المحلد السابع عشر

The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills مجلق كليق التربيق الأساسيق للصلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كل<mark>ية التربية الأساسية – جامعة بابل</mark>

The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills Lec. Dr. Ahmed Ali Alwan Abbas General Directorate of Education in Babylon Governorate <u>ahmedalwan198244@gmail.com</u> أثر نموذج التعلم الخماسي (5E) في تنمية مهارات الكتابة لدى طلبة المدارس المتوسطة العراقيين دارسي اللغة الانجليزية كلغة ثانية م.د. أحمد علي علوان عباس

Abstract:

This study examines the impact of the 5E learning model on the writing skills of the second intermediate stage students in Almutafaweqeen High School for Boys, Babylon, Iraq, for the first semester of the academic year 2022-2023. The study tool is a test of writing skills consisting of four questions. The researcher relies on the experimental method in order to find out the effect of the independent variable (the effect of the 5E learning model) on the dependent variable (writing skills) on the study sample. The results show the superiority of the experimental group that was taught using the 5E learning model over the control group that was taught in the conventional way, i.e., the results showed that the 5E learning model was more effective in developing writing skills than the conventional method. The study recommends the teachers and curriculum designers use the 5E model to develop writing skills and other linguistic skills. The study suggests further research and studies on 5E model effects on different education levels. The 5E learning model provides students with more useful information than traditional methods.

Key Words: 5E learning model, writing, writing skills.

الملخص:

تناولت هذه الدراسة أثر نموذج التعلم الخماسي على مهارات الكتابة لدى طلبة المرحلة الثانية في ثانوية المتفوقين للبنين في محافظة بابل في العراق، للفصل الدراسي الأول للعام الدراسي ٢٠٢٢-٢٠٢٣. وكانت أداة الدراسة هي اختبار مهارات الكتابة المكون من أربعة أسئلة. اعتمد الباحث على المنهج التجريبي لمعرفة أثر المتغير المستقل (أثر نموذج التعلم الخماسي) على المتغير التابع (مهارات الكتابة) لدى عينة الدراسة. وأظهرت النتائج تفوق المجموعة التجريبية التي تم تدريسها باستخدام نموذج

المحلد السابع عشر

مجلق كليق التربيق الأساسيق للصلوم التربويق والأنسانيق

The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

التعلم الخماسي على المجموعة الضابطة التي تم تدريسها بالطريقة التقليدية، أي أظهرت النتائج أن نموذج التعلم الخماسي كان أكثر فعالية في تنمية مهارات الكتابة من الطريقة التقليدية. وتوصي الدراسة المدرسين ومصممي المناهج باستخدام نموذج التعلم الخماسي لتنمية مهارات الكتابة والمهارات اللغوية الأخرى. وتقترح الدراسة إجراء المزيد من البحوث والدراسات حول تأثيرات نموذج التعلم الخماسي على مستويات تعليمية مختلفة، حيث يوفر نموذج التعلم الخماسي للطلاب معلومات أكثر فائدة من الطرق التقليدية.

1.1 Introduction

The modern age has transformed the world into a global village, with English as the universally spoken language. English is the language widely used in the fields of scientific research, education, business, the internet, travel and tourism, media and newspapers, software, medicine, engineering, information and technology, entertainment, banking, and so on. As English serves the purpose of international communication, most Iraqi learners try to learn it. In this process, they have to acquire all four basic skills of the language: listening, speaking, reading, and writing. Listening and reading are passive skills, or receptive skills, whereas speaking and writing are active skills, or productive skills (Rao, 2019).

Writing is viewed as a tool for language learning and is regarded as an essential life skill as well as a fundamental component of teaching foreign languages, making it a crucial productive skill for EFL students in particular since it is the main area for successful academic achievement in educational circles. Better usage of the English language requires more practice, in-depth knowledge, and extensive vocabulary comprehension. Understanding each word's precise meaning aids in improving learners' writing abilities (Aajami, 2018).

Writing skills affect the learners' ability to learn, communicate, and introduce themselves to the world. That is why writing courses and activities should occupy a considerable space in school and college syllabi. Such suggestions are based on true demand and recommendations advanced by various related studies. According to such studies, Iraqi learners studying English as a foreign language show poor writing performance and weak achievement in writing courses (Abbas, 2016).



The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills مجلق كليق التربيق الأساسيق للعلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

Developing EFL students' English writing skills is a fundamental goal in many EFL countries, including Iraq, as writing is a major factor in academic and career success. Yeh et al. (2020) argue that this goal, however, is difficult to achieve in that writing requires not only linguistic knowledge of grammar and vocabulary but also strategic knowledge for planning organization, style, and rhetorical effects. Thus, for most EFL students, English writing is a complicated and challenging task with heavy cognitive demands. Moreover, Khidhir & Abbas (2020) confirm that the applied linguistic area paid a great deal of attention to the writing field. They add that writing skills are complex and problematic to acquire.

The contemporary world is witnessing a huge information and technological revolution, which led to the emergence of a civilized development that included all fields of human knowledge. In light of these changes, the English language syllabi in Iraq faced great challenges, as they could no longer ignore what was happening in societies, which motivated those curricula to invent new models of teaching and learning to keep pace with that development and to achieve their effectiveness in leading the process of shaping the future. Therefore, the Iraqi Ministry of Education seeks to develop its curricula and methods according to objective foundations that take into account the investment of teaching and learning in achieving its goals.

Recently, there have been strategies, approaches, and models in the field of teaching methods that have been presented in the educational system, aiming at developing the teaching and learning process and moving away from memorial education that perpetuates the passivity of the learner and his preservation of information. Among the most prominent of these models and approaches is the 5E (Explain, Engage, Extend, Examine, and Evaluate) model.

AlFouria & Alkaaf state that the method of teaching with the 5E model passes through five stages: explain, engage, extend, examine, and evaluate. The Explain stage is an introduction to the lesson, and it attracts the students' attention and stimulates their motivation by asking the teacher questions that arouse their curiosity about the lesson. In the Engage stage, the teacher provides the opportunity for students to work collectively to answer the questions posed in the busy stage through discussion and work with their colleagues. In the Extend stage, students are allowed to interpret their solutions that they presented in the Engage stage, and the teacher's role in this



The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills مجلق كليق التربيق الأرساميية للصلوم التربويق والانسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

stage is to guide students, facilitate the learning process, clarify ideas, interpret misconceptions and ideas, and organize information correctly. In the Examine stage, students are able to apply what they have learned, relate it to their previous experience, and categorize ideas into new applications. In the evaluation stage, the teacher is able to check the extent to which the students understand the subject and assess their progress on it. The students also check the accuracy and consistency of their interpretations of their behaviour and attitudes in the new educational situations (AlFouria & Alkaaf , 2020).

It is found that "the five Es Model provides teachers with a simple framework for enhancing the way they talk about words with their students and improves their ability to discern student understanding through valuable formative assessment" (Watts-Taffe et al., 2019).

The main idea of the 5E constructivist learning model is the preconceived ideas that an individual can use to understand new experiences, concepts, and information. On the other hand, the 5E constructivist learning model achieves quality through the learner playing the roles of discoverer, experimenter, researcher and, interactive thinker. He desires to learn not for the sake of passing the test but rather to benefit from what he has learned in his future and practical life as well. NASA eClipsTM activities and resources (2022) incorporate the 5E constructivist learning model, assisting students in building and developing their own knowledge from experiences and new ideas. It has an expanding research foundation and may be utilized in integration, Project-based Learning, Problem-based Learning, and Universal Design for Learning.

1.2 Problem of the Study

The absence of effective foundations and criteria for teaching English language skills in general and writing skills in particular led to the mixing of concepts, confusion, and improvisation as a result of using random methods of teaching without resorting to the methods of correct scientific teaching. Language teaching skills are divided into writing, speaking, reading, and listening, with writing being the most difficult and slow-improved skill in second intermediate stage context, requiring a special attention. Moreover, by reviewing some of the previous studies such as Abid (2019), Dehham (2020), and Harchegani, & Sherwani (2021), it was noted that these studies did not deal with modern and effective teaching models to develop writing skills in the English language, but they dealt with teaching methods and strategies that



The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills مجلق كليق التربيق الأسا<mark>سيق العلوم التربويق والإنسانيق</mark>

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

were distinguished by their lack of criteria related to developing writing skills in English. Therefore, the researcher, according to his knowledge, found that there are no methods or effective teaching models to develop writing skills, and this prompted the researcher to employ the 5E learning model to develop writing skills in English among students in the second intermediate stage.

By exploring the opinions of experts in the field of curricula and teaching methods on employing of the learning 5E model and the extent of its potential and impact on developing writing skills among students in the second intermediate stage, the researcher concluded the research problem was the weakness of students in the second intermediate stage in the use of writing skills in English. To examine the influence of the 5E constructivist learning model and explore in-depth its affordances for developing EFL intermediate students' writing skills, the following questions guided this study:

- 1. What effect does the 5E learning model have on EFL intermediate students' writing skills?
- 2. In what ways does the 5E learning model help EFL intermediate students develop their writing skills?

1.3 Aim of the Study

The study aims at figuring out the extent to which 5E as an approach helps increase EFL intermediate students' ability to develop their writing skills.

1.5 Limits of the Study:

The results of this study can be generalized in light of the following limitations:

- A- Objective limits: The writing topics mentioned in the units (1, 2, 3 and 4), of the English language subject O'Neill's et al. book entitled "English for Iraq" for the second intermediate stage, as approved by the Iraqi Ministry of Education for the academic year 2022-2023.
- B- Human limits: a sample of 61 second-grade intermediate students, and it consists of two groups (experimental) and (control).
- C- Spatial limits: Almutafaweqeen High School for Boys affiliated to the Directorate of Education in Babylon Governorate, Iraq.
- D- Time limits: This study was implemented in the first semester of the academic year 2022-2023.

1.6 Value of the Study

It is hoped that the current study would:



The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills هجلق كليق التربيق الأساسيق للصلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

- Highlight one of the important teaching approaches, which is the 5E constructivist learning model, which aims to build student's scientific knowledge through the process of investigation that leads to effective learning and the development of many scientific concepts and skills. This model helps students engage in the process of concepts learning through their previous experiences, as well as it works to link their old knowledge with new ones.
- Underscore the importance of contemporary teaching strategies within Iraq's educational development plan, particularly in enhancing English language skills at the intermediate stage.
- Provide additional theoretical support on the importance of this approach in improving students' understanding in line with the principles of constructivist theory that makes the learner is the focus of the educational process.
- Provide feedback on the feasibility of using the 5E constructivist learning model in improving and developing English writing skills.
- The study results can be used to improve the prevailing methods and strategies in teaching English language skills in general and writing skills in particular.
- English language teachers may benefit from this study in re-preparing their daily lessons according to the 5E constructivist learning model, and how to practice and employ it in teaching English in order to help students develop their writing skills.

1.7 Hypotheses of the Study

The research hypotheses are as follow:

- 1. There is no statistically significant difference at the significance level (0.05) between the mean scores of the experimental group students who are taught "writing component" using the 5E constructivist learning model and the mean scores of the control group students who are taught the same subject using the conventional method in the post writing skills test.
- 2. There is no statistically significant difference at the significance level (0.05) between the mean scores of the experimental group students who are taught "writing component" using the 5E constructivist learning model in pre and post writing skills tests.

المحلد السابع عشر

مجلق كليق التربيق الأساسيق للصلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

1.8 Instrument of the Study

The following instrument was administered after ensuring its validity and reliability:

- A pre-post writing skills test for second intermediate school students designed by the researcher.

1.9 Basic Terms of the Study

• **5E Learning Model**: The 5E Learning Model is an approach of instruction that provides the structure for teachers to meet the demands of today's teaching and learning standards. It engages students' thinking, then allows for explorative discovery and factual learning to deepen students' understanding of content matter. Students learn that one scientific question leads to another, which may lead to several more. Students have the opportunity to become critical thinkers and continue their learning of topics of interest as time passes. This method is flexible and can be used with many different types of instructional resources, programs, and materials that teachers may already have. The 5Es are as follows: Engage, Explore, Explain, Elaborate or Extend, and Evaluate (Chitman-Booker & Kopp, 2013).

As reported by Özenc et al., the 5E Learning Model is one of the models based on the constructivist learning which refers to accessing information and constructing a new structure by bringing the pieces together, i.e., the learner builds new information on his/her prior knowledge (by linking prior knowledge with new knowledge). The concept five Es stands for the first letters of the words Engage, Explore, Explain, Elaborate, and Evaluate, which are five phases of this approach (Özenc et al., 2020).

Operationally, this study defines the 5E Learning Model as an application and translation of some constructivist theoretical ideas. It is a circular model that consists of five teaching stages, which the teacher uses with his/her students inside or outside the classroom. This model aims to build the student's scientific knowledge on his/her own and also to develop writing skills for second intermediate grade students. It is based on an engagement to "excite students and attract their attention", exploration, interpretation, expansion, and evaluation.

المحلد السايع عشر

هجلق كليق التربيق الأساسيق للصلوم التربجيق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

• Writing Skills:

Writing skills are the art of expressing thoughts, feelings, and viewpoints using language as a medium to convey and present them to others in the form of a written subject (Yeung et al., 2016).

Tayseer (2021), in this concern, has adeptly noted that writing skills are all knowledge and abilities related to expressing ideas and thoughts through the written word. Writing skills are about expressing the writer's thoughts and feelings, or clarifying an idea that he had in mind, and then presenting it to the audience in a written and clear form.

In this study, the researcher defines writing skills operationally as specific abilities which help second intermediate grade students put their thoughts and feelings into words in a meaningful form and to mentally interact with the message through the process of planning, discovering, generating ideas, organising, selecting appropriate words, putting ideas on paper, reshaping (making a draft), editing and revising it.

2. Literature Review

2.1 The °E Constructivist Model

The term constructivism is widely used across a range of different activities including, philosophy, psychology, education, art, and research methods. Constructivism as an educational theory concerns what has been found out about the way learning occurs in human minds, and so is important in informing how teaching is organised (Marcus-Quinn & Hourigan, 2017).

The constructivist model is reflected the shifting of focus from external factors that affect student learning, such as: school, teacher, and curriculum; to turn to what happens inside the mind of the learner when exposed to educational situations. These situations are such as: his prior knowledge and his previous understanding of concepts, his ability to process information, his motivation to learn and thinking patterns, and everything that makes learning meaningful to him/her.

Constructivism as a concept has appeared in the past and played a role in the natural sciences. The most recent field in which constructivism emerged was the field of education. There are many and varied applications of constructivism in teaching methods. One of the most important of these applications (strategies) and models based on constructivism is the 5E Constructivist Model (Singh & Yaduvanshi, 2015).



The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills مجلق كليق التربيق الأساسيق للصلوم التربجيق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

According to Omotayo & Adeleke (2017), the 5E Constructivist Learning Model is "one of the best approaches recommended for teaching within a constructivist learning approach. It is derived from the Atkin and Karplus learning cycle proposed in the early 1960s and incorporated into the Science Curriculum Improvement Study (SCIS) program." (p.16).

In the earlier period, this model was recommended only for teaching science. Later on, educationalists used it in the teaching of other subjects. Employing five versions of "E", the model explains five interconnected stages for the construction of knowledge. The five E's of the model are explained as engage, explore, explain, elaborate, and evaluate (Borah, 2020).

The five-stage learning cycle that the researcher employed in the current study will be reviewed as follows:

- 1. **Engagement Phase**: The goal of this phase is to stimulate students, arouse their curiosity and interest, and engage them in the subject of the study. The role of the teacher is to create excitement, generate curiosity, encourage prediction, and ask thought-provoking questions, to raise questions and responses that reveal what they have of previous information and experiences, and how they think about the topic or concept. This phase is used to focus the learners' attention on the subsequent tasks and students should also ask questions such as: Why did this happen? How can I find? What do I already know about this? What can I find out about this concept or topic?
- 2. Exploration Phase: At this stage, the learning is centred on the learner. S/he is actively trying to explore the concept or topic of the written composition to be learned by doing a series of activities in which the students are given some hints and directions that they follow to collect data through direct sensory-motor experiences and to understand the meaning of the topic which they are studying. The teacher in this phase is responsible for giving the students adequate directions and appropriate vocabulary related to the topic to be explored. The following guiding questions help the teachers begin the planning process: What is the idea behind the specific written composition that students will discover and write about? What activities must the students carry out to become familiar with the topic of written composition? What types of instructions do students need? How would the teacher give it to them without telling them the topic or concept?



- 3. Explanation Phase: The teacher prepares the class in a way that enables students to build concepts and ideas in a collaborative way. S/he asks them to provide the information they have found to be discussed, processed, and organized. Then, s/he encourages them to explain the ideas in their own language. Here, the students focus on their initial results obtained from the exploration process that they implemented. The following questions help the teacher guide students to build a self-exploration of the topic: What types of information or results should students talk about? How does the teacher help students summarize their results? How can the teacher help students use the information they get to build the main topic in a proper way? What descriptions should students give to the topic? What reasons does the teacher give the students if they ask why this concept or topic is so important?
- 4. Elaboration Phase: This stage is centred around the students. It aims to help the students mentally organise their experiences by linking them to similar previous experiences and discovering new information about what has been learned. The following questions help the teacher guide students in organizing their thoughts: What previous experiences did the students have related to the current concept? How can the students relate this concept or topic to previous experiences?
- 5. **Evaluation Phase**: The evaluation process is not limited only to the end of the learning process to ensure the understanding of the main idea of the written composition, but it is characterized by continuous evaluation in each of its stages. Moreover, the student receives feedback continuously, and the teacher's use of various and varied evaluation tools helps students acquire the necessary concepts and writing skills.

2.2 Educational Importance of the 5E Constructivist Learning Model

According to Çakir & Güven (2019), the 5E Constructivist Model, which is widely accepted in most field of courses teaching, includes skills and activities that increase students' interest in research, satisfy their expectations, and enable them to focus on research for knowledge and understanding. In addition, this model encourages students to create their own concepts by involving them in the activity at every stage. It is seen that teaching organized according to the 5E learning model positively affects students' achievement, is effective in eliminating their misconceptions and contributes to the positive development of students' attitudes towards the course.



The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills مجلق كليق الترببيق الأرسامسيق للصلوم التربويق والانعسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

It is clear from the above that the 5E Constructivist Model makes the student the centre of the educational process through his active role in the classroom. The student discovers, discusses, shares knowledge with his colleagues, and performs the process of inquiry that leads to learning. In addition, this approach or model takes into account the mental capabilities of the learners and gives students an opportunity to practise mental operations to a greater degree than the prevailing methods based on memorization. Thus, learning proceeds from the part to the whole to help students build their scientific concepts (AlFouria & Alkaaf, 2020).

The study of Özenc et al. (2020) revealed that learning activities organized on the basis of the 5E constructive learning model can improve students' scientific performance, including both their knowledge level and comprehension level. It put forth that the 5E learning model had a positive effect on students' learning levels. Moreover, it is determined that the 5E constructive learning model was more effective than the traditional learning method during the learning of the subject. The results showed that the 5E constructive learning model and learning activities developed with WEB 2.0 tools positively increase student achievement.

In particular, this model is based on a structuralized approach to create rich learning environments and increase its quality. The 5E learning model can enable students to understand the subjects better, and to configure the concepts easily in their minds, thereby increasing their academic success (Kozcu Cakir et al, 2021).

2.3 Writing Process

The concept of "writing" has been interested in by many researchers and scientists. McNamara and Allen (2019) define writing as the use of symbols to express ideas or thoughts. It entails the conversion of ideas and concepts, sounds, or visuals into physical trace. This means that writing takes both physical and mental effort or act. Writing is essentially the physical act of committing thoughts or words to some medium. Writing, on the other hand, is the mental process of coming up with ideas, considering how to convey them, and structuring them into sentences and paragraphs that are understandable to a reader. According to some experts and researchers, writing is viewed as the result of complex processes of planning, drafting, reviewing, and revising. They suggest that the teachers should focus on the process or product of writing before designing or creating a writing task. The



process consists of five steps: pre-writing, writing, revising, editing, and sharing, while the production in a learning context involves four steps: model text, controlled practice, organising ideas, and final product. Moreover, Gangal emphasized that a writer often revises their writing three-four times before finalizing it, following various steps such as determining the topic, collecting and organising thoughts, drafting, editing, re-reading and re-writing the article, and proofreading (Gangal, 2011).



Fig. (1): The Writing Process, <u>https://www.sketchbubble.com</u>.

With a view to achieving some objectives of writing skill in the "English for Iraq" book, the teacher should do his/her best to practice how to develop the writing ability as a powerful tool? Among these objectives are:

- To help students write correctly and effectively for different purposes in day-to-day life.
- To help students write emotively, correctly and creatively on the subject that pleases them.
- To help students learn the process of writing and the essentials of effective writing.



The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills مجلق كليق التربيق الأساسيق للعلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

Moreover, in this book, learning to write deals with two most important problems that a second intermediate student faces while engaged in writing about something. They are: what to write and how to write.

Gangal (2011) explains as a piece of writing demands an absolute clarity of thoughts for its reader, a writer unlike a speaker, has to take special care to ensure that there is nothing vague and ambiguous to the prospective readers in what s/he writes. Composition writing requires a comprehensive treatment of writing skills in a graded form to enable a learner to use writing as a powerful tool.

2.3.1 Teaching EFL Writing to Young Learners

It seems essential to choose the topics the students will be required to write on before the actual writing tasks can be outlined or specified. Therefore, it seems crucial to choose topics that all students are familiar with in order to prevent skewed or biased outcomes. The need of taking into account the learners' linguistic resources is also apparent. Lack of language resources is one of the major difficulties that young EFL learners encounter when writing texts in the foreign language (Griva and Chostelidou, 2013). As a result, it is determined to employ and use topics that are pertinent to the learners' daily life and that, in accordance with the curriculum (English for Iraq), are intended to be covered in intermediate foreign language classes.

The complex skills of text production that emerge after learning written language are referred to as "writing development". Due to the fact that learning a foreign language in Iraq typically begins in primary stage, students have already mastered the fundamentals of writing (the students have already acquired basic writing skills in the school language). As a result, teaching the alphabet and how to form the individual letters in the EFL classroom are typically not necessary in the intermediate stage. In order to learn to write texts, the second-year intermediate students put a strong emphasis on writing development. According to Hallet (2016), this may first entail writing very brief and short texts, such three-sentence stories or two-sentence arguments.



19 العدد 19

The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills مجلق كليق التربيق الأسا<mark>سيق العلوم التربويق والإنسانيق</mark>

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

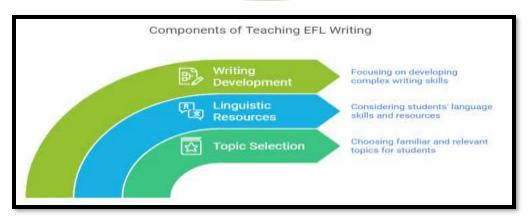


Fig. (2): Components of Teaching EFL Writing

Dehham (2021) also argues that writing activities can help students understand the concept of writing and produce longer texts that can be inspiring and motivating. The students can use a simple text model or framework (cards, invitations, letters, stories, or posters) that they complete and modify with their own ideas, creating their own texts or compositions.

2.3.2 Problems and Difficulties in Teaching EFL Writing

Language plays a pivotal and extremely important role in the student's cognitive and mental development. It is one of the greatest determinants of the individual's humanity. Therefore, the existence of problems and learning difficulties in the field of language hinders the student's cognitive development, thinking, and social and emotional interaction.

English is taught as a foreign language in schools from an early age, but students frequently have difficulties and challenges in developing their writing skills. Writing is regarded as the hardest and least liked of the four English skills (listening, speaking, reading, and writing), despite being one of the most important for language output. Writing is always the last skill to be learnt as compared to the other three skills of listening, speaking, and reading during the process of the formation, learning, and development of any language. However, writing is thought to be the skill that learners find the most challenging (writing is considered as the most difficult skill for learners). In English learning as a foreign language, there is no exception. Learners often have difficulties in writing their texts even in their language. For English writing, those difficulties seem much bigger. This issue has been a widely discussed topic of linguists and foreign language researchers in the world (Anh, 2019).

المحلد السابع عشر

The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills هجلق كليق التربيق الأساسيق للصلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

Muamaroh et al. (2020) explain that the students' English writing problems covered content, organization, vocabulary, language use and mechanic. They add that some studies on writing skills have been found that:

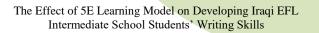
- Many students encounter some problems in the cohesion and coherence of EFL essay writing,
- The major problems in Pakistani undergraduate ESL learners' writing are insufficient linguistic proficiency.
- Anxiety has both positive and negative effects for students in their writing.

Writing activity often requires many factors such as a good ability to develop ideas and information, high level of accuracy to help readers avoid misunderstandings, the use of diversified grammatical structures, syntax, and vocabulary. All of these help to create a particular writing style in accordance with the writing theme and target readers. Additionally, Prayogi et al. (2022) indicate that writing is the most complex and difficult-to-learn skill for those who learn English as a foreign language because "writing is an extremely complex, cognitive activity for all which the writer is required to demonstrate control of a number of variables simultaneously"(p.61). This means that, at the sentence level, the writer must consider many factors such as content, sentence structure, vocabulary, punctuation, and spelling.

In view of the aspects and problems of EFL learners in English writing that were monitored by previous studies and research, the researcher was able to put them in several groups. The most important axes are the following:

- **Problems related to written performance, including**: Excessive errors in spelling and composition, unorganized writing, students not correcting their writing mistakes, students not using punctuation marks, intertwining letters, inconsistent students' written performance and students writing incomplete letters.
- **Problems related to writing behavior itself, including:** Holding the pen incorrectly, speaking to oneself while writing, pressing the pen too hard while writing, not sitting properly while writing, and moving the pen incorrectly while writing.
- **Problems related to students' lack of vocabulary mastery and language used:** Students have limited knowledge in constructing sentence grammatically and also their lack of vocabulary mastery make them feel confused in choosing the word. Besides, they also have problems in





مجلق كليق التربيق الأساسيق للعلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

spelling. They often leave hesitant in writing English word and assume their spelling is not good enough.

- **Psychological manifestations, including:** Feeling frustrated with written work, a tendency to be lazy and neglectful, a tendency to verbally express ideas, evading the practice of duties, and a feeling of stress and fatigue when writing.

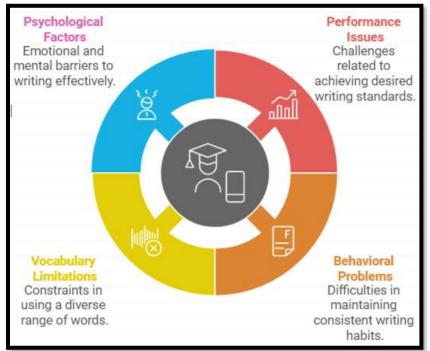


Fig. (3): The Challenges of Teaching EFL Writing.

2.3.3 EFL Writing Skills

EFL Writing skills are an important part of the communication process through which students can express their thoughts, feelings, and opinions in writing. In Arab countries, including Iraq, education systems prioritize writing for passing exams or achieving good grades, leading to a decontextualized and artificial writing experience.

The writing skills can be classified into three categories: Arrangement of Ideas and Examples (AIE), Communicative Quality (CQ) or Coherence and Cohesion (CC), and Sentence Structure Vocabulary (SSV.) AIE examines the convergence and sparability of writing skills, including grammar, lexis,

المجلد السابع عشر

آذار، ۲۰۲۵

The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills هجلق كليق التربيق الأساسيق للعلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

cohesion, and idea arrangement, while CQ focuses on range, accuracy, logical pronouns, conjunctions, idea sequencing, and strength of conceptual and referential linkage. SSV includes using appropriate vocabulary, correct spelling, punctuation, correct syntax, avoiding sentence fragments and fused sentences, and using synonyms and antonyms accurately (Aryadoust, 2010).

Writing skills serve a life-related purpose, allowing students to express themselves emotively and creatively. Acquiring writing skills helps students quench their soul thirst and use powerful language, such as figurative meanings and figures of speech, to leave readers spellbound and intoxicated (Gangal, 2011).

Moreover, the study of Grabe & Kaplan (2014) focuses on the importance of writing process in EFL writing instruction for students to improve their essay writing skills. they add that successful writing relies on execution of strategies, and learning to write a foreign language involves not just putting down conventional symbols but also purposeful organization of ideas, facts, and experiences. The goal is to achieve compactness, precision, grammatical, idiomatic, and orthographic accuracy in order words.

Syllabus design plays a crucial role in determining whether the emphasis is on the product or process approach of writing. Traditional curriculum practice distinguishes between syllabus designer activities and methodologies activities. Product – based approaches involve learners imitating and copying correct language models, limiting creative expression and requiring frequent revision for flawless writing (Siddiqui et al, 2023). Teachers and course designers are essential in helping students improve their writing skills by identifying their needs and designing courses that cater to their needs.

Teaching EFL writing skills necessitates teachers developing knowledge of language structure, usage, and context, as well as understanding and teaching writing skills within their intended context (Ene et al., 2024).

From the researcher's perspective as a teacher, EFL writing is more than just a skill for passing exams – it is a vital tool for self-expression and communication. Unfortunately, many education systems, especially in Arab countries like Iraq, focus on rigid writing structures rather than fostering creativity and meaningful expression. Writing can be taught as a process that helps students think critically, organize their ideas, and express themselves effectively. Ultimately, EFL writing skills should not feel like a mechanical task but rather an opportunity for students to communicate with clarity and



The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills

مجلق كلبق التربيق الأساسيق للعلوم التربويق والانسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

confidence. By shifting the focus from exam-oriented writing to real-world application, the teachers can help learners develop their writing skills that serve them beyond the classroom.

2.3.4 Reasons for Teaching Writing Skills in the EFL Classroom

Writing is a crucial skill for language learning, requiring the ability to transmit and receive information and develop perspectives. It's complex and requires guidance and assistance from both learners and teachers to achieve success (Fodil-Cherif, 2021). Besides, writing is often perceived as an easy task by both students and teachers, but it is a crucial structure or format that students must learn (Gurung, 2023). Nguyen (2023) stated that writing presents numerous challenges for both students and teachers. Anxiety, a common issue in writing classes, often leads to avoidance behaviours. Teachers struggle to find suitable teaching methods, allocate sufficient practice time, and facilitating them to generate more ideas for writing. The importance of teaching EFL writing skills lies in its challenges and its practical use as a communicative tool. Moreover, improving students' English writing skills is essential for various reasons, such as responding to emails, taking exams, writing skills is not an easy task.

2.3.5 Teaching and Developing Writing Skills Using 5E Constructive Learning Model

Writing is a crucial literacy skill in the 21st century, requiring explicit instruction and practice. There is no one right way to approach the teaching of writing, and teacher must identify and apply methods that best meet their students' needs.

To help students develop their writing students, teachers should raise their students' awareness of various strategies for composing essays. They should guide them on how to match appropriate strategies to each writing situation, focusing on content and self-expression rather than accuracy or grammatical patterns. Teacher should act as "readers" and " facilitators" in the writing classroom, providing detailed feedback that encourages students to act and commit to change in their writing (Daffern & Mackenzie, 2020).



مجلق كليق التربيق الأسا<mark>سيق العلوم التربويق والإنسانيق</mark>

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

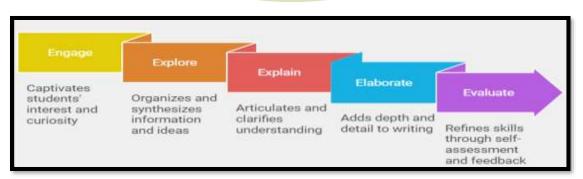
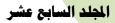


Fig. (4): 5E Constructive Learning Model and Writing Skills

In the intermediate classroom, it is important for the learners to be aware of the necessity of developing the writing skills for future success in language exams. The focus of tasks should shift from language to ideas and content, with the teaching of writing focusing on students' ideas and expressions rather than grammar. Moreover, writing skills promotion requiring and stimulating topics that engage students and allow them to express their ideas. Creating authentic and personally relevant contexts, such as class magazines or classroom websites can motivate students and engage them in writing process (Hyland, 2019).

On the other hand, collaborative writing and beer evaluation are influential composition teaching strategies, practically beneficial for second language learners. Group work helps generate ideas, enhances review and evaluation, and builds self-confidence. Activities like interviewing classmates, sharing experiences, and listing strengths and accomplishments build self-confidence and lead to successful collaborative work. Peercorrection can also be beneficial for specific learners, as it allows them to work together on their first drafts, providing a more motivating context for writing (Davies & Pearse, 2013). Overall, promoting writing skills through engaging, stimulating activities and a supportive environment can significantly enhance students' writing abilities.





19 العدد 19

The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills

هجلق كليق التربيق الأساسيق للصلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

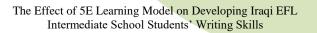


Fig. (5): Suggestions of Developing Writing Skills in EFL Classroom (Nifli, 2023)

Successful foreign and second language learning relies on appropriate teaching methods. Constructivist Approach teaching, including models like 5E learning model has gained interest in recent year.

Yiğit (2011) argues that the Constructive Learning Theory and the 5E Constructive Learning Model emphasize internal cognitive aspects, focusing on learners discovering and creating language rather than just memorizing and repeating information. The 5E learning Model stages enable instructors to boost student interest, meet expectations, and create an enjoyable learning environment, crucial in challenging writing instruction process. The 5E learning model effectively promotes students' writing skills and motivates them to write, making it an effective tool for improving challenging writing skills in language classrooms, leading to motivated and successful writers. Additionally, the 5E modal is a useful tool for teaching writing, as it promotes creativity, motivation, and higher-order thinking skills. It helps students create engaging and enjoyable writing lessons, fostering original texts. Prior knowledge is significant in learning a new language, and the 5E Model helps construct new information on this knowledge.

المحلد السايع عش





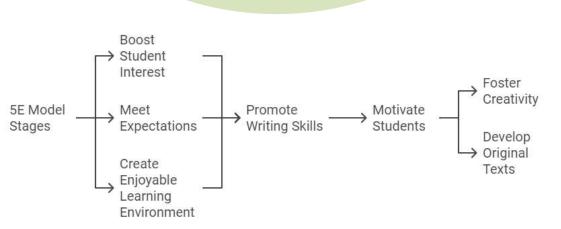
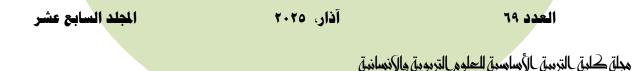


Fig. (6): Enhancing Writing Skills by Using the 5E Learning Model

The 5E Constructive Learning Model, consisting of five stages: Engage, Explore, Explain, Elaborate, and Evaluate, significantly enhances students' writing skills. It promotes active participation and critical thinking, crucial for effective writing. The "Engage" phase stimulates curiosity, while the "Explore" phase organizes information and ideas. The "Explain" phase helps students articulate their understanding, while the "Elaborate" phase adds depth and detail to their writing. The "Evaluate" phase, facilitated by self-assessment and peer feedback, helps refine writing skills, promoting continuous improvement (Bybee, 2014).

Moreover, Abdi (2022) stated that the 5E Constructive Learning Model is a method for enhancing writing skills by creating an active, inquiry-based learning environment. The Engage stage captivates students' interest, while the Explore stage collects and synthesizes information. The Explain stage helps articulate understanding, while the Elaborate stage refines and expands ideas, promoting complex writing. The Evaluate stage encourages selfreflection and peer feedback, enhancing writing skills and achieving higher proficiency levels.

To improve English writing skills, students should write daily, starting with a daily theme. They should ask someone to check their writing, such as a teacher or friend or relative who speaks English. They should engage in writing English exchanges, where they can write in English and receive corrections from the other person. Additionally, students can improve their vocabulary by reading English books, newspapers, or magazines, which will teach them new words and common idioms. Moreover, using a dictionary can also help practice using unfamiliar words and phrases. Lastly, checking



مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

students' writing carefully after they have written something in English can help identify mistakes and improve spelling, grammar, and vocabulary. By following these tips, students can enhance their writing abilities and enjoy the process of writing in English.

2.3.6 Writing Skills Assessment

Error, self and peer corrections are important in teaching students writing skills. Error correction is often provided by teachers, but it is more effective when students correct their own mistakes. Grammar and editing feedback can also improve text accuracy. In like manner, peer correction is considered a positive and reinforcing method for students, providing an audience and making writing tasks more meaningful. While some students may not welcome peer feedback, it helps them become more critical of their own texts. By detaching themselves from their texts and reading them with the audience's eyes, students gain confidence and become more autonomous revisers. Peer feedback is an essential tool in cooperative learning English writing classrooms (Thao, 2017).

Moreover, the teachers should diagnose students' writing issues before teaching, differentiate between formative and summative assessment practices, and be trained in designing exams to measure course objectives, replacing attendance and classroom participation with written assignments, peer-reviews, and written quizzes (Ahmed & Abouabdelkader, 2016).

3. Research Procedures

The present study follows the subsequent procedures:

1. Reviewing the literature and previous studies which are related to:

a. 5E Constructivist Learning Model.

b. Writing Skills .

2. Designing a pre-post test for the writing skills, required for second intermediate grade students, and verifying its validity and reliability.

3. Designing an instructional framework based on the 5E constructivist learning model in the light of the scheduled curriculum for second intermediate grade students.

4. Selecting a sample of second intermediate grade students randomly (n=61) and dividing it into two groups: one acts as the control group (n=30), whereas the other constitutes the experimental group (n=31).

5. Administering the pre-post writing skills test to both the experimental and the control groups before the experiment.



The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills مجلة كلية التربية الأساسية العلوم التربوية والإنسانية

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

6. Teaching the assigned composition writing passages in (units 1, 2, 3 and 4) to the students of the experimental group through using the 5E constructivist learning model and to the control group through the regular method of instruction.

7. Administering the writing skills test to both the experimental and the control groups after conducting the experiment.

8. Analysing the obtained data statistically.

9. Presenting results, recommendations and suggestions for further research.

3.1 Research Methodology and Design

The current research used the experimental approach with a semiexperimental design, and the idea of this design is based on selecting two groups, one experimental and the other control, where writing skills test was applied beforehand. The experimental group was then taught utilizing the 5E constructivist learning model, whereas the control group received the traditional instruction on the same subjects. After the end of the experimental period, the two groups were subjected to a re-use of the writing skills test, as a post-measurement. The researcher chose one of the partial adjustment designs that best suited the circumstances of the ongoing study. The design had the following format:

Table	(1):	Experimental	Design
-------	------	--------------	--------

Test tools	Dependent variable	Independent variable	Groups
Writing skills test	Writing abilla	5E constructivist learning approach	Experimental
	Writing skills	Traditional method	Control

3.2 The Research Population and Its Sample:

The research population consists of all intermediate stage students in Babylon Governorate for the academic year 2022-2023. The sample of the study consisted of 61 male students. It was selected in a simple random way to homogenize the members of the community. They were divided into 30 students for the control group and 31 students for the experimental group. Here, the researcher deals with classrooms, and he is not entitled to move the sample members; because it was not possible to randomly distribute individuals between the experimental and control groups, as the choice falls on the school. One of the intermediate schools was randomly selected, where the choice fell on Almutafaweqeen High School for Boys. Then, section (A) was chosen to represent the control group (CG), and section (B) to represent the experimental group (EG). Accordingly, some extraneous variables that



مجلق كليق التربيق الأساسيق للعلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

may have an impact on the results of the study were controlled, the most important of which is adjusting the pre-measurement to writing skills test.

3.3 Equivalence between the Two Groups: The researcher randomly selected two research groups and ensured statistical equality by examining chronological age, academic achievement of fathers and mothers, and writing pre-test.

3.4 Writing Skills Pre-test:

The study used a writing pre-test to compare the performance of two research groups by using t-test for two independent groups. The mean scores of EG was (27.6) and had a standard deviation (8.68) compared to CG (28.2) and a standard deviation (10.50). The difference was not statistically significant at 0.05, indicating that EG and CG groups were statistically equivalent in writing skills test. The results are presented in table (2):

	Tuble (2): t test Results of the writing skins file test									
Group	No	Mean	Standard Deviation	t-test Value		Degree of	Level of Sig. at 0.05			
•				Cal.	Tab.	freedom	0			
EG	31	27.6	8.68	0.21 2.0		59	Not statistically			
CG	30	28.2	10.50	0.21	2.0	59	significant			

Table (2): t-test Results of the Writing Skills Pre-test

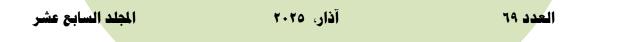
The test emphasized the importance of control procedures and internal safety in experimental design, ensuring equivalence between experimental and control groups in variables affecting the dependent variable. Internal safety is achieved when differences are attributed to independent variable.

3.5 Study Tools and Verification of Validity and Reliability

3.5.1 A List of Writing Skills for Intermediate Second Stage Students:

The list aimed to determine the appropriate writing skills for intermediate second stage students. This list was built by relying on a number of sources, namely: previous studies and related literature in the field of writing skills, such as the study of Al-Ebadi (2019), Dehham (2021), and Harchegani, & Sherwani (2021), as well as the objectives of teaching writing in the intermediate stage in Iraq.

Validity of Writing Skills Checklist: The current research used the Content Validity. One way to estimate the validity of the content is to present it to arbitrators and experts. The checklist was presented in its initial form to eleven arbitrators in the field of curricula and teaching methods. To further adjust the list, the relative weight has been calculated; this is to resort to these



مجلق كليق التربيق الأساسيق العلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كل<mark>ية التربية الأساسية – جامعة بابل</mark>

proportions in excluding some of them, or retaining them. The skills that obtained the agreement of the arbitrators were approved by (90%) or more. The researcher excluded two skills that the arbitrators considered unsuitable. Some of the linguistic wordings were modified for some of the skills. Table (1) shows the writing skills reached with the experts' perspectives and the percentage of their approval:

	Skill Checklist		No. of exper		
Skills	EFL Writing Sub-Skills		Percentage		
J KIII5	ET L WITTING Sub-Skins	Total	Agree	Disagree	rereentage
	1- Producing a clear, logical, relevant, well-developed content.		12	1	92%
Content and	2- Writing suitable sentences that are relevant to the content.		11	2	85%
treatment skills	3- Highlighting and presenting the main idea creatively (developing thoughts and excluding all irrelevant material).	13	13	0	100%
Language use skills	4- Using a range of vocabulary.		10	3	77%
	5- Applying grammatical rules accurately.	13	13	0	100%
Mechanics	6- Spelling words correctly.	10	13	0	100%
skills	7- Using punctuation marks correctly.	13	13	0	100%
	8- Presenting a precise and an interesting introduction that introduces the subject and catches the reader's attention.		10	3	77%
Organization skills	9- Developing a body that contains the students' in-depth analysis and justifications.		12	1	92%
	10- Using a suitable conclusion that wraps up student's ideas.		11	2	85%
	11- Imposing logical sequence of the sentences, ideas or paragraphs.		11	2	85%

 Table (3): Experts' Perspectives Regarding the EFL Writing

 Skill Checklist

Table (1) shows that EFL writing skills were divided into four main skills. Under each main skill there are a number of sub-skills that serve as subindicators for achieving the main skill or what can be called a criterion. The total number of all skills is eleven. The arbitrators agreed on its importance and suitability for second grade students.



مجلق كليق التربيق الأساسيق للصلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

3.5.2 The Writing Test and Its Aim:

A pre-post writing test was designed by the researcher for measuring the development of the necessary writing skills for second year intermediate students. It was administered to the control and the experimental groups before starting the treatment in order to make sure that both groups were at the same writing level. Therefore, any progress in the experimental group students' writing skills could be attributed to the implementation of 5E constructivist learning model. As a post test, it was used to investigate the effect of the 5E constructivist learning model in developing second year intermediate students writing skills in comparison with their results in its pre-administration.

- Validity of the test: The test was evaluated by experts in EFL curricula and teaching methods, with 85% agreement rate. Based on their observations, modifications were made, and the test was ready for application.
- **Reliability of the test:** The test was administered twice to 35 second-stage students at AL-Dhafer Intermediate School for Boys. The reliability of the test was estimated using Pearson's correlation coefficient, with a coefficient of (0.92), indicating its reliability for the current study's purposes.
- The building of test

The test was built of essay questions (paragraph writing). The test addressed the levels of (understanding, application and synthesis) according to Bloom's taxonomy. The test consists of four questions with 10 marks for the completely correct answer, 5-9 marks for incomplete answer, and zero for each incorrect or left answer, resulting in a maximum score of (40) (see appendix 1). Moreover, the content of the writing skills test (content analysis), another crucial component and procedure of the test, covered the first four topics of the EFL writing syllabus prescribed by the Ministry of Iraqi Education for the first semester, which are: unit one (Embarrassing Moment), unit two (A Letter to a Sick Friend), unit three (People Should Do Sport), and unit four (Changes in Your Town). The experts evaluated the four questions to remove ambiguous terms and language difficulties, and then the researcher edited and reviewed the test questions based on their suggestions, incorporating them and eliminating defects.

مجلة كليق الترببية الأساسية الصلوم التربوية والإنسانية

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

3.6 Difficulties Involved when Using the 5E Constructivist Learning Model to Develop EFL Writing Skills:

While 24 (77%) of experimental group students reported no problems using the 5E constructivist learning model, 7 (23%) of them faced some challenges, including:

- **Engagement challenges**: Some students lacked sufficient exposure to EFL writing. This may include limited prior knowledge and low motivation among students, making it challenging to connect new concepts and engage them meaningfully.
- *Exploration challenges*: This includes limited autonomy and cognitive load, as some students may struggle with self-directed learning and inquiry-based activities due to low proficiency.
- *Explanation challenges*: These challenges can arise from language barriers and conceptual gaps (e.g., coherence and cohesion) in abstract writing concepts, making it difficult for students to comprehend teacher explanations and peer discussions.
- *Elaboration challenges*: These challenges involve application difficulties and time-consuming activities, such as peer reviews and rewriting drafts.
- *Evaluation challenges*: It can include subjectivity in writing assessment due to varying fluency and creativity levels, and delayed feedback impact, which can hinder students' ability to improve.

4. Results and Discussion

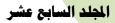
The researcher presents the statistical analysis of collected and acquired data. He also discusses the findings after using statistical instruments for both control and experimental groups.

4.1 Presentation of Results

4.1.1 The Results of the First Null Hypothesis:

1. The researcher tested the first null hypothesis that there is no statistically significant difference at the level of significance (0.05) between the mean scores of the EG students who are taught "composition writing" using the 5E constructivist learning model and the mean scores of the CG students who are taught the same subject using the conventional method in the post writing skills test. After correcting answers and analyzing data, the mean, variance, and standard deviation were calculated.

The researcher used a t-test for two independent groups to compare the mean scores of the EG and CG. It was shown that the EG had a higher mean



The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills هجلق كليق التربيق الأساسيق للعلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

score (36.26) compared to the CG (26.77). The calculated t-value (4.6) was larger than tabulated t-value (2.0), indicating a statistically significant difference in post-writing test scores, in favor of the EG at the level (0.05). Thus, the null hypothesis is rejected and alternative hypothesis is accepted. The results are presented in Table (4).

Table (4): t-test Results of the Two Research Groups in Writing Post-test

	icsi								
	Group No Mean		Mean	Standard t-test Value		Degree of	Level of Sig. at		
	•			Deviation	Cal.	Tab.	freedom	0.05	
ſ	EG	31	36.26	6.28	16	6.28	2.0	50	statistically
	CG	30	26.77	9.42	4.6	2.0	59	significant	

Table (4) shows a significant difference in writing test scores between the EG and CG, indicating superiority of the EG taught using 5E Model over the CG.

3. The researcher calculated the effect size (the extent of effectiveness for two independent groups) of the independent variable on dependent variable in writing test using the Eta square equation . The effect size was (0.26), indicating a large amount for the teaching variable with 5E Model and a significant positive effect on the EG in the writing test.

Table (5): The Effect Size of the Independent Variable (5E Model) on the Dependent

Variable (Writing Skills)						
Dependent	Value of effect					

Independent	Dependent	Value of effect	Effect Size
Variable	Variable	size η2	
5E Model	Writing Skills	0.26	Large

Table (6): Effect Size and Its Values According to Cohen's Classification

Values of Effect Size (η2)	Significance
(0.01) – (0.05)	Small
(0.06) – (0.14)	Medium
(0.14) –	Large

4.1.2 The Results of the Second Null Hypothesis:

1. The researcher tested the second null hypothesis that there is no statistically significant difference at the significance level (0.05) between the mean scores of the experimental group students who are taught "composition writing" using the 5E constructivist learning model in pre and post writing skills tests.



The researcher conducted the study on experimental research group students using pre and post writing tests. By using the t-test for two correlated samples, the results showed a significant difference in post-test scores, with the experimental group students scoring higher in the post-test at the level of (0.05). The experimental group students' pre-writing test mean scores were (27.68) with a standard deviation of (8.68), while their post-writing test mean scores were (36.26) with a standard deviation of (6.28). The calculated t-value (8.20) was larger than the tabulated t-value (3.65) with a degree of freedom (30), indicating the superiority of the experimental group students after conducting the experiment and introducing the 5E model. Thus the second null hypothesis is rejected and the alternative hypothesis is accepted. Table (7) illustrates the results:

Table (7): Mean Scores and T-values (Calculated and Tabulated) of theExperimental Group Students in writing Pre and Post Test

				Standard t- Tes		st Value Statistic		Standard t- Test Value Sta		Degree	Level of
Group	No	Test	Mean	Deviation	Calculated	Tabulated		of Freedom	significance at (0.05)		
EG	31	Pre Post	27.68 36.26	8.68 6.28	8.20	3.65	0.00	30	statistically significant		

Table (7) reveals a significant difference in pre-post writing test scores among experimental research group students, favoring post-writing test.

2. The researcher used Cohen's equation to calculate the effect size (d) of the 5E model on writing skills for two correlated samples , resulting in a value of (1.13), a value that explains the effect size with a large amount of the teaching variable, indicating a significant impact of teaching using the 5E model on developing writing skills. Table (8) explains that:

Table (8): The Effect Size of the Independent Variable (5E Model) on the Dependent

Variable (Pre and Post Writing Test) of the Experimental Group.

	ind i obt mining i	(cot) of the happen	mentar Group	
Independent Variable Dependent Variable		Value of effect size η2	Effect Size	
5E Model	5E Model Writing Skills		Large	
Table (9): Effect S	ize and Its Values	According to Coh	en's Classification	
Values of E	ffect Size (d)	Significance (Relative Size)		
(0.2) -	- (0.4)	Small		
((0.4)	- (0.7)	Medium		
(0.8	8) -	La	rge	



مجلق كليق التربيق الأساسيق العلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

4.2 Discussion of Results

The study successfully verified all hypotheses and achieved its main aim of developing writing skills for 2nd intermediate school students using the 5E Constructivist Learning Model. The use of 5E Model has significantly enhanced students' knowledge acquisition and writing skills, enabling them to understand and analyze information more deeply. This model has also allowed them to deepen their understanding of composition writing topics, enhancing their ability to apply this knowledge in new educational situations. The researcher attributes the previous results to the 5E Model used in the present study which consists of five stages: Engage, Explore, Elaborate, Extend, and Evaluate, to record and compose writing content. The Model increases students' motivation and knowledge retention, leading to increased satisfaction and improved attitudes to towards learning. This result is aligned with the previous studies by Bybee, (2014) and Abdi (2022).

The experiment revealed that students prefer alternative learning methods over rigid ones, reducing their motivation and boredom. The 5E Model effectively attracts students' attention through suspense, increasing motivation and interaction, and contributing to the development of writing skills, as demonstrated in a writing skills test. The results also showed that the using of 5E Model significantly improved the experimental group students' writing skills. This result is aligned with many previous studies that indicated the 5E Model was effective in developing various students' skills and the ability to read, write and engage in their own learning such as the study of Çakir & Güven (2019) and the study of Özenc et al. (2020).

In addition, the experimental group students demonstrated significant progress in developing their writing skills after implementing and using the 5E learning Model, largely due to various factors, including:

- 1- The researcher's understanding of students' thinking, individual differences, viewpoints, and accepting new ideas significantly enhanced their interest in learning using the 5E Model.
- 2- Providing positive feedback and avoiding negative comments during students' learning experience with the 5E Model.
- 3- The use of 5E Model taught experimental group students how to support opinions and write agreement or disagreement paragraphs using key strategies. They enjoyed arguing with peers, defending ideas with



مجلق كليق التربيق الأساسيق للعلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

examples, and gained self-confidence to speak and write their support, enhancing their ability to defend their ideas.

- 4- The students preferred group work for preparing the topics of composition writing, as it promoted collaborative learning and improved their overall study experience.
- 5- The researcher encouraged students to enhance their understanding through activities that connect prior knowledge with new concepts, extend their conceptual knowledge on the writing topics, and assess their progress in gaining new skills within the evaluation phase, allowing the researcher to monitor their progress.

As has been noted, the 5E Learning Model is a useful tool for teaching writing, as it helps students create engaging and enjoyable writing lessons, fostering original texts. The 5E Constructivist Model, which values and improves higher-order thinking skills, also helps students construct new information on prior knowledge, which is crucial in learning a new language, especially in writing.

4.3 Recommendations:

The research findings have led to the following recommendations:

- 1- Encouraging teachers and curriculum designers to use the 5E learning model to develop writing skills.
- 2- Offering professional development courses for English language teachers, focusing on the 5E learning model, to help them effectively use it with intermediate school students.
- 3- Benefiting from the writing skills that the current research has reached when teaching the intermediate school students.
- 4- Discussing various modern creative writing techniques that can help students explore and enhance their writing imagination.
- 5- Focusing on providing many and varied linguistic activities to train students in different linguistic skills.
- 6- Focusing on the evaluation process by preparing a diverse and multiple set of questions that measure the students' actual level of the writing skills that have been taught.

4.4 Suggestions:

1- The effectiveness of the 5E learning model on developing creative reading comprehension skills.

المحلد السابع عشر

مجلق كليق التربيق الأساسيق للصلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأ<mark>ساسية – جامعة بابل</mark>

- 2- Further research is needed to investigate the effect of the 5E constructivist learning model with other students' populations at different levels of education.
- 3- The effectiveness of a program based on the 5E learning model on developing listening skills for high school students.
- 4- The effectiveness of a program based on the 5E learning model on developing speaking skills for high school students.

References:

Aajami, R. F. (2018). Applying Cognitive Linguistics to Enhance the Semantics of English at: An Experimental Study (Baghdad University). International Journal of English Linguistics, 8(6), 185-192.

Abbas, S., Hamid. (2016). Writing Apprehension and Performance of Iraqi EFL Students According to their Academic Locus of Control Orientation. International Journal of English Language Teaching, 34-48.

Abdi, A. (2022). Application of the 5E Learning Model in Enhancing Writing Skills: A contemporary Approach. Journal of Modern Educational Research. 17 (3), 112 – 125.

Abid, A. K. (2019). The effectiveness of Iraqi language writing proficiency on foreign language performance (English) in the writing skill of preparatory school pupils in Iraq. Humanities & Social Sciences Reviews, 7(6), 807-812. Ahmed, A., & Abouabdelkader, A. (2016). Teaching EFL Writing in the 21st Century Arab World. Palgrave Macmillan.

Al-Ebadi, Q. H. (2019). The Impact of Implementing Think Pair Share Strategy on Developing Iraqi EFL Students Writing Skills. Larq Journal for Philosophy, Linguistics & Social Sciences, 4(35).

AlFouria, Z. S., & Alkaaf, F. M. (2020). The Effectiveness of the Five E's Learning Cycle in Rhetoric Achievement among Grade Ten Female Students in Oman, Journal of Educational Sciences, Issue 14, Qatar University Press.

Anh, D. T. N. (2019). EFL student's writing skills: Challenges and remedies. IOSR Journal of Research & Method in Education, 9(6), 74-84.

Aryadoust, V. (2010). Investigating writing sub-skills in testing English as a foreign language: A structural equation modeling study. TESL-EJ, 13(4), 1-20.

Borah, R. (2020). Enhancing Performance Of Viii Grade Learners Using Constructivist '5e'model In Social Science At Elementary Education Of Assam. International Journal of Management (IJM), 11(7).



The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills هجلق كليق التربيق الأساسيق للصلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

Bybee, R. W. (2014). The BSCS 5E Instructional Model: Personal Reflections and contemporary Implications. Science and Children, 51,(8).

Çakir, N. K., & Güven, G. (2019). Effect of 5E learning model on academic achievement and attitude towards the science course: A meta-analysis study. Cukurova University Faculty of Education Journal, 48(2), 1111-1140.

Chitman-Booker, L., & Kopp, K. (2013). The 5Es of inquiry-based science. Teacher Created Materials.

Daffern, T., & Mackenzie, N. M. (Eds.). (2020). Teaching writing: Effective approaches for the middle years. Routledge.

Davies, P. & Pearse, D. (2013). Success in English Teaching - Oxford Handbooks for Language Teachers. Oxford University Press.

Dehham, S. H. (2020). Developing Iraqi EFL school students' performance in creative writing skills through focus strategy. International Journal of Language and Linguistics, 8(4), 128-134.

Dehham, S. H. (2021). The Impact of (PTT) Strategy on enhancing Iraqi EFL 5th school Students' Achievement in Writing Skills. Turkish Online Journal of Qualitative Inquiry, 12(4).

Ene, E., Gilliland, B., Lee, S. H., Saenkhum, T., & Seloni, L. (Eds.). (2024). EFL writing teacher education and professional development: Voices from under-represented contexts (Vol. 118). Channel View Publications.

Fodil-Cherif, S. B. (2021). EFL writing skills development through literature. Education and Linguistics Research, 7(2), 1-8.

Gangal, J. K. (2011). A practical course for developing writing skills in English. PHI Learning Pvt. Ltd.

Grabe, W., & Kaplan, R. (2014). Theory and practice of writing: An applied linguistic perspective. Routledge.

Griva, E., & Chostelidou, D. (2013). Writing skills and strategies of bilingual immigrant students learning Greek as a second language and English as a foreign language. Reading & Writing-Journal of the Reading Association of South Africa, 4(1), 1-9.

Gurung, R. K. (2023). Teaching writing skills in EFL classes, especially in lower classes. International Journal of English and Studies (IJOES), 5(6), 85-95.

Hallet, W. (2016). Genres im fremdsprachlichen und bilingualen Unterricht. Formen und Muster der sprachlichen Interaktion. Seelze: Klett, Kallmeyer.



The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills مجلق كليق التربيق الأساسيق للعلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية - جامعة بابل

Harchegani, M. K. & Sherwani, K., A. (2021). The Impact of Multimodal Discourse on Iraqi EFL Learners' Writing Skills. Turkish Journal of Computer and Mathematics Education (TURCOMAT), 12(2), 239-245.

Hyland, K. (2019). Second language writing. Cambridge university press.

Khidhir, E. A., & Abbas, N. J. (2020). Strategies of Fostering Writing Skills to Improve EFL Learners' Writing Fluency in Erbil Secondary Schools. Qalaai Zanist Journal, 5(1), 242-279.

Kozcu Cakir, N., Guven, G., & Celik, C. (2021). Integration of mobile augmented reality (MAR) applications into the 5E learning model in Biology teaching. International Journal of Technology in Education (IJTE), 4(1), 93-112.

Marcus-Quinn, A., & Hourigan, T. (2017). Handbook on digital learning for K-12 schools. Springer International Publishing.

McNamara, D., S. & Allen, L., K.(2019) Writing. Available online at: https://files.eric.ed.gov/fulltext/ED595364.pdf

Muamaroh, M., Mukti, V. C., & Haryanti, D. (2020). The process and problems of EFL learners in English writing. Ethical Lingua: Journal of Language Teaching and Literature, 7(2), 405-418.

NASA eClipsTM (2022). What is the 5E instructional model? Available online at: <u>https://nasaeclips.arc.nasa.gov/teachertoolbox/the5e</u>

Nguyen, H. T. (2023, April). The Use of Padlet in EFL Writing Classes in Vietnam: From Teachers' Perspective. In *Proceedings of the 19th International Conference of the Asia Association of Computer-Assisted Language Learning (AsiaCALL 2022)* (Vol. 744, p. 167). Springer Nature.

Omotayo, S. A., & Adeleke, J. O. (2017). The 5E Instructional Model: A Constructivist Approach for Enhancing Students' Learning Outcomes in Mathematics. Journal of the International Society for Teacher Education, 21(2), 15-26.

Özenc, M., Dursun, H., & ŞAHİN, S. (2020). The effect of activities developed with web 2.0 tools based on the 5e learning cycle model on the multiplication achievement of 4th graders. Participatory Educational Research, 7(3), 105-123.

Özenc, M., Dursun, H., & ŞAHİN, S. (2020). The effect of activities developed with web 2.0 tools based on the 5e learning cycle model on the multiplication achievement of 4th graders. Participatory Educational Research, 7(3), 105-123.



The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills مجلق كليق التربيق الأساسيق العلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية - جامعة بابل

Prayogi, A., Mulyati, Y., Sastromiharjo, A., & Damayanti, V. S. (2022, December). Incubation Learning Model to Improve Procedure Text Writing Ability. In Sixth International Conference on Language, Literature, Culture, and Education (ICOLLITE 2022) (pp. 60-70). Atlantis Press.

Rao, P. S. (2019). The importance of speaking skills in English classrooms. Alford Council of International English & Literature Journal (ACIELJ), 2(2), 6-18.

Siddiqui, S., Ahamed, M. M., Chowdhury, G., Mishu, A., & Monira, S. (2023). Teaching Writing Skills to EFL Learners: Issues and Concerns. Journal of Language Teaching and Research, 14(6), 1541-1550.

Singh, S., & Yaduvanshi, S. (2015). Constructivism in science classroom: Why and how. International Journal of Scientific and Research Publications, 5(3), 1-5.

Tayseer, Muhammad. (2021). What are writing skills? The Foundation for the Arab Journal of Science and Research Publishing - Al Mudawana. Retrieved on 10/10/2022, from <u>https://blog.ajsrp.com/</u>.

Thao, N. T. T., & Anh, N. D. (2017). Error correction in teaching writing skill. Journal of Development Research, 1(1), 24-28.

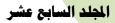
The Writing Process.Retrieved on 3/1/2022, from<u>https://www.sketchbubble.com</u>

Watts-Taffe, S., Gwinn, C. B., & Forrest, C. (2019). Explain, Engage, Extend, Examine: Four E's of Vocabulary Instruction. Texas Journal of Literacy Education, 7(1), 25-43.

Yeh, H. C., Heng, L., & Tseng, S. S. (2020). Exploring the impact of video making on students' writing skills. Journal of Research on Technology in Education, 53(4), 446-456.

Yeung, P. S., Ho, C. S. H., Chan, D. W. O., & Chung, K. K. H. (2016). A simple view of writing in Chinese. Reading Research Quarterly, 52(3), 333-355.

Yiğit, C. (2011). The effect of the 5E model in writing on achievement and motivation. Yayımlanmamış Yüksek Lisans Tezi, Trakya Üniversitesi: Edirne.



مجلق كليق التربيق الأساسيق للعلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

Appendix (1): Pre Test and Post Test

Q1/ Write a paragraph of 80 - 100 words in an appropriate style about an embarrassing moment that happened to you at school. Recount the embarrassing moment itself using vivid, descriptive language to make the readers feel like they are experiencing it with you. Reflect on your thoughts and feelings in the moment. Discuss how you reacted, what went through your mind, and the emotional impact of the embarrassment. Make use of the following questions: what happened during the embarrassing moment? Where and when it take place? What led up to this moment? Was it expected or completely unexpected? How did other people around you react? Did anyone help you deal with the embarrassment? If so, how? What did you learn from the experience? (10. Marks)

Q2/Write a paragraph of 80 - 100 words about your favourite sport. You can use the following questions as a guide to organize your thoughts and create a cohesive paragraph: what is your favourite sport, and why do you enjoy it? How did you first introduced to this sport? What skills and techniques are required to play it? Who is your favourite player or team in this sport? How often do you play or watch this sport? What makes this sport unique or exciting compared to others? What are some memorable experiences you've had related to this sport? How has this sport impacted your life or shaped your personality? (10. Marks)

Q3/ Write a letter to a sick friend. The following questions can help express your care and create a meaningful connection while also encouraging your friend to open up: How are you feeling today? What have the doctors recommended for your recovery? Are you getting enough rest? Is there anything you need or would like me to help with? How are you keeping yourself occupied while resting? Have you been able to catch up on any favourite books, shows, or hobbies? How's your mood? Are you staying positive? Do you feel like sharing how everything has been going lately? (10. Marks)

Q4/Write a paragraph of 80 – 100 words about the changes that happened in your town. Here are some questions that can help create a detailed and engaging paragraph: What are the most noticeable changes that have occurred in your town recently? How has the town's infrastructure, such as roads or buildings, evolved? Have there been any new restaurants, parks or





The Effect of 5E Learning Model on Developing Iraqi EFL Intermediate School Students' Writing Skills مجلق كليق التربيق الأساسيق للصلوم التربويق والإنسانيق

مجلة علمية محكمة تصدر عن كلية التربية الأساسية – جامعة بابل

recreational areas introduced? What changes have been made to transportation or public services? How have these changes impacted the daily lives of residents? Are there any environmental or aesthetic changes, such as landscaping or cleanliness? What future developments are planned or anticipated? How do the residents feel about the changes in the town? How does your town now compare to what it was like in the past? (**10. Marks**)