initial experiences and learning in new situations following to the term

introduction. This sequence was proposed as necessary to develop better understanding and interest towards the science concept.

As the learning cycle started to be implemented and investigated over years, the model was modified regardless this conceptual foundation of the approach (Bybee & Taylor, 2006). Educators and researches extended the phases of model to increase the emphasis on some issues and different versions of the model were emerged as 3E, 4E, 5E and 7E. Among them, 7E strategy instruction is the broad one encompassing seven phases each starting with the same letter; Elicit, Engagement, Exploration, Explanation, Elaboration, Evaluation, and Extension. In line with the development theory of Piaget, knowledge construction in learning cycle instruction can be explained as following in the light of related literature (Abraham &Renner, 1986).

2.3 Procedures of 7E Strategy

The procedures of 7E strategy are as follow:

- **1.**Expanding the circle of learning by conducting new applications on multiple educational situations, and using students' previous knowledge to propose solutions, formulate decisions, record observations, write reports, and provide proof and evidence about the conclusions and interpretations they have reached.
- **2.**Arousing students' curiosity for knowledge, raising questions, discovering relationships, concepts, and different cognitive structures, and finding convincing explanations.
- **3.**Emphasizing students' activity and their ability to exchange discussions, give viewpoints on learned topics, use research and investigation to achieve and satisfy their curiosity, and participate with each other in observing, exploring, completing tasks, and achieving set goals.
- **4.**Creating an atmosphere of mutual trust and respect between the students themselves and between students and teachers.
- 5. Linking student's previous knowledge of concepts with new knowledge (Wodaj, 2020).

2.4 Advantages of 7E Strategy

There are many advantages for both the teacher and the students in 7E strategy, such as:

- **1_ Aid in deeper understanding of the concepts:** 7E strategy advocates for active involvement of students" in the learning process rather than sitting back &passively receiving the information brought to them. As the students are engaging themselves with the content, making connections with their prior knowledge, exchanging, discussing, questioning, reflecting, applying their learning in new situations; it promotes deeper understanding of the concept and help them maintain their concentration throughout the learning process (Bozorgpouri,M.2016)
- **2_Makes the learning efficient:** Learning is more effective if the teacher can determine what the students already know about the concept being taught. This model has emphasized the necessity of eliciting previous understanding of the students. This step helps the teacher

realize what the students need to know first, which in turn results in efficient and meaningful learning (Akar, E,2005).

- **3_Promotes transfer of learning:** 7E model stage transfer of learning or skills in the real-life situations. Research has shown that expert learners are much more adept at the transfer of learning than novices and that practice in the transfer of learning is required in good instruction (Cherono, J., 2021).
- **4_Stimulates internal motivation to learn:** The 7E model favors providing conducive learning environment for the students. The favorable learning environment increases their motivation to learn. They find the learning interesting, engage themselves in the activities entirely from within rather than in order to receive some external rewards, work together and support each other, enjoy the learning process and find internal satisfaction in it (Akar.E., 2005).
- **5_Generates confidence and self-esteem:** One of the important features of this model is that students are not judged based on 'right" and 'wrong" answers rather their point of view is given importance. Such an emphasis generates confidence and self-esteem in the students making them ready to deal with more complex problems (Wetman & Whiteside , 2010).

2.6 The Effect of 7E Strategy on Pupils

There are some potential effects of implementing the 7E strategy in education that have been a positive effect on pupils

- **1.Increased engagement**: The 7E strategy emphasizes active learning and student engagement. By involving students in hands-on activities, discussions, and problem-solving tasks, the strategy can help increase students' interest and motivation in the learning process.
- **2.Deeper understanding:** The 7E strategy promotes a deeper understanding of the subject matter. Through the stages of exploration, explanation, and elaboration, students are encouraged to explore concepts, ask questions, and construct their own knowledge. This approach can lead to a more comprehensive understanding of the topic(Thompson & soyibo ,2002).
- **3.Improved retention**: The 7E strategy focuses on providing multiple opportunities for students to revisit and reinforce their learning. By incorporating activities such as review, evaluation, and extension, the strategy helps students consolidate their knowledge and improve long-term retention.
- **4.Positive attitude towards learning:** Implementing the 7E strategy can contribute to a positive attitude towards learning. By actively involving students in the learning process and providing opportunities for collaboration and creativity, the strategy can enhance students' enjoyment and satisfaction with their educational experience (Madhavaiah et al., 2013).

5.Enhanced critical thinking and problem-solving skills: The 7E strategy encourages students to think critically, analyze information, and solve problems. Through activities that require students to apply their knowledge in real-world contexts, the strategy helps develop students' critical thinking and problem-solving skills. The 7E strategy aims to create a more engaging and effective learning environment for students and depending on factors such as individual student (Gok,G.,2014)

2.7 Theoretical Framework of 7E Strategy

The 7E strategy includes the following seven stages:

- **1.Eliciting:** It is a teaching technique used to activate students' prior knowledge and encourage them to think critically about a specific topic or concept .This stage aims at motivating learners and enhancing their curiosity for learning the concept. It aims to determine what students already know about the concept to be taught. Teachers can access the prior knowledge of the students through Questioning, KWL chart, incomplete concept maps, activity sheets, etc. (Eisenkraft, 2003). It is included some techniques on how to apply this stage in classroom such as setting the stage, asking open-ended question, encouraging brainstorming and using visual aid or real-world example.
- **2.Engagement :** It is about focusing the learner's attention to the task at hand. Focusing the learner's attention requires the introduction of brief but interesting activities which in turn stimulate their thinking and increase their interest and curiosity to be expose to new ideas an concept (Naada, Alamina, &Okwelle, 2018) .

Pupils rely on their abilities to take initiative in learning, construct understanding, selfadvocate and engage with their peers through limited immediate feedback and active individual or collective engagement (Rappel, 2017). Teachers can get pupils mentally engaged in the concept or the topic through asking questions or showing videos related to authentic real-life situations, problems or events. Engagement theory is based on preparing collaborative work teams that work on various projects focusing on three main principles: relate, create and donate. The first principle (the relate component) mainly focuses in peer and content interaction through (1) exchanging thoughts, viewpoints and ideas among learners, (2) helping students learn from different experiences and backgrounds, (3) allowing students to clarify and verbalize their problems to facilitate available solutions. The second principle (the create component) emphasizes creating a creative learning context by encouraging students to apply their thoughts and ideas in conducting their projects in interesting ways. The third principle (the donate component) gives students opportunities to relate their learning materials to authentic and real contexts through interaction (Rappel, 2017). It includes some techniques to apply this stage in classroom such as personal relevance, active participation and multimedia presentations or visuals.

3.Exploration: This stage aims at satisfying the learners' curiosity through providing them with necessary experiences and activities in order to enable them to acquire the meaning of the concept. designs activities that enable pupils to recognize the concept structure, and will be responsible for providing sufficient and clear instructions and suitable tools related to each activity, giving them the opportunity to work in groups or in collaborative manner to practice investigation (Sahebi & Brusilovsky, 2018). This stage leads to enhance pupil

intellectually, that is, due to the variety of new well-designed activities it contains, and so the pupil's cognitive balance is disturbed, and this motivates him to ask questions and seek answers, that he cannot answer, and then reach primary conclusions about the concept, discovering new ideas or relationships which were not recognized for him before. It includes some techniques on apply this stage in classroom such as encourage inquiry-based learning, reflect and document findings, and facilitate discussions and share findings (Cherono, 2021).

- **4.Explanation:** This stage aims at explaining the concept as well as the terms, teacher collects the information that his pupils gathered in the exploration stage and helps them organize and process these information, providing them with the necessary explanations that help them organize their exploratory experiences in its correct position and put them in order to identify the concept(Yenilmez & Ersoy, 2008). This stage helps the pupil recover his cognitive balance, in accordance with the concept of matching which was talked about by Beige in his theory about the cognitive development. It is usually guided by the teacher while learners should explain what they have understood after exploring. Various learning materials can be applied in this phase as: videos, films, educational apps or software and oral presentations, and should learn how to give alternative answers to the questions of the topic through developing new thoughts and ideas. Students gradually develop new thoughts after getting involved in observations during the explore phase. Consequently, students develop their abilities to add and explain new explored concepts and issues. It includes some techniques to apply the stage in classroom such as, break down complex ideas, use clear and concise language, and summarize and provide closure(Fatimah and Anggrisia, 2019).
- **5. Elaboration**: According to Eisenkraft (2003), this phase is directly related to the psychological construct called transfer of learning. in this phase techers should help students develop clear, deeper and appropriate understanding of the given topics and concepts by providing them with suitable data and information, skills and learning experiences. To enhance deepening and elaboration, paper-based handouts and materials, and experiments should be used at this stage to help students get immediate feedback. Students should think in-depth on topics and concepts they have learnt and apply them in different contexts(Sharma & Pooja, 2016).

This stage aims at clarifying the relationship of the concept with other concepts, it helps in extending pupils` conceptual understanding. Pupils will get deeper understanding of the concept by performing familiar types of activities to elaborate their skills and knowledge. The teacher helps his pupil recognize how the concept relates with other concepts, through asking questions that help them discover such relationships. It includes some techniques to apply this stage in classroom such as, concept mapping ,cross-curricular connections ,and debate and discussion(Putri and Sari , 2022).

6.Evaluation: Teacher in this stage evaluates his pupils' learning of the concept and provides them with the suitable feedback, that is, through putting them in new situations, observing the change in pupils' thinking abilities and dealing with new problems. Evaluation process may be carried out through each stage of 7e strategy instead of the final stage only it is an ongoing diagnostic process which goes beyond testing correct answer only for passing a grade. It mainly focuses on diagnosing both strengths and weaknesses

and taking remedial steps and actions when needed. It includes some techniques to apply the evaluate stage in classroom such as , assessments, rubrics or criteria, self-assessment,

7.Extension: Pupils will be able to create and develop critical thinking, teamwork and social skills. Teacher will focus his efforts to extend the students' understanding by providing more related examples on this concept (Eisenkraft, 2003). It includes some techniques to apply this stage in classroom such as, real-world applications, research and

investigation, and collaboration and communication.

3.1 Experimental Design

and peer assessment (Kilinc, 2019).

The experimental study, the data from the experimental and control groups are obtained by using pretest and posttests. The findings are then compared to determine the treatment's effect on the dependent variable (Riazi, 2010).

The researcher has found that the experimental design is an approach that needs good understanding of the appropriate system to test the hypothesis and discover the results of the research. Concerning the current research, the use of aim and hypothesis demands the Non Randomized experimental group pretest-posttest design is taught by using 7E strategy ,whereas the control group is taught by using the traditional method. Consequently, the two groups—of the fourth scientific preparatory school pupils are the sample of the study as shown in table (1).

 $\label{eq:Table (1)} The \ Experimental \ Design \ of \ The \ Research$

Group	Independent Variable	Dependent Variable
Experimental group	7E Strategy	Pupils' Achievement
Control group	Traditional Method	Pupils' Achievement

3.2 Sample of the Research

The sample is a subset of the population that accurately reflects the population's primary features (Arikunte ,2006). In order to achieve the aim of the research , the research has randomly selected (60) pupils of the fourth _year of Om Al-Mumineen preparatory school for Girls in Tikrit in the academic year 2023-2024 to be the sample of the study. Pupils are distributed in to sections (A,B). Section (A) of (30) pupils have been randomly chosen to be experimental group, and section (B) of (30) pupils is the control group. The textbook being used is a standard material in all Iraqi schools for teaching English to students in the fourth preparatory stage, who have been learning English for at least 6 years

3.3.2 Pupils' Scores in the Pre-test

The pre-test has been conducted for equalization see . Both experimental and control groups are submitted to the same pre-test. The mean pretest scores for the experimental group is (50.37), while the mean pre-test scores for the control group is (45.33), with standard deviations of (12.57) and (11.11), respectively, for the two groups. At the degree of freedom (58) and the level of significance (0.05), the calculated t-value is determined to be (0.276), which is lower than the tabulated value (2.00). As indicated in the table (3), this result implies that there is no statistically significant difference between the two groups in the pre-test.

Table (3)
The T-Test Value of the Two Groups in the Pre-test

Group	No. of Pupils	Mean	SD.	T-Value		DF	Level of Significance
EG.	30	50.37	12.57	Calculated	Tabulated		
CG.	30	45.33	11.11	0.276	2.00	58	0.05

3.4 Construction of post-test

To measure the experimenter's level of achievement, the instrument includes preparing a post-test. The test is constructed on what pupils have learned and should be provided rapidly after the teaching material is completed (units or textbooks).

McNamara (2000) clarified that exams are confined to subject that taught in a curriculum inside a question. It can aid in the assignment of aspects that pupils should work on in the future. The purpose of the test is to assess if the course goals have been accomplished at the end of the instructional time. An achievement post-test has been given to pupils in which there are seven questions. The first question consists of two branches which are (A) and (B) that contain (6) items, while the second and third questions consist of two branches (A)and (B) that contain (5) items. The forth question consists of (2) items but the fifth question is free. The sixth and seventh consist of (3) items.

3.5 Application of the Experiment

To teach the experimental group based on 7Estrategy , the researcher followed the following procedures:

- 1.Help pupils understand the context of their work, 7E strategy is introduced and defined, along with their concepts and practices.
- 2. In the experimental group, each lesson starts with a clear description of the behavioral goals for the unit and an explanation of what the pupils should learn.
- 3. Lessons are given as usual. keeping attention on the objectives and engaging the pupils in activities.
- 4. The lesson is summarized to help pupils remember what they have learned and to keep track of their development.
- 5. The teacher encouraged pupils to be able to utilize English both inside and outside of the classroom.
- 6. Pupils are given some exercises assignments and are asked to solve it collaborate in pairs or groups to discuss their thoughts.
- 7. The researcher makes a revision for the whole unit before moving on the next unit, and be sure that at least 70% of the pupils are understood the material well.

3.6 statistical item

1. T-test for Two Independent Samples: It is used to find out the significance between the two groups in the equalization of age and literature scores. It is also used to find out the significance of differences between the two groups in the posttest.

4.1 Results

All mean scores are obtained and compared to find out if there is any significant difference between the mean scores of the experimental group and those of the control group in the post-test. Statistics show that the mean scores of the experimental group is (70.70) and that of the control group is (47.77). By using the t-test formula for two independent variables, the calculated t-value is found to be (5.35), while the tabulated t-value is found to be (2.00) at the degree of freedom (58) and level of significance (0.05). This means that there is a significant difference between the achievement of the two groups and in favor of the experimental group. Thus, the hypothesis, which states that there is no statistically significant difference between the mean scores of the experimental group and that of the control group in the post achievement test, is refused, as shown in table (4).

Table (4)

Means, Standard Deviation, and T-values of the Two Groups in the Post Achievement Test

No. of Level of DF Groups SD. Mean T-Value **Pupils** Significance EG. 30 70.70 14.68 Calculated Tabulated 58 0.05 CG. 30 47.77 15.42 5.35 2.00

4.3 Discussion of Results

The goal of the current research is to determine whether 7E strategy has an effect on EFL pupils preparatory school or not. It also aims to determine whether there are any distinguished changes between the experimental and control groups in terms of pupils' test.

The results indicate that the English language achievement of the experimental group, which are taught by using 7E strategy , is higher and better than the control group, which are taught using the traditional methods in posttest . By using the 7e strategy and applying each phase and its activities such as chart, video, ask question , etc. ,pupils' attention curious and motivation are increased to learn the English language.7E strategy encourages pupils to keep the new words and phrases through listening ,repetition and when they make conversation. Pupils are able to learn new ideas ,foster engagement ,critical thinking personalized learning , analyze, and understand the contents of the unit after they have achieved it, this will develop the pupils' skill and ability to access ideas and link among vocabulary and know to interact easily .

By using 7E strategy enhances pupils' confidence in their learning process, they are able to be more active, monitor, and self-evaluation. Students' opportunity to practice and produce English language easily . The results indicate phases of the 7e strategy focus on the skills and abilities of pupils such as eliciting focuses on the pupil's ability to keep reviving prior knowledge and experience of learning. In engaging focuses on pupils' ability to interact with teachers and colleagues in teamwork and be more active and reinforce their engagement with others . Through using the explore phase pupils can explore their environment and observe with friends, whereas in the explaining phase pupils' abilities are to exchange thoughts ,ideas, and beliefs using oral presentation . pupils think in-depth on topics and concepts of the lesson that encourage them to elaborate their knowledge and give them chance to freely express thoughts without hesitation.

Finally, pupils can extend their learning when they apply what they have learned in reality which makes them more confident and they explore their weakness and strengths. pupils think without stopping or hesitation. By using 7E strategy the relation between teacher and pupils will be friendly.

5.1 Conclusions

Based on the findings, in this research the aim is to investigate the effect of 7E strategy on the achievement of EFL pupils. Following data collection and analysis, the results of the scores indicate that pupils who are taught by 7E strategy better than those who are taught by conventional methods.

By improving the relationship between the student and the teacher, the 7E strategy motivates students to be more interested in studying EFL. To encourage students to participate in class, teachers should employ a range of strategies, including establishing an engaging setting. Positive interactions between students and teachers have been demonstrated to be facilitated by communication, which also helps students overcome shyness and reluctance and boosts their confidence.

Because the students understand that their language and communication skills are developing and improving, the instructional materials are suitable for their learning levels and requirements. The 7E strategy's teaching methodology gives students the opportunity to ask questions, utilize words or phrases to convey meaning through classroom conversation, and converse in English.

In addition, using various techniques in the classroom. Pupils are encouraged to ask questions and start investigating their own ideas, which help them improve their skills and learn how to communicate easily.

References

- Abdi, A. (2014). The effectiveness of teaching based on seven-stages cyclic learning model of learning cycle in improving critical thinking skills in male students. Thinking and children, Institute for Humanities and Cultural Studies, Issue II, autumn and winter.
- o Abraham, M. R. & Renner, J. W. (1986). The sequence of learning cycle activities in high school chemistry. *Journal of Research in Science Teaching*, 23, 121-143.
- o Akar, E. (2005). 'Effectiveness of 5E Learning model on students' understanding of acid-base concepts' .Turkey: Middle East Technical University.
- o Arikunte, S. (2006). Research Procedure: A Practical Approach. Jakarta: Rineka Create
- o Bozorgpouri, M., (2016). '' The Study of Effectiveness of Seven-step (7E) Teaching Method in the progress of English Learning in Student Shiraz city.''*Turkish online Journal of Design*, Art and Communication 6 (JLYSPCL):341-46
 - Bulbul, Y. (2010). "Effects of 7E Learning Cycle Model accompanied with Computer Animations on Understanding Diffusion and Osmosis Concepts". Doctoral Dissertation. Middle East Technical University, Ankara, Turkey
 - Bybee, R. W., Taylor, J. A., Gardner, A., Scotter, P. V., Powell, J. C., Westbrook, A. & Landes, N. (2006). "The BSCS 5E instructional model:" origins and effectiveness. A Report Prepared for the Office of Science Education National Institutes of Health. Retrieved March 08, 2008
 - Cherono, J. (2021). "Effect of 7E learning cycle model on student's academic achievement in biology in secondary schools in chesumei subcounty". Kenya, African Journal of Education, Science and Technology. 6, (3): 312-322
 - Eisenkraft, A. (2003). "A 7E model emphasizes transfer of learning and the importance of eliciting prior understanding". (Blog Post). Science teacher, 70(6), 56-59.
 - Fatimah, F. M., & Anggrrisia, N. F., (2019)."The effectiveness of 7E learning model to improve scientific literacy". International Conference on Science,

- Technology , Educational , Arts , Culture and Humanity Interdisciplinary challenges of Humanity Education in Digital Era , 18-22
- Fitzpatrick, H. (2001). "Teaching Strategy": Inquiry Learning. Adolescent Learning and Development, Research Paper, 20
- Gok, G. (2014)."The Effect of the 7E Learning Cycle on the 6th Grade Students' Conceptual Understanding of Human Body Systems, Self-regulation, Scientific Epistemological Believe and Science Process Skills."Doctoral Dissertation. Middle East Technical University, Ankara, Turkey
- Gul, Y. L., Elif, E., Salih, C. (2010). "The effect of the material based on the 7E." *Journal of Science Education*, 5(1), 788-794.
- Kajuru, Y. K. & Kauru, A. I. (2014). "Effects of 7E 's constructivist approach to teaching trigonometry on polytechnic students" achievement and retention." *Journal for research in Science Education*. 122(39). 106-121
- Karplus, R. & Thier, H. D. (1967). "A New Look at Elementary School Science." Chicago: Rand McNally.
- Kilinc, M. (2019). "The usage level of time-saving measurement and evaluation techniques in teacher training programs." International EducationStudies, 12(10), 123-129.
- Madhavaiah , G. , Nagaraju, Ch. & Peter, S. (2013) "Innovate Methods in Teaching English Language and Communication Skills". International Journal of Scientific Research and Reviews , 2(3), 141-145.
- McNamara, T. (2000). Language Testing. Oxford University Press
- Naade, N. B., Alamina, J. I. and Okwelle, P. C. (2018). Effect of 7E's constructivist approach on students' achievement in electromaentic induction topic in senior secondary school in Nigeria. *Journal of Education*, *Society and Behavioral Scienc*.24(3).
- Putri, M. S. & Sari, N. T. (2022). The Effect of Learning Cycle 7e Model on Improving the Mathematical Problem –solving Ability of Junior High school students. *Jurnalllmiah Pendidikan danPembelajaran Metamatika*, 1(2), 87-100
- Rappel, L. (2017). Self-direction in on-line language learning. Retrieved from ERIC database. (ED 573731).p.20.
- Razi, S. (2010). Effects Of A Metacognitive Reading Program On The Reading Achievement And Metacognitive Strategies. Doctorate Dissertation, Dokuz Eylül University Educational Sciences Institute, Izmir
- Sahebi, S., & Brusilovsky, P. (2018). Student Performance Prediction by Discovering Inter-Activity Relations. Proceedings of the 11th International Conference on Educational Data Mining 87, 87-96. ERIC Number: ED593107
- Shaheen, M. N. U. K., &Kayani, M. M. (2015). Improving students' achievement in biology using 7E instructional model: An experimental study. Mediterranean Journal of Social Sciences, 6(4), 471. Retrieved from
- Sharma, H. L. & Pooja (2016) Enhancing Students interest in English language via <u>Multimedia presentation</u>. International Journal of Applies Research. 2(1),275 -<u>281</u>
- Thompson, J., & Soyibo, K. (2002). Effects of lecture, teacher demonstrations, discussion and practical work on 10th graders' attitudes to chemistry and

understanding of electrolysis. Research in Science & Technological Education, 20(1), 25-37

- Weltman, D. and Whiteside, M. (2010), "Comparing the Effectiveness of Traditional and Active Learning Methods in Business Statistics: Convergence to the Mean," Journal of Statistics Education, 18(1),
- Yenilmez, k., & Ersoy, M. (2008). Opinions of mathematics teacher candidates towards applying 7e instructional model on computer aided instruction environments. International Journal of Instruction, 1(1), 49-60.
- o Zeitoun ,A , M (2007). Constructivist theory and strategies for teaching science , the first edition , Dar Al Shorouq for publishing and distribution , Amman ,Jordan

Questions of Posttest for 4th Grade

Q1/A/Read the following text carefully and answer the questions

Mr. Joe owned his own business and worked very hard. His wife was afraid that he would get sick if continued like that ,so she often tried to get him to take a vocation . At last she managed to persuade him to do this , but she was afraid that he might not be able to enjoy his vocation quietly ,so before they left ,Mrs. Joe went to see her husband's secretary .She said to her, "My husband needs a vocation very much , so whatever happens , please don't bother him with telegrams and letters about business problems while we're away , just wait till we get back ." After Mr. and Mrs. Joe had been away about a week . Mr. Joe received a letter from his secretary which said , "Something terrible has happened to your business , but I'm not going to bother you with it now while you're enjoying your vocation ."

- 1. What was Mr. Joe's wife afraid to?
- 2.Did Mr. Joe enjoy his vocation?
- 3. Choose the word that is closest in meaning to 'vocation' (medicine/holiday/money).
- 4. What did the secretary write in letter to Mr. Joe?
- 5. Write a suitable title to the passage.
- 6.Infer the meaning of the sentence "My husband needs a vocation very much".

Textbook Passages

B /Answer or complete the following questions using information from textbook . $(10M.)\,$

- 1. The 'F' in UNICEF stands for (family / friendship /food).
- 2. What does Sandra like to do when she travels?
- 3. The Parthenon was damaged because people had been using it to keep the gunpowder exploded. (True / False)
- 4. The star princess is as twice big as the (complete)
- 5. Who was the Great Pyramid built for ?

Grammar and Functions

Q2/A) Do as required

(10M.)

(12M.)

- 1. She usually goes to school on feet . (Negative)
- 2. where Can tell you me is? Café the (Re-order to make indirect question)
- 3. (see / an Oryx). (Write question with "ever").
- 4. Ali got full Mark in English . John got full Mark in English. (Join . Use : 'like ')
- 5. Empty your bags . (polite request)

Q2/B) Choose the correct answer between the brackets:

(10M.)

Journal of Language Studies. Vol.8, No.11, 2024, Pages (80-96)

1. All children should get an education (and / because) good nutrition. 2. Neither Salma nor Huda (speak / speaks) French. 3. She usually takes her insulin injection every day (On / In) the morning. 4. My sister (borrowed / lent) me her Walkman for the journey. 5. The children were very (tired /tiring) when they got back from the beach. Vocabulary Q3/A) Complete the sentences with words below: (10M)porter health peach learning diary gate 1. A good way to learn English language is to write in your every day . 2. We haven't been swimming in the pool because we prefer the..... 3. When people are sick, they need Care. 4. The place where passengers get on a plane 5. The At the hotel gave us directions to the museum . Q3/B/Match each phrase with its definition: (10M.)1.Child labor * floods, earthquakes, droughts * describing what you have found out in an essay 2.Health care * when children work and don't go to school 3. Natural disasters * being tested when you have learned 4.Take an exam * doctors, medicine and hospital 5. Write a report Classify the following words according to the number of syllables **O4**) (10M.)(magazine , video , software, monitor program,) 2 Syllables 3 Syllables Q5) Written composition (10M.)Write a description about places to go by using the pictures: Q6) Complete the following oral dialogue: (9M.) A: When was UNICEF created? B: A: What does UNICEF stand for ? B:..... A: Do you like to work at UNICEF? B: Q7) Explain the words: (9M.)1) Shinkansen 2) Airbus 3) star princess