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An Educational Program Based on the Interaction Between Active Learning and Critical Thinking to Develop Writing Skills And Motivation Among Prep School Pupils

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Abstract

This research aimed to investigate the effect of an educational program based on active learning and critical thinking on developing prep school pupils' writing skills and motivation. It adopted the one-group pretest-posttest design. The participants were forty second-year prep pupils from Misr Future Governmental Distinctive Language School, El-Wayly Educational Directorate, Cairo. The program was conducted over 12 sessions during the first semester of the academic year 2024/2025. The program utilized two quantitative instruments: pre- and post-writing tests and a writing motivation scale, and sheets. Statistical two qualitative materials: a scoring rubric and reflection-on-action analysis revealed significant improvements in the writing skills and their aspects (unity, coherence, grammar, vocabulary and expression, and punctuation) and their motivation towards writing, favoring the post-test results. The findings confirmed the program's effect in enhancing the pupils' writing skills and increasing their motivation to write when properly applied. Finally, the research concluded with recommendations for teachers, pupils, curriculum designers, supervisors, and parents and suggestions for future researchers.

Keywords: Active learning, Critical thinking, Writing skills, Motivation, Preparatory Stage

برنامج تعليمي قائم علي التفاعل بين التعلم النشط والتفكير الناقد لتنمية مهارات الكتابة والدافعية لدي تلاميذ المدرسة الاعدادية

إعداد

اندرو عادل كمال

(معلم لغة انجليزية)

المستخلص

هَدَفَ هذا البحث إلى معرفة فاعلية برنامج تعليمي قائم علي التفاعل بين التعلم النشط والتفكير الناقد لتنمية مهارات الكتابة والدافعية لدي تلاميذ المدرسة الاعدادية. وتم اعتماد تصميم الاختبار القبلي والبعدي للمجموعة الواحدة. وتكونت عينة البحث من أربعين طالبًا من الصف الثاني الإعدادي من مدرسة مصر المستقبل الرسمية متميزة لغات، التابعة لإدارة الوايلي التعليمية بالقاهرة. وتم إجراء البرنامج على مدار اثنتا عشرة جلسة خلال الفصل الدراسي الأول من العام الدراسي ٢٠٢٤/٢٠٢٥ م. واستخدم البرنامج أداتين كميتين: اختبارات الكتابة القبلية والبعدية، ومقياس قبلي-بعدي لقياس الدافعية نحو الكتابة، وأداتي قياس كفية: معيار تقييم النتائج ونماذج تقويم البرنامج المُنفذ. وكشف التحليل الإحصائي عن تحسنات كبيرة في مهارات الكتابة وجوانبها (الوحدة، والترابط، والقواعد، والمفردات والتعبير، وعلامات الترقيم) ودوافعهم نحو الكتابة لصالح نتائج الاختبار البعدي. وأكدت النتائج فعالية البرنامج في تعزيز مهارات الكتابة لدى التلاميذ وزيادة دافعتهم للكتابة عند تطبيقه بشكل صحيح. وأخيراً، اختتم البحث بتوصيات للمعلمين والتلاميذ ومصممي المناهج والمُشرفين وأولياء الأمور واقتراحات للباحثين في المستقبل.

الكلمات المفتاحية: التعلم النشط ، التفكير الناقد، مهارات الكتابة ، الدافعية، المرحلة الاعداد

An Educational Program Based on the Interaction Between Active Learning and Critical Thinking to Develop Writing Skills And Motivation Among Prep School Pupils

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Introduction

The challenge to cultivate advanced writing skills and genuine academic motivation demands strenuous effort by both teachers and students. Traditional instructional models, often centered on passive learning and rote memorization of grammatical and stylistic rules, frequently fail to engage students in the deeper cognitive processes required for adequate writing performance and interest. While active learning and critical thinking have been individually recognized for their educational benefits, the synergistic potential of their integrated application within adolescent writing instruction remains a significantly unexplored area in pedagogical research.

According to Jamoom (2021), writing is a productive skill that requires pupils to convey messages and ideas through written texts. Furthermore, it is regarded as a crucial skill that pupils must develop to achieve academic success. Additionally, it reinforces the new vocabulary, expressions, and grammar structures that pupils have learned. In addition, writing goes beyond simply arranging words into grammatically correct sentences and connecting them to form texts, as many EFL pupils assume.

It is a complex cognitive process that involves thinking, composing, and transforming ideas into written language. Therefore, writing improves the pupils' language abilities, broadens their cognitive domain, and fosters their intellectual development.

According to Nalliveettil and Mahasneh (2017), writing is a crucial skill that enables teachers to evaluate pupils' performance and proficiency in the English language. However, many EFL pupils struggle with writing due to their fear of making grammatical errors, often resulting in incoherent and disorganized texts. Additionally, pupils' poor proficiency results from their insufficient engagement in writing activities and their

struggle to identify their own mistakes. Furthermore, teachers' lack of effective teaching strategies and instructional methods limit pupils' motivation to write. To develop strong writing skills, pupils need consistent practice in the language's semantic and syntactic aspects, enabling them to produce well-structured and creative written work.

According to Sahli and Abderrahim (2018), motivation plays a crucial role in learning. To enhance the pupils' motivation, teachers should encourage pupils to choose topics they are passionate about, making them more curious and excited to learn. When pupils feel encouraged by their teachers and peers, they are more likely to develop a positive attitude towards writing and become motivated to improve their skills. Moreover, teachers should provide constructive feedback to the pupils and assess their progress regularly to inspire them further to improve. In addition, acknowledging pupils' efforts and accomplishments through praise, certificates, or other forms of recognition can boost their motivation.

Chickering and Gamson (1987) have criticized traditional education because it relies on pupils memorizing pre-packaged assignments, throwing up the answers, and listening to their teachers while seated in the classroom. In the same vein, Hafeez (2021) states that traditional education methods are poor and ineffective because they limit pupils' participation in the learning process. For more clarification, they often place the pupils in passive roles within the classroom in addition to the absence of technological tools in the instruction. As a result, teachers should implement active learning strategies as they promote the use of structured exercises, discussions, challenging conversations, group projects, and peer reviews.

According to Bean and Melzer (2021), active learning is a learner-centered approach in which pupils actively participate in their own learning through various activities such as discussions and problem-solving tasks. Thus, active learning offers numerous benefits for their academic development. For more explanation, active learning allows pupils to actively develop and use their English language, especially their writing skills. Such development in writing skills occurs when pupils come up with new ideas, do lots of research, revise and refine the written material, and seek constructive feedback. As a result, they can obtain a

greater comprehension and deep understanding of the subject matter and improve their writing skills by actively engaging in the writing process.

In the same vein, Meyers and Jones (1993) emphasize the significance of active learning for pupils. Active learning supports the environment that allows pupils to talk, read, write, and reflect on their ideas in the classroom when they participate in various activities. Such an environment is created when the teacher's role shifts from being the primary source of information to a facilitator who guides and mentors the pupils throughout the learning process. Furthermore, the essence of active learning is the engagement of pupils' minds in recalling old knowledge and fusing that knowledge with new knowledge. It aids in pupils' knowledge retention and mental development.

Boss and Lamer (2018) state that active learning can be deployed in classrooms through project-based learning, where teachers encourage pupils to rely on each other as valuable sources of information. Furthermore, the teacher ensures that the learners work effectively in the groups and that all group members' opinions are respected or heard. To illustrate, a gallery walk is an example of PBL as pupils work in groups and then get feedback from their peers to improve their projects. This occurs when the teacher presents the work of the groups using cards on the walls of the classroom, and then pupils write their feedback "on sticky notes next to the work displayed". Such activities promote the student-centered approach.

According to Johnson and Johnson (2008), cooperative learning is an effective approach that encourages pupils to take an active role in their learning rather than being passive. Furthermore, cooperative learning takes place when pupils participate in group-based activities, working together in small teams to achieve shared academic goals. All the participants are encouraged to actively participate in group work by exchanging ideas and collaborating on problem-solving. Moreover, they should engage in constructive discussions to reach a consensus and collaborate toward achieving a common goal. As a result, pupils achieve higher academic success, retain information more effectively and develop a more positive attitude toward their peers and the subject matter.

According to Sharma and Saarsar (2018), Think-Pair-Share is a cooperative learning strategy that encourages pupils to actively participate in class discussions while fostering a dynamic and engaging learning environment through meaningful interactions. Unlike other collaborative

techniques, TPS gives each pupil some time to think quietly before engaging in small group discussions. In addition, the teacher poses a question that encourages pupils to think more deeply and engage in debates. TPS provides all pupils with the opportunity to share their ideas and thoughts, enabling them to build their knowledge through discussions and discover what they know and do not know.

According to Ghafar (2024), debate is a valuable intellectual activity requiring pupils to discuss with their peers who hold differing or opposing views. To present their arguments effectively, pupils must cultivate open-mindedness, enabling them to critically assess and consider various perspectives. Thus, debate plays a crucial role in promoting democracy and freedom of expression by developing pupils' critical thinking, communication and problem-solving skills. As a result, debates encourage pupils to think creatively and innovatively, integrating intuition and reasoning to produce high-quality outcomes.

Language and thinking are considered two sides of the same coin since everyone uses language to express the ideas that emanate from their minds. Nickerson et al. (2014) state that the individual cannot express their thoughts unless they think effectively. Moreover, thinking skills are more important today than ever before because the world is more complicated, and so are its difficulties. Thus, critical thinking is required to overcome such obstacles. It enables individuals to analyze situations objectively, make reasoned judgments and develop effective solutions. In a rapidly changing world, these skills are essential for responding effectively to the demands of modern life.

According to Paul and Elder (2019), critical thinking, on the other hand, entails analyzing, evaluating, and interpreting information logically and objectively. In addition, critical thinking assists pupils in assessing and questioning their ideas, the credibility and relevance of sources, and the logical consistency of their arguments in the context of English writing. It also encourages them to explore other points of view, identify biases, and construct well-reasoned arguments. By strengthening their critical thinking skills, they can effectively express their thoughts, challenge existing knowledge, and engage in meaningful discussions.

According to Ennis (1989), the main goal of critical thinking is to teach pupils how to think critically, especially in contexts that occur outside the classroom. Khalil (2020) states that critical thinking serves

other purposes, including enhancing vocabulary, developing linguistic proficiency, and fostering creativity. By sharing knowledge within a structured framework, pupils develop cognitive skills that will benefit them throughout their lives, ultimately strengthening their mental processes. As a result, Song (2016) states that critical thinking should be a core component of the curriculum and instruction as it is essential for education in a free society.

In addition, Khalil (2020) states that pupils who use critical thinking can have a deeper understanding of themselves. In addition, it will allow them to be unbiased, less fervent and more open-minded as they appreciate the opinions and feelings of others. Leicester & Taylor (2010) state that critical thinking is frequently linked to the ability to consider alternatives and options. This occurs when the learners practice the habits and tools of critical thinking. Such tools are represented in the habit of asking questions and thinking outside the box. When the pupils deploy such methods, they can form their views on their own and independently articulate their perspectives and beliefs.

Facione (2015) states that the ideal critical thinkers possess several key characteristics. They are well-informed, guided by reason, open-minded, flexible and fair in their evaluations. In addition, they have a natural curiosity to ask questions and seek deeper understanding. Furthermore, they are willing to reconsider their viewpoints, approach issues with clarity and manage complex matters in an organized manner. Moreover, they diligently seek out relevant information and evidence and strive for accurate and reliable results.

Context of the problem

The researcher investigated the following components of the problem's context:

- The personal experience
- Pilot Study

The researcher's own experience

From the researcher's experience as an English teacher for over three years, the researcher found that the pupils' poor writing skills and lack of motivation to write were the root causes of the current research issue. Furthermore, the researcher noticed that pupils faced significant

challenges in expressing their own opinions in their writing. Moreover, pupils continued to perceive writing as a distant goal or a complex skill that is difficult to master. In the preparatory stage, English writing was not given sufficient time or attention in instruction. Therefore, it was crucial to conduct this kind of research to examine the educational program based on the interaction between active learning and critical thinking to develop the writing skills of the pupils and increase their motivation to write.

The Pilot Study

To have a closer identification of the problem, the researcher conducted a pilot study:

Teacher questionnaire

An open-ended interview was conducted with the 15th English preparatory school teachers in the El-Wayly Educational Directorate. The interview questions included:

1. What strategies and procedures do you use to encourage pupils to write better?
2. Do pupils in the classroom get equal opportunities to practice writing?
3. Are the pupils familiar with the writing aspects?
4. In English class, do pupils consistently write and use appropriate grammar, vocabulary, and expressions?

The results of the pilot study of the interview with teachers indicated that:

1. Fifteen teachers (100%) acknowledged the need for better teaching techniques and strategies to motivate their pupils to develop their writing skills. In addition, they said that some pupils prefer not to engage in class due to their inability to write correctly or their fear of making mistakes.
2. Despite the fact that the majority of pupils can use words, grammar, and expressions effectively, fourteen teachers (93%) said their skills are poor.
3. According to thirteen teachers (86%) who teach English to second-year preparatory school pupils, writing instruction lacked sufficient time and attention and pupils did not receive equal opportunities to practice writing in class.
4. Twelve teachers (80%) concentrated on the pupils' lack of consistency and coherence, guaranteeing uncertainty and misunderstanding of the information being delivered.

Pupil test

The researcher examined twenty pupils to discover more about their proficiency in unity, grammar and coherence. The researcher sought to understand the challenges pupils face in producing accurate and well-structured writing. Therefore, the pupils were asked to write on a topic of their choice selected from two topics provided by the researcher, with both tests designed to be of the same level of difficulty. According to the findings of the pilot study:

1. Nineteen pupils (95%) had difficulty with the topic's unity. They have limited knowledge and understanding of the topic they are writing about, conduct insufficient research and lack organization in their writing.
2. Eighteen pupils (90%) faced difficulties with grammar in their writing due to a lack of understanding of grammatical rules, confusion over sentence structure, and challenges in applying proper verb tenses and subject-verb agreement.
3. All twenty pupils (100%) faced challenges in maintaining coherence in their writing. Their issues include a lack of a clear topic sentence or central idea, disorganized structure, weak transitions, and insufficient editing and revision, leading to a lack of clarity and logical flow in their writing.

Statement of the problem

It became clear that EFL prep pupils suffered from significant weaknesses in their writing skills, including unity, coherence, grammar, vocabulary and expressions and punctuation. In addition, they demonstrated low levels of motivation towards writing tasks, which further hindered their progress in acquiring effective writing skills.

Research questions

The research problem was addressed in the following questions:

1. Questions related to the overall EFL writing skills:

- 1.1 How far can an educational program based on the interaction between active learning and critical thinking develop second-year preparatory school pupils' overall EFL writing skills?

2. Questions related to the EFL writing aspects:

- 2.1 To what extent can an educational program based on the interaction between active learning and critical thinking develop a well-structured, unified paragraph?
- 2.2 To what extent can an educational program based on the interaction between active learning and critical thinking develop an acceptable, coherent paragraph?
- 2.3 To what extent can an educational program based on the interaction between active learning and critical thinking develop correct grammatical structures?
- 2.4 To what extent can an educational program based on the interaction between active learning and critical thinking develop vocabulary and expressions in the context?
- 2.5 To what extent can an educational program based on the interaction between active learning and critical thinking develop correct punctuation?

3. Questions related to motivation towards writing:

- 3.1 How far can an educational program based on the interaction between active learning and critical thinking develop pupils' motivation towards writing?

Hypotheses of the research

This research attempted to test the following hypotheses:

A. Hypotheses related to the writing skills:

1. There is a statistically significant difference at level (0.01) in the mean scores of the pupils on the part related to the unity of the text between the pre-and post-tests, favoring the post-test.
2. There is a statistically significant difference at level (0.01) in the mean scores of the pupils on the part related to the coherence of the text between the pre-and post-tests, favoring the post-test.
3. There is a statistically significant difference at level (0.01) in the mean scores of the pupils on the part related to writing grammatically correct sentences of the test between the pre-and post-tests, favoring the post-test.
4. There is a statistically significant difference at level (0.01) in the mean scores of the pupils on the part related to the use

of appropriate vocabulary and expressions in the test context between the pre-and post-tests, favoring the post-test.

5. There is a statistically significant difference at level (0.01) in the mean scores of the pupils on the part related to the correct punctuation of the test between the pre and post-tests, favoring the post-test.
6. There is a statistically significant difference at level (0.01) in the mean scores of the pupils on the overall English writing skills (unity, coherence, grammatical structures, vocabulary and expressions and punctuation) of the test between the pre-and post-tests, favoring the post-test.

B. Hypotheses related to Motivation to write English:

1. There is a statistically significant difference between the mean scores of the pupils on the writing motivation scale between the pre- and post-administration of the scale, favoring the post-administration.

Purpose of the research

The research aimed to:

1. **Enhance Writing Skills:** The program aims to improve the writing abilities of prep school pupils by implementing active learning and critical thinking that encourage them to actively engage in the writing process. Through practice, feedback, and critical thinking exercises, pupils can develop their writing skills effectively.
2. **Promote Active Learning:** The program focuses on fostering an active learning environment where pupils are actively involved in their learning process. It encourages pupils to participate in discussions and collaborate with peers, thereby enhancing their writing skills and overall motivation.
3. **Develop Critical Thinking Skills:** The program aims to cultivate critical thinking abilities in pupils. By incorporating critical thinking exercises into the curriculum, pupils learn to evaluate and analyze information, develop logical reasoning, and make informed decisions. These skills are beneficial not only for writing but also for other aspects of their academic and personal lives.

4. **Boost Motivation:** The program seeks to increase pupils' motivation towards writing. By incorporating active learning strategies that actively engage pupils, they are more likely to feel motivated and interested in the writing process. This can enhance their overall motivation and commitment to writing tasks.
5. **Integrate Technology:** The program utilizes technology as a tool to enhance the learning experience. By incorporating the ASSURE model, pupils can explore various writing styles and receive immediate feedback to improve their writing. Therefore, this integration of technology fosters a more dynamic and engaging learning environment.

Significance of the research

The present research was intended to be of benefit not only to pupils but also to teachers, curriculum designers and researchers:

- **EFL Preparatory school pupils:** This research helps the pupils develop their writing skills and increase their motivation to write, which will help them to overcome the difficulties they usually face in their daily lives.
- **EFL Preparatory Teachers:** This research may inspire English teachers to employ the educational program based on the interaction between active learning and critical thinking to improve pupils' writing skills and enhance their motivation to write.
- **EFL Curriculum designers:** This research may encourage curriculum designers to use the educational program based on the interaction between active learning and critical thinking to develop the pupils' writing skills and increase their motivation to write.
- **EFL Researchers:** The results of this research may be used as considerable and valuable input for future researchers interested in exploring new areas of EFL writing skills.

Delimitations of the research

The present research was delimited to:

1. **Objective delimitations:** The research implemented an educational program based on active learning (CL, TPS, NHT and Debates) and CT skills within the second-year preparatory curriculum to develop the pupils' writing skills, including unity, coherence, grammar, vocabulary and expressions and punctuation, and increase their motivation to write.

2. **Place delimitations:** The research was conducted at Misr Future Governmental Distinctive Language School, El-Wayly Educational Administration, Cairo Governorate.
3. **Time delimitations:** the research was conducted during the first semester of the academic year of 2024/2025.

Definition of terms

Active Learning

According to Fern et al. (1995), active learning refers to the active participation of pupils in the learning process. Furthermore, it demands an interactive relationship between pupils and teachers to achieve the goals of the educational process. Moreover, it ensures that the pupils are engaged not only in the activities themselves but also deeply connected to their purpose and objectives. In the same vein, Prince (2004) assures the necessity of the pupils' engagement in meaningful learning activities that encourage them to reflect on their thinking. As a result, active learning is often contrasted with the traditional lecture where pupils passively absorb information from the instructor.

Operationally, the current research defines active learning as an approach that relies on the pupil and his participation in the classroom and its activities. Moreover, active learning takes several forms, including cooperative learning, Think-pair and Share and debates that encourage the pupil to interact with his peers in meaningful learning situations.

Critical Thinking

According to the Cambridge Dictionary, it is “the process of thinking carefully about a subject or idea without allowing feelings or opinions to affect you”. (Cambridge University Press, n.d.) In addition, Ennis (1985) defines it as “reflective and reasonable thinking that is focused on deciding what to believe or do” (p.45).

Operationally, the current research defines critical thinking as the ability of the pupil to think logically in any situation, whether in the classroom or beyond, by analyzing, evaluating and synthesizing the information systematically to make reasoned decisions.

Motivation

According to Cahyono & Rahayu (2020), motivation refers to the driving force that inspires pupils to write. It arises from internal or

external factors that encourage engagement in the writing process. Motivation is crucial because it affects the quality and quantity of the writing produced. When motivated, pupils are more likely to invest time and effort in improving their writing skills, exploring new ideas, and effectively conveying their thoughts and messages to their intended audience.

Operationally, the current research defines motivation as the force that encourages the pupil to actively engage in classroom activities and persist in writing with passion, despite mistakes, in pursuit of success.

Review of Literature

The following section sheds more light on the main variables of the current research, which are EFL writing skills, motivation, active learning and critical thinking.

EFL writing skills

According to Mohamed (2023), writing is a crucial and significant skill globally due to its widespread application in both the workplace and higher education. Furthermore, the pupils can use such skills to communicate their ideas, feelings, and opinions. If the pupils fail to express themselves in writing, they will find it difficult to interact with peers, teachers and anyone else. Alisha et al. (2019) assert that writing is a complex and complicated process that requires a variety of cognitive and metacognitive tasks relating to the pupils' everyday language usage such as organizing, brainstorming, planning, outlining, writing, and revising.

According to Klimova (2013), writing plays a unique role in language teaching due to its great importance. Above all, writing requires a comprehensive experience and understanding of the other three language skills: speaking, listening and reading. In other words, writing entails the comprehension of written and spoken input to produce a coherent and well-organized text. In fact, students who have problems in writing will find it difficult to interact effectively with peers, instructors, employers, and pretty much everyone else. Moreover, writing necessitates the development of additional abilities, such as metacognitive abilities. Furthermore, students must apply cognitive skills when writing; they must evaluate their sources and synthesize them into a brief essay. For more explanation, good writing occurs when pupils meticulously prepare their ideas, consider their organization and logical flow and revise them.

Motivation

According to Filgona et al. (2020), motivating and inspiring pupils is one of the main issues in education. Thus, student motivation is a crucial component because it determines whether the pupil will succeed or fail in school. Anjomshoa & Sadighi (2015) assert that providing the pupils with an appropriate curriculum and adequate teaching alone without motivation, are insufficient on its own to guarantee the pupils' success. Moreover, Filgona et al. (2020) state that pupils' behaviors during the learning process reveal their motivation for the subject matter. As a result, if the teachers seek consistent and high-quality results in the classroom, they should motivate and encourage the pupils to participate in the classroom activities.

According to Anjomshoa and Sadighi (2015), motivation is a very important element in the learning process. For more illustration, it is considered the essential driving force to start the process of acquiring a second language, as well as the primary factor that keeps such a process lengthy and enjoyable. In addition, the researchers find that the pupils with the most remarkable skills are unable to reach long-term goals without sufficient motivation. On the other hand, a less talented pupil with high motivation will succeed more in his studies compared to a cleverer pupil who lacks motivation. As a result, instructors, teachers and experts agree that motivation is the perfect solution in teaching since it impacts the success and pace of learning a second or foreign language.

Active learning

According to Cherney (2011), active learning is considered a modern strategy that maximizes students' learning. In the active learning environment, students who participate in the educational process become active students rather than passive ones. In addition, the teachers become the facilitators of the learning process because the responsibility is placed upon the pupils. Moreover, learning means making meaning in its essence, which cannot be achieved without the use of active learning strategies. For more explanation, new learning occurs when the pupils draw connections between previously held beliefs, concepts, information, and experiences and refine them to establish long-term connections and learn new things. Additionally, they need to reflect, deliberate and clarify their ideas to the teacher, their peers, and themselves. As a result, active learning stimulates social integration among the pupils.

Critical Thinking

According to McPeck (2016), critical thinking (CT) is a valuable human quality, so it should be encouraged in schools at all times. Moreover, supporting CT in our classrooms is similar to supporting freedom or justice; thus, it is immediately embraced by the majority of people all over the world. According to Behar-Horenstein & Niu (2011), experts disagree about whether critical thinking is a skill that can be taught or its development is controlled by personality factors, motives, and dispositions. As a result, they define critical thinking as mentally active, responsible, and competent thinking that supports and facilitates good judgment. Moreover, it calls for the application of presumptions, knowledge, competence, and the capacity to question one's ideas.

According to Toy and Ok (2012), CT is considered a critical ability of great importance that should be acquired at any level of education. It helps the pupils to deal with life's challenges and the expectations of a changing society. Furthermore, CT actively alters the belief systems of the pupils to learn new information. In other words, they need to transform their outdated belief systems into new ones. For more illustration, the current beliefs help the pupils to comprehend new ideas, concepts, or principles. In addition, CT helps the pupils to restructure their ideas so they can include new knowledge, abilities, and concepts. As a result, CT should be employed more effectively in the classrooms by the teachers.

Method

This section tackles three major points: design of the research, participants, instruments and materials of the research, including the paragraph writing pre/post-test and the writing motivation scale.

Design of the research

The research adopted the one-group pretest-posttest design in terms of using one treatment group due to its relevance to the mixed-methods nature of the current research. The treatment group, consisting of forty pupils, received training in the educational program that was based on the interaction between active learning and critical thinking. In addition, the purpose of this design was to detect the effect of this program on developing pupils' writing skills and increasing their motivation to write. For more data analysis, both qualitative and quantitative methods were used. The SPSS package was used to conduct the statistical analysis of the results.

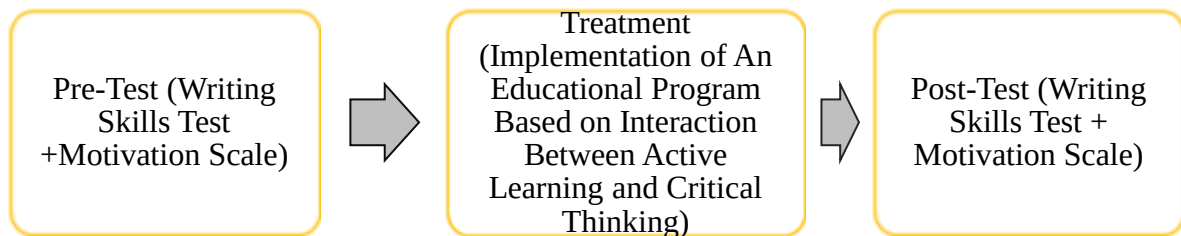


Figure 1: Design of the research

Participants

The research participants were forty second-year class pupils randomly chosen from the second-year preparatory stage pupils at Misr Future Governmental Distinctive Language School, El Wayly Educational Administration, Cairo Governorate. In addition, the pupils were taught the educational program during the first semester of the school year 2024/2025.

Instruments and Materials of the Research

To achieve the purpose of the research, the following instruments and materials were prepared:

1. Quantitative Instruments:
 - 1.1 The paragraph Writing Pre and Post-tests.
 - 1.2 The Writing Motivation Scale.
2. Qualitative Materials:
 - 2.1 The Writing Scoring Rubric.
 - 2.2 Reflection-on-action sheets.

The paragraph Writing Pre and Post-Tests

Purpose

The researcher designed the tests to assess the writing skills of the second-preparatory pupils before and after implementing an educational program based on the interaction between active learning and critical thinking. Moreover, the writing pre- and post-tests were used to evaluate and score the group's answers to compare those of the pre-test to those of the post-test and thus determine the effect size of the treatment.

Description

The research utilized two tests: the pre-writing test and the post-writing test. Furthermore, each test included two questions of 150 words and the pupils should choose only one question to answer in each part. Moreover, the test score was 25 marks for each question. Furthermore, the test questions were designed in alignment with the pupils' level of knowledge of the English language and English writing.

Time of the test

The researcher piloted the test to determine the appropriate time for the pre and post-test. In addition, the researcher divided the total time the pupils took to answer the pilot test by the total number of pupils. Therefore, the time was 35 minutes as in the following formula:

$$\frac{\text{total time taken by the students}}{\text{total number of students}} = \frac{1400 \text{ seconds}}{40 \text{ Students}} = 35 \text{ minutes}$$

Test Validity

To establish the validity of the EFL writing test, it was submitted to a jury panel (professors, associate professors and lecturers) specialized in the Curriculum and TEFL instruction field from various faculties of Education in Egypt. Moreover, they expressed their opinions regarding the clarity of questions and the appropriateness of the topics for the level of the pupils to measure the second-year preparatory school pupils' writing skills.

The Writing Motivation Scale

Purpose

The writing motivation scale is a structured assessment tool that measures the extent and types of motivation that affect the pupils' participation in writing tasks. In addition, the scale's questions take many forms, such as closed-ended, open-ended, and Likert-scale questions. As a result, the researcher employed a paper scale including 18 statements on a five-point Likert scale to collect the pupils' opinions regarding their motivation toward writing.

Scale Validity

To establish the validity of such a scale, it was submitted to a jury panel (professors, associate professors and lecturers) specialized in Curriculum and TEFL instruction from various faculties of Education in Egypt. Moreover, they determined the suitability and effectiveness of this

writing motivation scale. Furthermore, the jury members approved the scale it was a valid and adequate scale. However, some modifications were suggested regarding the duplicated items and the order of items. As a result, the researcher took the jury recommendations seriously and modified the writing scale.

Results

The results of the research are presented in two parts: Part one is related to overall English writing skills and Part two is associated with the writing motivation scale.

Part One

The hypothesis related to the overall English writing skills states, “There is a statistically significant difference at level (0.01) in the mean scores of the pupils on the overall English writing skills (unity, coherence, grammatical structures, vocabulary and expressions and punctuation) of test between the pre-and post-tests, favoring the post-test”.

The paired sample t-test was used to investigate the differences between the mean scores of the experimental group pupils in the pre- and post-applications of the overall English writing skills, favoring the post-test. The following table shows that:

Table 1

The Paired Sample t-test Statistics of the Overall English Writing Skills

Skill	Tests	N	mean	Std. Deviation	Mean differences	t	sig
Total Score	Pre	40	8.21	2.67	-10.55-	-34.557-	.000
	Post	40	18.76	4.22			

Table 1 shows that there are statistically significant differences at the 0.01 level between the pre-and post-administrations of the overall English writing skills (unity, coherence, grammatical structures, vocabulary and expressions and punctuation) in favor of the post-test. The following graph shows these differences:

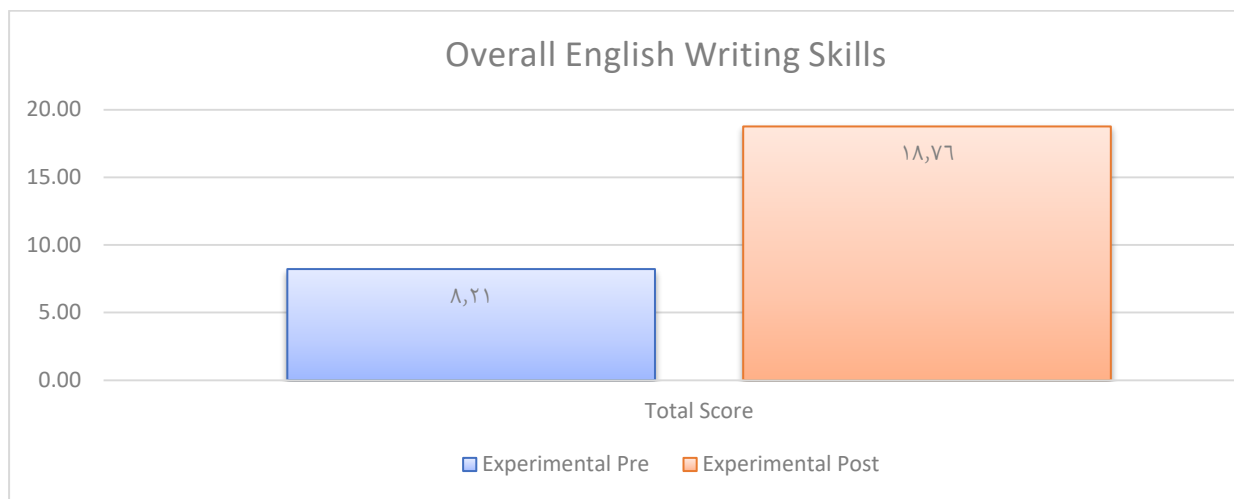


Figure 2: Differences between the pre- and post-administrations of the Overall English Writing Skills

As shown in Figure 1, the target pupil's performance in the target overall English writing skills improved from pre- to post-test after implementing the educational program based on the interaction between active learning and critical thinking. The performance measure was 8.21 on the pretest and 18.76 on the posttest. Thus, such an educational program significantly developed the target pupils' overall English writing skills. As a result, the hypothesis is verified and shows the program's effect.

Part Two

The hypothesis related to the writing motivation scale states, "There is a statistically significant difference between the mean scores of the pupils on the writing motivation scale between the pre- and post-administrations of the scale, favoring the post-administration".

The paired sample t-test was used to investigate the differences between the mean scores of the experimental group in the pre- and post-administrations of the writing motivation scale, favoring the post-administration, and the following table shows that:

Table 2

The Paired Sample T-test Statistics of the Writing Motivation Scale

Dimension	Tests	N	mean	Std. Deviation	Mean differences	t	sig
Intrinsic Motivation	Pre	40	18.37	5.64	-1.42-	-6.224-	.000
	Post	40	19.80	4.89			
Extrinsic Motivation	Pre	40	17.47	5.30	-1.05-	-2.283-	.028
	Post	40	18.52	3.58			
Integrative Motivation	Pre	40	14.47	4.36	-1.05-	-4.978-	.000
	Post	40	15.77	3.79			
Instrumental Motivation	Pre	40	14.37	2.51	-1.35-	-5.059-	.000
	Post	40	15.72	2.98			
Total Score	Pre	40	64.90	17.68	-4.17-	-4.310-	.000
	Post	40	69.07	13.09			

Table 2 shows that there are statistically significant differences at the 0.01 and 0.05 levels between the pre- and post-administrations of the motivation scale on the total score and all dimensions in favor of the post-administration of the scale. For clarification, statistically significant differences exist at the 0.01 level for the total score, intrinsic, integrative, and instrumental motivation, and at the 0.05 level for extrinsic motivation. In addition, these findings showed that intrinsic motivation had the strongest impact on pupils' writing engagement, followed by instrumental motivation then integrative motivation. In contrast, extrinsic motivation had the least impact on the pupils' motivation. The following graph shows these differences:

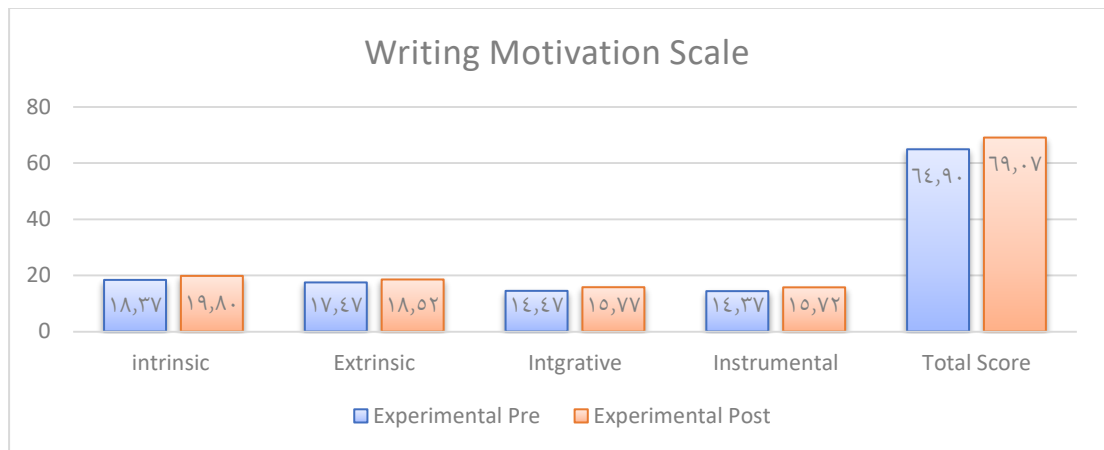


Figure 3: Differences between the pre- and post-administrations of the motivation scale

As shown in Figure 2, the target pupil's performance in the target writing motivation scale improved from pre- to post-test after implementing the educational program based on the interaction between active learning and critical thinking. The performance measures of intrinsic, extrinsic, integrative and instrumental motivation were 18.37, 17.47, 14.47 and 14.37 on the pretest and 19.80, 18.52, 15.77 and 15.72 on the post-test. In addition, the performance measure of the total score was 64.90 on the pretest and 69.07 on the posttest. Therefore, the total motivation score showed a notable increase, reflecting an overall improvement in pupils' motivation. Thus, such an educational program significantly developed the target pupils' overall English writing motivation scale. As a result, the hypothesis is verified and shows the program's effect.

Conclusions

The following conclusions were reached based on the results of the current research:

- The educational program based on the interaction between active learning and critical thinking successfully improved the second-year prep school pupils' overall paragraph writing skills and their components — unity, coherence, grammatical structures,

vocabulary and expression and punctuation — and enhanced their motivation to write.

- The implementation of active learning strategies such as cooperative learning, think-pair-share and debates fostered an encouraging environment that has promoted engagement and collaboration among the pupils. Furthermore, such strategies encouraged the pupils to actively engage with their classmates in discussions, exchange ideas, and refine their thoughts, enabling them to communicate more effectively and demonstrate a deeper understanding of the writing texts. By working together in such activities, pupils developed teamwork and leadership skills, creating a dynamic and student-centered learning environment that empowered them to be independent learners.
- Moreover, the integration of critical thinking skills into instruction encouraged the pupils to analyze information and evaluate different perspectives. Additionally, such skills equipped the pupils with the ability to construct logical arguments, supporting their claims with evidence and reasoning. Furthermore, such skills helped them to strengthen their argumentation skills and compose well-structured, coherent written texts.
- In addition, providing pupils with ongoing constructive feedback helped them recognize their weaknesses, build on their strengths and gain confidence in their skills. When pupils received constructive guidance, they became more motivated to engage in the writing process and developed their skills further.
- Throughout the educational program, the teacher's roles were changed to include those of the facilitator, monitor, involver and scaffolder, which enabled the pupils to gradually take control of their EFL learning process.
- The research provides valuable guidance and recommendations to those concerned with the development of pupils' writing skills and enhancing their motivation to write.

Recommendations

In light of the results of this research, the following recommendations are proposed:

1. EFL teachers should provide their pupils with a calm and motivating environment that enables them to employ different active learning strategies, enhancing their engagement and writing proficiency.
2. EFL teachers should determine the pupils' needs and allow them to choose topics that interest them to make the writing process more meaningful and enjoyable. Furthermore, they should teach pupils how to organize their thoughts logically and develop coherent written texts by applying critical thinking skills.
3. Pupils should regularly practice composing well-structured and coherent written paragraphs to improve their writing skills.
4. Curriculum designers should develop dynamic and flexible lesson plans that can accommodate pupils of different proficiency levels and help them be more accountable and responsible for their learning process.
5. Supervisors should organize regular workshops and training sessions to equip the teachers with the necessary skills to implement these new strategies and effectively scaffold their pupils' writing skills.
6. Parents should establish a quiet and supportive home environment that encourages the pupils to write and praise their efforts to enhance their confidence and motivation.

Suggestions for Future Research

The research offers the following suggestions for further research:

- Investigating the effectiveness of an educational program based on the interaction between active learning and critical thinking to develop the writing skills of EFL secondary school students.
- Examine the impact of critical thinking skills on the development of the EFL secondary school students' reading proficiency and overall academic achievement.
- Explore the role of digital tools, artificial intelligence and online platforms alongside critical thinking skills to develop the pupils' writing skills across different grade levels.

- Other similar studies are needed to investigate the effectiveness of this educational program but to be extended over a longer time.
- Further research is needed to investigate the effectiveness of this educational program in the development of various types of writing, including narrative, argumentative, cause and effect and expository writing.
- Further research is needed to investigate the effectiveness of this educational program in developing other areas of writing skills such as organization, structure, cohesion, style, content and mechanics.

References

- Anjomshoa, L., & Sadighi, F. (2015). The importance of motivation in second language acquisition. *International Journal on Studies in English Language and Literature*, 3(2), 126-137.
- Bean, J., & Melzer, D. (2021). *Engaging ideas: The professor's guide to integrating writing, critical thinking, and active learning in the classroom*. John Wiley & Sons.
- Behar-Horenstein, L., & Niu, L. (2011). Teaching critical thinking skills in higher education: A review of the literature. *Journal of College Teaching & Learning*, 8(2), 25-42.
- Boss, S., & Larmer, J. (2018). *Project Based Teaching: How to create rigorous and engaging learning experiences*. ASCD.
- Cahyono, B., & Rahayu, T. (2020). EFL STUDENTS' MOTIVATION IN WRITING, WRITING PROFICIENCY, AND GENDER. *TEFLIN Journal: A Publication on the Teaching & Learning of English*, 31(2)
- Cambridge University Press. (n.d.). Critical Thinking. In Cambridge Dictionary. Retrieved March 25, 2023, from <https://dictionary.cambridge.org/dictionary/english/critical-thinking>
- Cherney, I. (2011). Active Learning. In R. Miller, E. Amsel, B. Kowalewski, B. Beins, K. Keith, & B. Peden (Eds.), *Promoting student engagement (Vol.1): Programs, techniques and opportunities* (pp. 150-156). Society for the Teaching of Psychology.
- Chickering, A., & Gamson, Z. (1987). Seven Principles for Good Practice in Undergraduate Education. *AAHE Bulletin*, 39(7), 3-7.
- Ennis, R. (1985). A Logical Basis for Measuring Critical Thinking Skills. *Educational Leadership*, 43(2), 44-48.
- Ennis, R. (1989). Critical Thinking and Subject Specificity: Clarification and Needed Research. *Educational Researcher*, 18(3), 4-10.
- Facione, P. (2015). Critical thinking: What it is and why it counts. *Insight Assessment*, 1(1), 1-30.
- Fern, V., Anstrom, K., & Silcox, B. (1995). Active Learning and the Limited English Proficient Student. *Directions in Language & Education*, 1(2), 1-8.
- Filgona, J., Sakiyo, J., Gwany, D., & Okoronka, A. (2020). Motivation in learning. *Asian Journal of Education and Social Studies*, 10(4), 16-37.

- Ghafar, Z. (2024). The Effect of Classroom Debate on Students' Academic Achievement in Higher Education: an Overview. *International Journal of Applied and Scientific Research*, 2(1), 123-136.
- Hafeez, M. (2021). A Critical Review on Blended Learning Versus Traditional Lecture Method. *International Journal of Management and Human Science*, 5(3), 1-21.
- Jamoom, O. (2021). EFL Students' Needs for Improving Their Writing Skills. *Scholars International Journal of Linguistics and Literature*, 4(4), 106-111.
- Johnson, R., & Johnson, D. (2008). Active Learning: Cooperation in the classroom. *The Annual Report of Educational Psychology in Japan*, 47, 29-30.
- Khalil, E. R. (2020). Critical Thinking-Based Learning: Developments, Trends and Values. *المجلة العربية للعلوم التربوية والنفسية*, 17(4), pp. 575-592.
- Klimova, B. F. (2013). The importance of writing. *Indian Journal of Research*, 2(1), 9-11.
- Leicester, M., & Taylor, D. (2010). *Critical Thinking Across the Curriculum. Developing Critical Thinking Skills, Literacy and Philosophy in the Primary Classroom*. McGraw Hill Education (UK).
- McPeck, J. (2016). *Critical thinking and education*. Routledge.
- Meyers, C., & Jones, T. (1993). *Promoting Active Learning: Strategies for the College Classroom*. San Francisco, CA: Jossey-Bass Inc.
- Mohamed, H. (2023). Integrated EFL listening and writing skills of secondary stage. *مجلة القراءة والمعرفة*, 255(23), 117-148.
- Nalliveettil, G., & Mahasneh, A. (2017). Developing Competence in Basic Writing Skills: Perceptions of EFL Undergraduates. *International Journal of Applied Linguistics & English Literature*, 6(7), 332-341.
- Nickerson, R., Perkins, D., & Smith, E. (2014). *The Teaching of Thinking*. Routledge.
- Prince, M. (2004). Does Active Learning Work? A Review of the Research. *Journal of Engineering Education*, 93(3), 223-231.
- Paul, R., & Elder, L. (2019). *The miniature guide to critical thinking concepts and tools*. Rowman & Littlefield.
- Sahli, F., & Abderrahim, F. (2018). *The role of metacognition and motivation in developing the writing skill* [Doctoral dissertation, Université Frères Mentouri-Constantine 1].

- Sharma, H., & Saarsar, P. (2018). TPS (Think-Pair-Share): An Effective Cooperative Learning Strategy for Unleashing Discussion in Classroom Interaction. *International Journal of Research in Social Sciences*, 8(5), 91-100.
- Song, X. (2016). 'Critical Thinking' and Pedagogical Implications for Higher Education. *East Asia*, 33(1), 25-40.
- Toy, B., & Ok, A. (2012). Incorporating critical thinking in the pedagogical content of a teacher education programme: does it make a difference? *European Journal of Teacher Education*, 35(1), 39-56.