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# **Utilizing an Inquiry-Based Instructional Model to Develop Preparatory School Pupils' EFL Writing Performance**

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## **Abstract**

**Title:** Utilizing an Inquiry-Based Instructional Model to Develop Preparatory School Pupils' EFL Writing Performance

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The present study aimed at investigating the effect of utilizing An Inquiry-Based Instructional Model on improving EFL Preparatory Stage Students' Writing Performance. The research adopted the quasi-experimental design. The participants of the study were (fifty) second year preparatory School Students from Manshiat Naser preparatory school, Awlad Sakr, Al Sharqia Governorate, Egypt, who were equally divided into an experimental and control group. To achieve the purpose of the research, the researcher designed a writing performance questionnaire and a writing performance test. The material based on inquiry model was designed and taught to students at the second term of the academic year (2022-2023).

The results indicated that the experimental outperformed the control group that received regular instructions.

***Keywords: Inquiry-Based, Writing performance***

## 1-Introduction

EFL writing performance is one of the main language skills. It takes great deal in our everyday life and also in our teaching syllabus. One of the syllabus aims is to improve students' writing performance to achieve mastery. Through writing, we do many mental processes, like thinking, reflecting, preparing, rehearsing, making mistakes and finding alternatives and solutions. Rules of English grammar, mechanics and punctuation are also needed to be known to write correct and clear sentences.

“It is extremely important for students to learn to write texts of different types in line with the requirements of life. These types can be the texts emerging in diverse fields of life to meet the needs (such as invitation cards, brochures, advertisement texts, business cards, announcements, etc.) as well as literary genres (such as essays, stories, poems, letters, etc.)” (Coskun and Tiryak, 2013).

Harmer (2004) states that “the most effective learning of writing ability is likely to take place when students are writing real messages for real audiences, or at least when they are performing tasks which they are likely to have to do in their out-of-class life”. Thus, EFL learners should have the ability to write complete and meaningful sentences, clear and organized ideas, choose appropriate words and idioms and apply writing mechanics appropriately in addition to, evaluating and expressing knowledge.

A good writing performance is not easily achieved. Coherence and cohesion are two aspects that should be applied. Coherence is to have sequenced ideas edited to create a paragraph and an essay, so the readers can easily understand the ideas and not miss them. In addition to well-developed topics, students generate topic sentences; decide the supporting ideas, and supporting details. Then they decide the conclusion. The second aspect is cohesion which is related to grammatical pattern of the sentences (arranging sentences, phrase, punctuation, and word choice).

Thus students, with some help from the teachers, technology and their learning, ask questions and find the answers by themselves. Students

combine what they know about the topic and what they want to know. They become a constructor of knowledge (not a receiver).

Prince and Felder (2006) stated that inquiry-based learning language (IBLL) is an inductive approach like problem-based learning (PBL), project based learning, case based teaching and discovery learning. This inductive approach begins with observation or a problem, and then students analyze the data and finally generate the facts, procedures, and guiding principles. By the help of the teacher students have the chance to investigate a question, advance the information and explore a hypothesis. Students go into a process of knowledge discovery. The inquiry process is started by student's own curiosity, concern, interest, or passion to understand and solve a problem.

According to David (2011) students are encouraged to ask and investigate for answering their questions. To facilitate students' learning a variety of tools, resources, and experiences are provided, that allow students to investigate, reflect, and discuss potential solutions to their own question about a topic the class studying. An inquiry based instructional model progresses through five phases that begin with the letter "E": engage, explore, explain, elaborate, and evaluate.

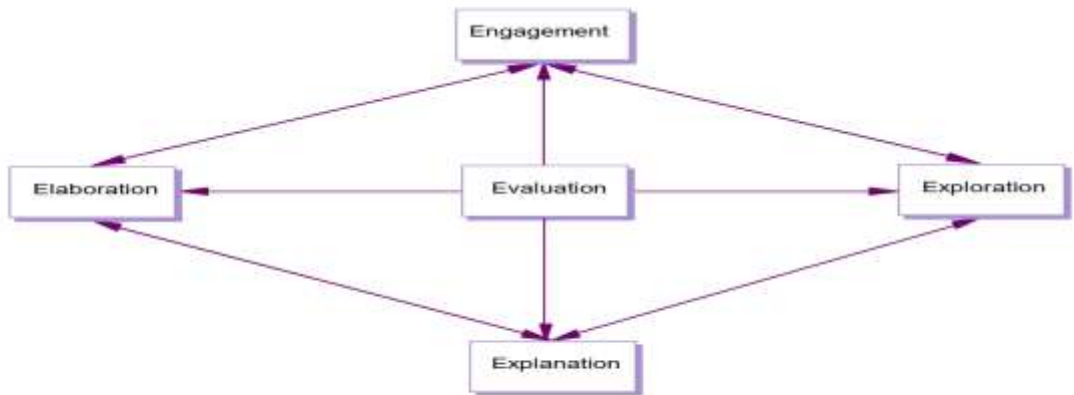


Figure 1. The 5E Instructional Model.

(The 5E Instructional Model adopted from Bybee & Landes, (1990): figure 1)

## 2. Context of the problem:

The problem of the study can be stated based on the researcher experience and previous studies such as

Al Shumaimeri, 2011; Al-Sobh & Al-Hag, 2012; Chelli, 2012; Chou, 2022; Zahran, 2013.

● During the academic (2022 – 2023), the researcher also conducted a pilot study on (30) second preparatory stage students. The results indicated that:

- Students showed an evident weakness in EFL writing performance.
- While answering the test, students found difficulty in organizing and generating ideas.
- Students also couldn't write correct complete sentences.

The previously mentioned points emphasize the weakness in writing performance among preparatory stage students. Hence, the researcher suggested using an Inquiry-Based Instructional Model to develop EFL writing performance among preparatory stage students.

## 3. Questions of the Study:

The current study was an attempt to find an answer to the following main question:

"What is the effect of an Inquiry-Based Instructional Model on preparatory students' writing performance?"

Out of this main question, the following sub-questions were derived:

- 1-What are the writing performance levels needed for second grade preparatory school students?
- 2-How can an inquiry-based instructional model be utilized in the preparatory stage writing classes?
- 3- What is the effect of an inquiry-based instructional model on second grade preparatory school students' EFL writing performance?

#### 4. Procedures of the study:

In an attempt to answer the study questions, the following procedures were followed:

1-Surveying the previous studies and pertinent literature related to the variables of the study. Writing performance (dependent variable), an inquiry-based instructional model (independent variable).

2- Designing the instruments of the study which include (a writing performance questionnaire, a writing performance test). These instruments were introduced to the jury members to validity them.

3-Choosing the research participants from preparatory school and dividing them into experimental and control group

4-Preparing the study material in the light of an inquiry-based instructional model for reinforcing writing performance:

5-Teaching the suggested material to the experimental group.

6-Treating the results statistically.

7- Discussing the results of the study.

8- Drawing conclusions and providing recommendations and suggestions

#### 5. Hypotheses of the study:

The following hypotheses were tested in the study:

1. There was a statistically significant difference between the mean scores of the experimental group and that of the control group in their performance of the post EFL writing test as a whole and its sub-skills, in favor of the experimental group.

2. There was a statistically significant difference between the mean scores of the experimental group in the performance of pre and post administrations of the EFL writing test results, in favor of the experimental group.

3. The suggested strategy would have a positive effect on developing EFL writing performance of preparatory school students.

#### 6. Purpose of the study:

The main purpose of the study was to investigate the effect of utilizing an inquiry-based instructional model on developing EFL second grade preparatory school students' writing performance.

#### 7. Significant of the study:

This study was hopefully expected to be useful to:

1-EFL students: as it might help them be aware of the appropriate writing performance and overcome the difficulties they face during the writing process. They could also be more motivated and satisfied while writing process.

2- EFL Teachers: It might provide them with a new strategy for teaching and developing their students' writing performance.

3- Curriculum designers: This research might help to get a better understanding of the role of an inquiry-based instructional model. The suggested teaching material might be considered in designing EFL text books.

4-Researchers: This study might help them conduct more researcher.

#### 8. Delimitations of the study:

The study was delimited to:

1- Fifty students of the second grade preparatory school students in Manshiat Naser preparatory school at Awlad Sakr educational zone.

2- Fifty students were chosen and divided into two groups, an experimental group and a control one.

3-Some writing skills which were suitable for EFL second grade preparatory school students and that will be approved by jury members.

4- This research would be conducted during the second term of the academic year 2022\ 2023.

#### 9. Definitions of terms

##### A- Writing performance:

Brookes and Grundy (2000) define writing performance as an activity that includes several processes, such as thinking what to write and ordering it into sentences and paragraph. "Writing is frequently useful as



preparation for some other activity, in particular when students write sentences as preamble to discussion activities. It gives students time to think up ideas rather than having to come up with instant opinions. Students even consult dictionaries, grammar books, and other reference material to help them in writing” (Harmer, 2004)

Naba'h (2013, p.38) defined writing performance as expressing oneself on a certain topic through the written word with good quality and enough quantity.

Hussein (2015) defined writing performance as the act or process of carrying out writing tasks. It describes what students actually do concerning writing tasks, in terms of content, organisation, vocabulary, grammar and mechanics.

Out of these definitions, the researcher defined writing performance as a process in which second year preparatory school students can produce ideas and express these ideas in writing in English, in terms of organisation, content, grammar, vocabulary and mechanics.

B- Inquiry-based learning:

“Inquiry” is defined as a quest “for truth, information, or knowledge...seeking information by questioning” (Exline,2004). Sanjaya(2010)defines that inquiry based learning “is a series of learning activities based on critical and analytical thinking to look for and find the answer of issue.”

Caputo (2014) points out that IBL are in particular emphasizing the responsiveness, authenticity, and intellectual- engagement that make this approach a useful means of ensuring that students get the most out of their share learning environment.”

As well as, Ajit,et. Al (2016) defines Inquiry based learning as “a way of learning through questioning and experimenting. They claim that in ELT context, they could remark that IBL is an effective way of learning English language.IBL serves greatest opportunities to create interesting, cross- cultural and practical lessons.

From the definition above, Inquiry–Based learning was defined as an approach which activates the students, prior knowledge before coming up with the entire materials provided by teacher. Also, it could be

simplified as questioning, making inferences, and finding out the open answer of the problems than evaluating the process of the inquiry experienced before.

#### 10- Preparing the material of the study:

A. Student's book: The researcher prepared a student's book mainly to improve students writing performance.

Content: The content was adopted from the students' book (New Hello) the second year governmental preparatory school. The researcher made use of the student. The researcher depended on unit seven "Technology and the future" and unit eight "You are what you eat ". The lessons contained writing and motivation tasks. The researcher depended on those activities in constructing the sessions of the model.

Teaching aids: videos, the internet, flash cards, charts and resources from the library.

Evaluation: observation, assessment, homework and assignment, class participation, classwork, peer assessment, self-assessment, formative assessment and presentation.

B. Teacher's guide: it was prepared in the light of the inquiry-based instructional model

Objectives: 1-To identify the function and usage of inquiry-based instructional model and its phases relevant to their syllabus as well as their age in order to be accurate in writing performance assigned to them.

2-To identify the characteristics of the writing performance. Additionally, the students should be aware of how to organize the writing performance paragraph, the construction of it, and how to express their feelings and opinions in many details as possible.

3-To update and enhance the research process strategies and skills.

4- To include new approaches to the delivery of instruction.

5- To include information and communication technology and new curricula

6-To include new research findings on the impact of emotions on learning.

Content: student's book (New Hello) unit seven "Technology and the future" and unit eight "You are what you eat" were prepared by utilizing the inquiry-based instructional model, and determined the teacher's role and students' role in each phase.

### 11-Design of the Study:

A quasi-experimental design was used to conduct the study. Fifty students were assigned to two groups, experimental and control, (25) students each. The control group received instruction through the regular classroom sessions and the experimental group was taught by utilizing an inquiry-based instructional model. A writing performance pre-post test was administered to the two groups before and after the experiment. Both groups were taught a number of writing performance lessons from (New Hello! English) for second year preparatory school. The design included the following variables: an independent variable which was an inquiry-based instructional model and the dependent variable which was the writing performance.

### 12-Participants

Participants of the study were fifty students from the second preparatory school students at Manshiat Naser preparatory school in Awlad Sakr, Sharqia governorate, enrolled in the 2nd term of the school year (2022/2023). Participants were divided into two groups: the controlled group (n=25) and experimental group (n=25). The participants were supposed to be a homogeneous group. As a result, they were anticipated to have a lot in common and not differ greatly in terms of experience or age. The researcher attempted to control some variables to ensure that the improvement of the students' writing performance could be attributed only to the effect of the inquiry-based instructional model, also to ensure that both the experimental and control groups were equivalent.

### 13-The Normalization Test:

In order to decide the suitable statistical method of testing hypotheses, the researcher computed the skewness, as well as the kurtosis of the total score of pre writing performance Skills as well as the four sub-skills. The results were as in the following table and figures:

Table (1)

Testing normalization indicators of the total score of pre writing performance Skills and its sub-skills (n=50)

Skills	Skewness	Std. Error of Skewness	kurtosis	Std. Error of kurtosis
Ideas and content	0.087	0.337	0.952	0.662
Mechanics	0.614	0.337	0.062	0.662
Grammar	0.240	0.337	0.248	0.662
Organization and Coherence	0.605	0.337	0.032	0.662
The total writing performance Skills	0.274	0.337	0.077	0.662

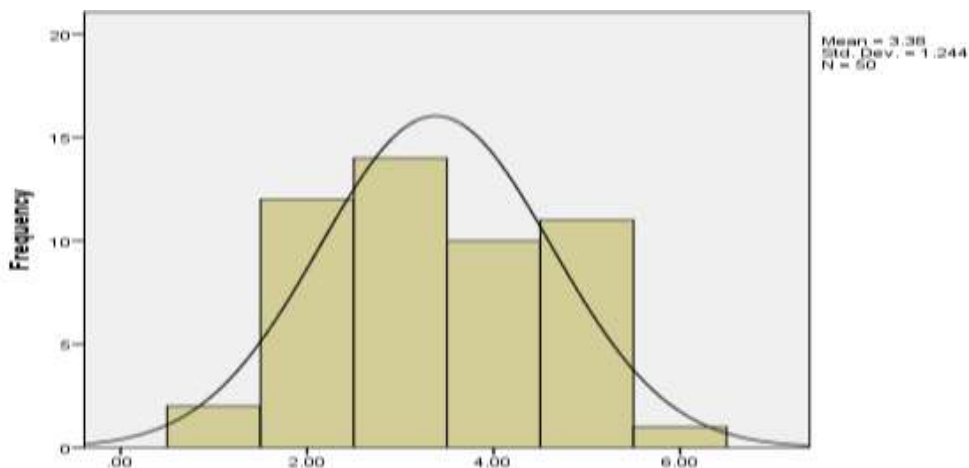


Figure (2) Testing normalization indicators of the pre application of Ideas and content as a sub-skill of writing performance Skills among Preparatory School Pupils (n=50)

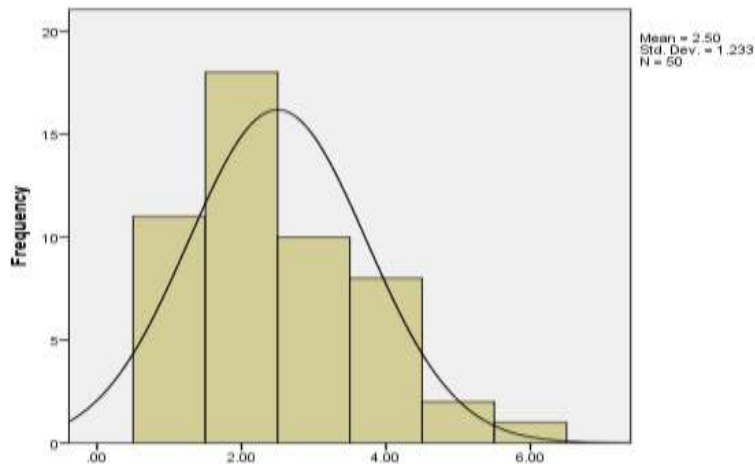


Figure (3) Testing normalization indicators of the pre application of Mechanics as a sub-skill of writing performance Skills among Preparatory School Pupils (n=50)

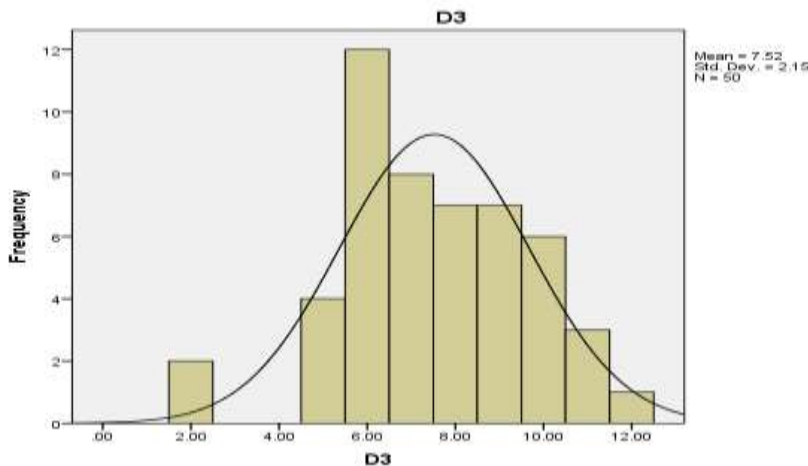


Figure (4) Testing normalization indicators of the pre application of Grammar as a sub-skill of writing performance Skills among Preparatory School Pupils (n=50)

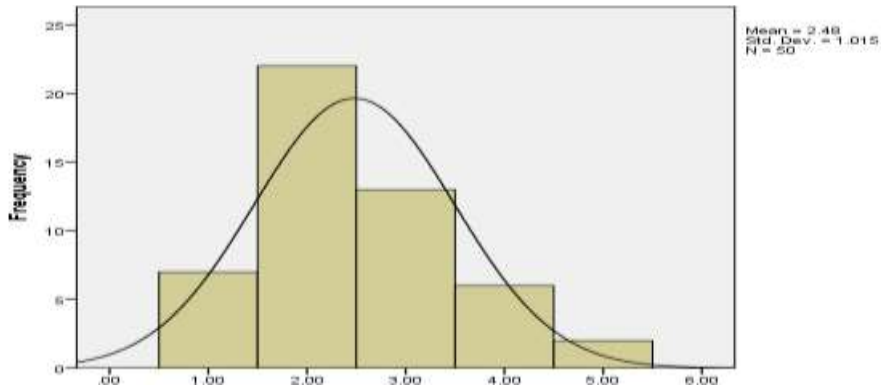


Figure (5) Testing normalization indicators of the pre application of Organization and Coherence as a sub-skill of writing performance Skills among Preparatory School Pupils (n=50)

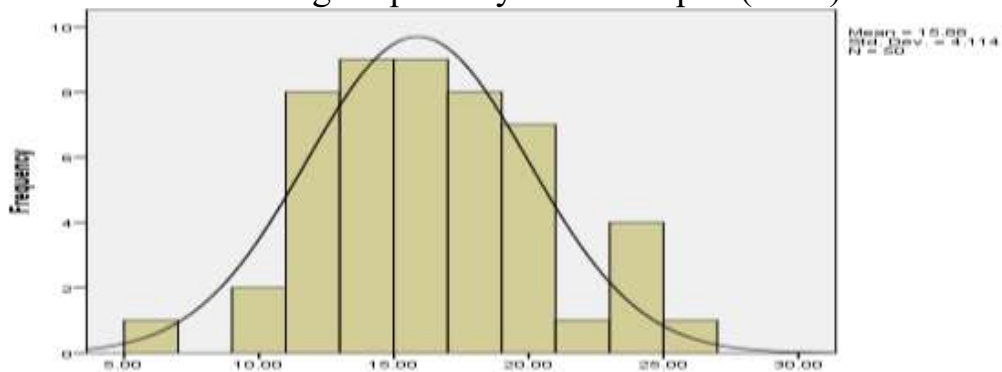


Figure (6) Testing normalization indicators of the pre application of writing performance skills among Preparatory School Pupils (n=50)

From the previous table (1) and figures (from 2 to 6), the Skewness value for the total score of pre application of writing performance Skills as well as the four sub-skills among Preparatory School Pupils were between (-1) and (+1), as well as each skewness value for the total score of pre application of writing performance Skills as well as the four sub-skills among Preparatory School Pupils were less than the double value of standard error of skewness. The kurtosis value for pre application of writing performance Skills as well as the four sub-skills among Preparatory School Pupils were between (-3) and (+3), as well as each kurtosis value for the total score of pre application of writing performance Skills as well as the four sub-skills among Preparatory School Pupils were

less than the double value of standard error of kurtosis. For this reason, the parametric statistic is the suitable statistical method of testing hypotheses.

Before experimentation, both groups (the control and the experimental) were pretested to make sure that both groups were equal in their writing performance Skills as well as the four sub-skills.

Table (2): Independent samples T-test of the pre \_test of writing performance Skills and its sub-skills among Preparatory School Pupils for the control and the experimental groups.

Skill	Group	No.	M	S.D	df	T__ value	sig
Ideas and content	Control	25	3.600	1.291	48	1.258	0.214 <b>Not significant</b>
	Experimental	25	3.160	1.179			
Mechanics	Control	25	2.720	1.275	48	1.269	0.210 <b>Not significant</b>
	Experimental	25	2.280	1.173			
Grammar	Control	25	7.840	1.724	48	1.054	0.297 <b>Not significant</b>
	Experimental	25	7.200	2.500			
Organization and Coherence	Control	25	2.640	0.952	48	1.117	0.269 <b>Not significant</b>
	Experimental	25	2.320	1.069			
The total writing performance Skills	Control	25	16.800	3.500	48	1.607	0.115 <b>Not significant</b>
	Experimental	25	14.960	4.532			

Non-significant.

Pre \_testing results in table (2) show that all t \_values for writing performance Skills and its sub-skills are not significant at the level of (0.05), so, there were no significant difference between the control and he experimental groups in writing performance Skills as well as the four sub-skills in pretest.

#### 14-An Inquiry-Based Instructional Model:

To achieve the objective of the present study, the researcher used The Inquiry-Based Instructional Model to develop the second year preparatory

students' EFL writing performance at Manshiat Naser preparatory School in Awlad Sakr.

General Objectives of the inquiry-based instructional model:

By the end of utilizing the model, students will be provided with opportunities to:

- develop skills they will need all their lives
  - learn to cope with problems that may not have clear solutions
  - deal with changes and challenges to understandings
  - shape their search for solutions, now and in the future.
  - Specific Objective of the inquiry-based instructional model
- 1-identify the function and usage of inquiry-based instructional model and its phases relevant to their syllabus as well as their age in order to be accurate in writing performance assigned to them.
  - 2-identify the characteristics of the writing performance. Additionally, the students should be aware of how to organize the writing performance paragraph, the construction of it, and how to express their feelings and opinions in many details as possible.
  - 3-updates and enhances the research process strategies and skills.
  - 4-includes new approaches to the delivery of instruction.
  - 5-includes information and communication technology and new curricula.
  - 6-includes new research findings on the impact of emotions on learning

### 15-Description of the inquiry-based instructional model

An inquiry-based instructional model progresses through five phases that begin with the letter “E”: engage, explore, explain, elaborate, and evaluate. In the first phase, engagement, the teacher’s role is to motivate and raise student interest in the subject. This can be done through an activity or experience that allows students to connect current and past experiences. The teacher could also ask an intriguing question, present a problem, or show a discrepant event. This stage is critical because it lays the groundwork for subsequent steps (Bybee et al., 2006). Students are encouraged to ask a variety of questions which include:

- Why did this happen?
- What can I find out about this?



- How can this problem be solved?

●Activities that help students to engage and stimulate their thinking include:

Teacher Demonstration Free Writing Brainstorming.

Using a KWL chart (Know Already-Want to know –Want to learn).

A short reading from a journal or piece of literature.

Watching a short video.

After students are engaged, they move to the exploration phase of this model. The teacher's role is to facilitate or coach students by involving students in activities which help them think, problem solving, or investigate. The teacher asks questions, observes, and listens to students' interactions. The activities help students develop an understanding of a scientific concept, skill, or process. These experiences should be concrete and meaningful because they will provide a foundation for formally introducing the scientific objective. This phase can also have students from hypotheses, test their predictions, record observations, and discuss alternatives with each other. (Bybee etal.2006)

●Activities that help student explore include:

Performing an investigation.

Reading resources to collect information.

Problem solving.

Constructing a model.

The teacher's task in the explanation stage is to formally present the scientific concept, process, or skill. His or her explanation is based on the activities presented in the engagement and exploration experiences. This explanation connects students' prior knowledge with observations and findings from the exploration activity. This will help students to comprehend the teacher's explanation and help them answer their own questions.

Examples of teacher explanation activities include:

Structured Questioning

Reading and discussion

Student analysis and explanation

Supporting ideas with evidence

Thinking skill activities: compare, classify, error analysis.

In the Elaboration phase, the students are involved in activities that have them apply, extend, or elaborate on the concepts and/or processes they explored. Students are applying information learned in the previous phases to new situations and are asking questions such as: “What happens if...” “Can I find a way to ...? This information could also be used to propose solutions, make decisions, and design experiments. At this level, the teacher should expect students to correctly use vocabulary, definitions, and explanations. Activities that help students elaborate and apply learning to real-world situations include:

- Problem solving.
- Decision making.
- Experimental inquiry.
- Thinking skills activities: compare, classify, and apply.

In the final phase, Evaluation, students work with each other to check their understanding. Students are expected to ask each other open-ended questions based on evidence, observations, and previous explanations. The teacher provides feedback on their explanations. The teacher has the option to complete a formal evaluation and/or administer a test to determine students’ level of achievement (Bybee et al., 2006).

Activities that assess student performance and/or understandings of concepts, skills, and processes, include:

- Using a scoring tool or rubric
- Using a performance assessment
- Producing a product
- Producing a Portfolio

## 16-Results and Discussion

This part presents the statistical analysis of the data gathered from the pre-post writing performance Skills. All the data collected were analyzed by using the Statistical Package for the Social Services (SPSS) version 23.

### A.The Results

The results of administering writing performance Skills to both the experimental and the control groups are statistically discussed in the light of the study hypotheses mentioned before:

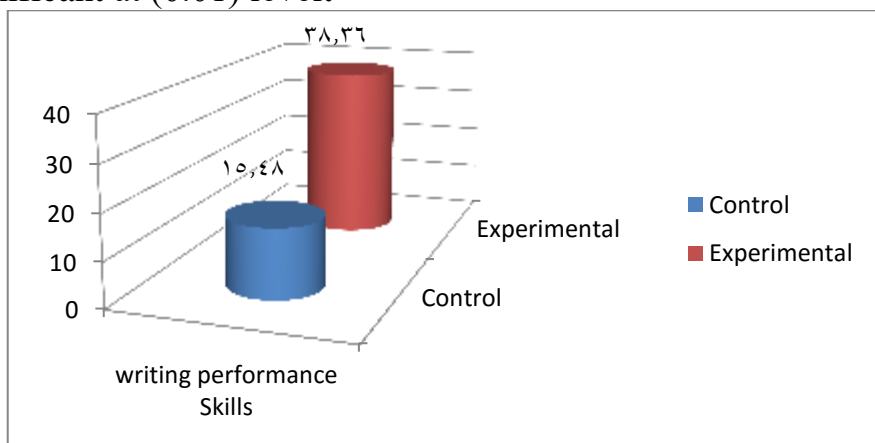
**Hypothesis 1:**

It was hypothesized that" There is no statistically significant difference between the mean scores of the experimental group and those of the control group in their performance of the post administration of the writing performance scale as a whole and its sub-dimensions".

Table (3) Independent samples T-test for the study groups of the post writing performance Skills Test.

Post administration	NO.	Mean	SD	df	T-value	Sig.
Control Group	25	15.480	4.124	48	14.810	0.000**
Experimental Group	25	38.360	6.531			

\*\* Significant at (0.01) level.



**Figure (7): The mean score of the control and the experimental groups in the overall writing performance Skills, in the posttest.**

The above table (3) and figure (7) indicate that there is a statistically significant difference at (0.01) level between the attained mean scores of the experimental and that of the control one in favor of the experimental group in the post administration of the writing performance Skills test results. The mean scores of the experimental group is (M=38.360) and that of the control group is (M=15.480), this means that the score of the experimental group's post administration of the writing performance Skills is better than that of the control group. The estimated T- value is

(14.810). It is significant at (0.01) level in favor of the experimental group.

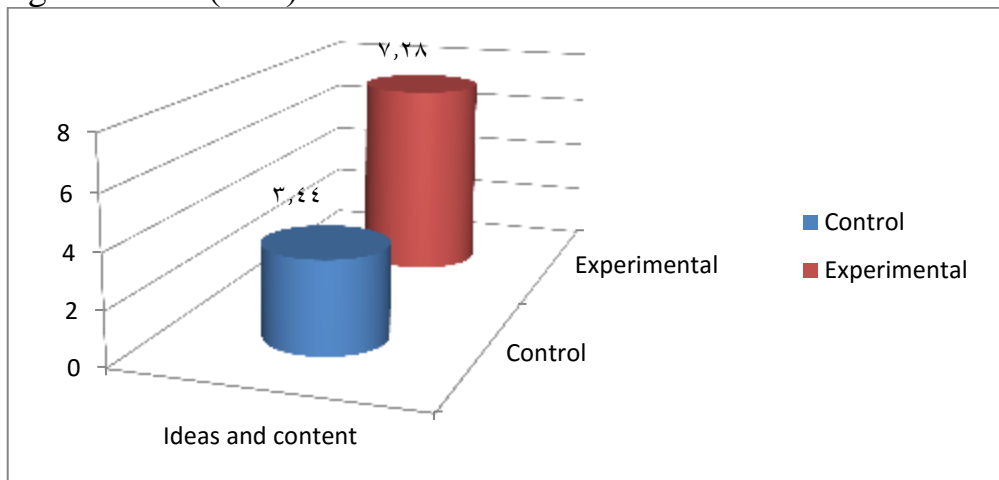
This hypothesis can be subdivided into the following four skills as follow:

1. There was a statistically significant difference at (0.05) level between the mean scores of the experimental and that of the control one in the post administration of the Ideas and content skill as a sub-skill of writing performance in favor of the experimental group. This is shown in the following table (4):

**Table (4)**  
**Comparing the Post Administrations of both the Experimental Group and control group in the skill of Ideas and content**

Post-test	N.	Mean	SD	Df	T-value	Sig.
Experimental g.	25	3.440	1.193	48	9.640	0.000**
Control g.	25	7.280	1.595			

\*\* Significant at (0.01) level.



**Figure (9): Means for the study groups of the post the Ideas and content skill**

From the previous table and figure, there was a statistically significant difference at (0.01) level between the mean scores of the experimental and that of the control one in the post administration of the Ideas and content skill as a sub-skill of writing performance in favor of the experimental group. The mean scores of the experimental group is

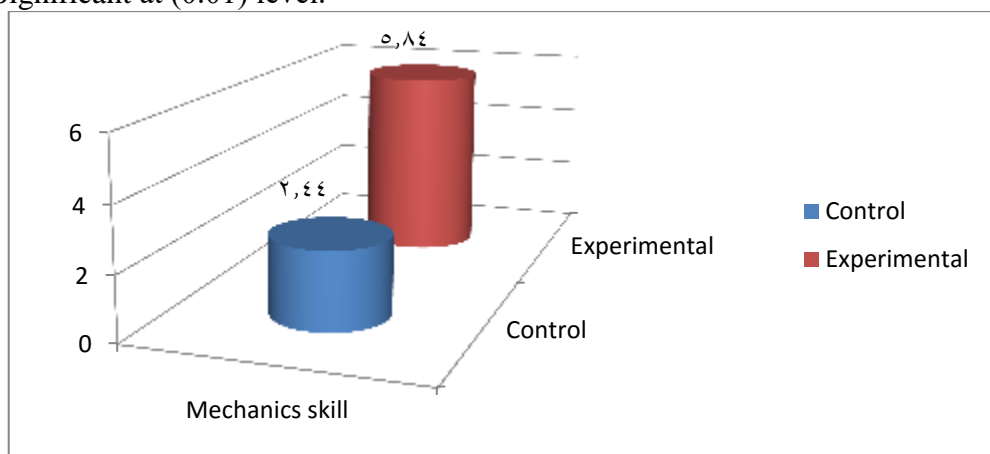
(M=7.280) while that of the control group is (M=3.440), and the estimated significant T- value is (9.640).

2- There was a statistically significant difference at (0.05) level between the mean scores of the experimental and that of the control one in the post administration of the Mechanics skill as a sub-skill of writing performance in favor of the experimental group. This is shown in the following table (5):

**Table (5)**  
**Comparing the Post Administrations of both the Experimental Group and control group in the skill of Mechanics**

Post-test	N.	Mean	SD	Df	T-value	Sig.
Experimental g.	25	2.440	1.261	48	8.032	0.000**
Control g.	25	5.840	1.700			

\*\* Significant at (0.01) level.



**Figure (10): Means for the study groups of the post the skill of Mechanics**

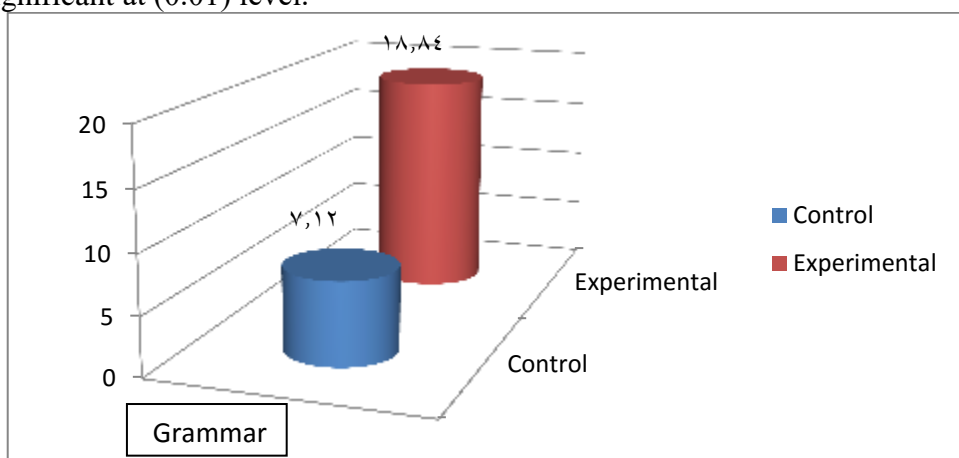
From the previous table and figure, there was a statistically significant difference at 0.01 level between the mean scores of the experimental and that of the control one in the post administration of the Mechanics skill as a sub-skill of writing performance in favor of the experimental group. The mean scores of the experimental group is (M=5.840) while that of the control group is (M=2.440), and the estimated significant T- value is (8.032) .

2. There was a statistically significant difference at (0.05) level between the mean scores of the experimental and that of the control one in the post administration of the Accuracy skill as a sub-skill of writing performance in favor of the experimental group. This is shown in the following table (6):

**Table (6)**  
**Comparing the Post Administrations of both the Experimental Group and control group in the skill of Grammar**

Post-test	N.	Mean	SD	Df	T-value	Sig.
Experimental g.	25	7.120	2.286	48	16.358	0.000**
Control g.	25	18.840	2.672			

\*\* Significant at (0.01) level.



**Figure (11): Means for the study groups of the post the skill of Grammar**

From the previous table and figure, there was a statistically significant difference at 0.01 level between the mean scores of the experimental and that of the control one in the post administration of the Accuracy skill as a sub-skill of writing performance in favor of the experimental group. The mean scores of the experimental group is (M=18.840) while that of the control group is (M=7.120), and the estimated significant T- value is (16.358).

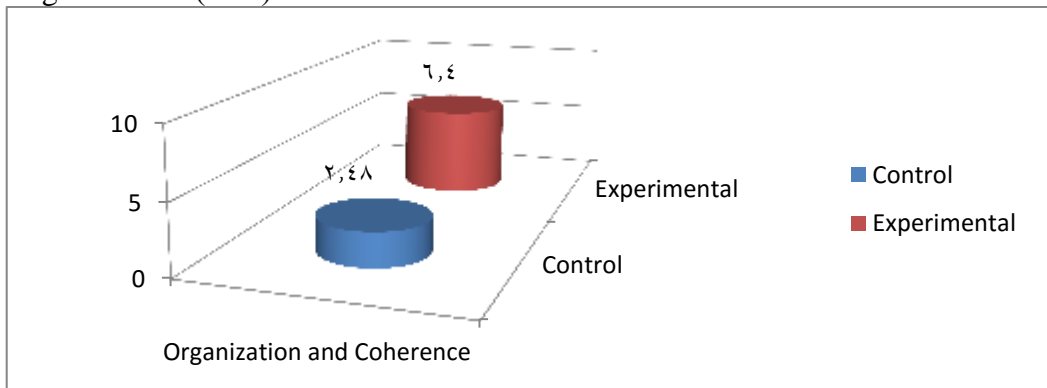
3. There was a statistically significant difference at (0.05) level between the mean scores of the experimental and that of the control one in the post administration

of the Organization and Coherence skill as a sub-skill of writing performance in favor of the experimental group. This is shown in the following table (7):

**Table (7)**  
**Comparing the Post Administrations of both the Experimental Group and control group in the skill of Organization and Coherence**

Post-test	N.	Mean	SD	Df	T-value	Sig.
Experimental g.	25	2.480	1.085	48	9.229	0.000**
Control g.	25	6.400	1.826			

\*\* Significant at (0.01) level.



**Figure (12): Means for the study groups of the post the skill of Organization and Coherence**

From the previous table and figure, there was a statistically significant difference at 0.01 level between the mean scores of the experimental and that of the control one in the post administration of the Organization and Coherence skill as a sub-skill of writing performance in favor of the experimental group. The mean scores of the experimental group is (M=6.400) while that of the control group is (M=2.480), and the estimated significant T- value is (9.229).

**Hypothesis 2:**

It was hypothesized that "The suggested strategy will have a positive effect on developing EFL writing performance of preparatory school students." This hypothesis is approved by the following formula:

$$\eta^2 = \frac{T^2}{T^2 + df}$$

$$ES = d = 2 \sqrt{\frac{\eta^2}{1-\eta^2}}$$

ES is decided according to next indicators as shown in next table:

Table (8)

Indicators for evaluating the Effect Size (ES) values according to  $\eta^2$  and  $d^2$

Tool	Effect Size			
	Low	Medium	Large	Very Large
$\eta^2$	0.01	0.06	0.14	0.20
$d^2$	0.2	0.5	0.8	1.10

Table (9)

The Effect Size (ES) values according to  $\eta^2$  EFL writing performance and its sub-skills

Skills	T	T2	df	$\eta^2$	Effect Size
Ideas and content	9.640	92.930	48	0.659	Very Large
Mechanics	8.032	64.513	48	0.573	Very Large
Accuracy	16.358	267.584	48	0.847	Very Large
Organization and Coherence	9.229	85.174	48	0.639	Very Large
The total writing performance Skills	14.810	219.336	48	0.820	Very Large

\*\* Significant at (0.01) level.

From the previous table, the suggested strategy will have a very large positive effect on developing EFL writing performance of preparatory school students

## 17. Discussion of the Results:

Results of the current study were discussed with reference to the hypotheses and the relevant literature.

The primary aim of the study was to develop EFL writing performance and motivation of the second year students enrolled in AWlad Sakr Governmental preparatory school through using an inquiry-based instructional model. The model included a variety of tasks and activities for helping students enhance their EFL writing performance and motivation. Regarding the effect of the inquiry-based learning



instructional model on developing the students' EFL writing performance and motivation, the obtained results showed significant differences between the pre and the post administrations of the writing performance test and motivation scale for the experimental group favoring the post results. So, the model proved to be statistically and educationally significant in developing students' writing performance and motivation.

After the administration of the inquiry-based instructional model, the experimental group students achieved progress and development in writing performance. This development could be attributed to several factors that stem from the nature of the model that was based on the notion that the teacher and students write together through the activities incorporated in the model that were based on brainstorming, whole class discussion, thinking critically, searching, self-reflection, self-questioning and conducting brief lessons on common errors of the students' writing.

Brainstorming and whole class discussion played an important role in developing the content of writing as these activities enabled participants to generate relevant ideas and support the main ones. Besides, allowing students to write about topics and providing them with the chance to write about the content that was accessible to them.

In addition, giving activities based on self-questioning, self-reflection and thinking critically for the experimental group students during administering the model, helped them to activate their background knowledge to write reflectively, think about the writer's ideas, use the different writing genres and increase their motivation, consequently, the aim of the study was achieved successfully.

The results of the current study showed that the experimental group outperformed the control one on the writing posttest. Hence, the significant differences were due to exposing this group to the inquiry-based instructional model.

Results of the current study lend support to those of Ahmad, Sitti, Abdul, Mohammad, & Sanitah, (2014), Hamsina, S.(2020), Simamora, A. M., & Hutabarat, N. (2020) and Hamid, S. M., Mannong, A. B. M.,

Hidayat, N., & Insyirah, L.(2021),Derseh, B. (2020), Wale and Bogale (2021), and Ahmed, H. A. E. R. (2022).

### 18-Conclusion:

The inquiry-based instructional model improved the second- year preparatory students' writing performance. This was confirmed in the following findings:

a- The experimental group students' means were higher than the control group in the writing performance test. This was shown through the significant differences between the means of the two groups.

b- In the post-administration of the writing performance test, the experimental group students' means were significantly higher than in the pre-application of the test.

c- The experimental group students' means in the post- administration of the self-efficacy scale for reading were much higher than theirs in the pre-administration of the self-efficacy scale for reading.

d- The Differentiated instruction based program was effective in enhancing the EFL writing performance of second-year preparatory school students. This was confirmed by the effect size of the treatment on students' writing performance.

### 19-Recommendations:

1-EFL Curriculum designers should pay attention to the effectiveness of the inquiry-based instructional model in developing English Language in general and EFL Reading Comprehension in particular.

2- Writing performance should be prioritized to be enhanced from the start of learning a foreign language at primary, preparatory and secondary stages.

3- Teachers should pay too much attention to use inquiry-based instructional model as a new way of the learning process that would support language learning chances.

- 4- Teaching should be changed from a teacher –centered to a student-centered approach In order to be involved in an active learning environment.
- 5- Students should be trained and supported to be self-learners, self-managers, decision maker, self-correctors and problem solvers. They should also use new learning strategies to be able to improve their reading comprehension and self-efficacy.
- 6- An inquiry-based instructional model could be used as a successful teaching method in EFL classrooms.
- 7-It is recommended that EFL teachers have training in differentiated instruction designing, administering, and assessing.
- 8- EFL teachers should motivate students to write by providing enjoyable writing tasks throughout class.
- 9- EFL teachers ought to provide contexts and learning opportunities that will aid in the construction of meaning. Learning environments that appreciate writing, have a varied range of texts, encourage writers to take risks, and provide time for writing independently.
- 10- EFL teachers should model for those students and help them develop the skills that are required to complete a given task.

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