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Using Imagining Generative Learning Strategy for Developing EFL Writing Performance among Secondary Stage Students

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Abstract

The aim of the present study was to investigate the effectiveness of using imagining generative learning strategy in developing EFL writing performance among secondary stage students. The participants of the present study included 60 students enrolled in first year at Qwesna Secondary School for boys in Menofia Governorate, 30 served as a control group and 30 as an experimental group. The instruments and materials of the present study included an EFL writing performance checklist, a pre/post EFL writing performance skill test, and an analytic rubric for scoring analyzing students' performance in the EFL writing perfromance test, and writing apprehension scale. The present study followed the control/ experimental pre-posttest design. The EFL writing performance skill was measured before and after the experiment for both groups. The results revealed that there is a statistically significant difference between the mean scores of the control group and that of the experimental group in the post-assessment of the overall EFL writing performance skill test in favor of the experimental group. Therefore, it can be concluded that the imagining generative learning strategy is effective in developing EFL writing performance skills among secondary stage students.

Keywords: Imagining generative learning strategy, EFL writing performance, and secondary stage.

Introduction

Writing is an ability for some and a talent for others that can be improved by improved practice. The goal of writing is to share knowledge, emotions, experiences, or beliefs by writing them down, and to convey a suitable meaning. Writing as a process and a product possess a cluster of attributes that correspond exceptionally to certain powerful learning strategies. Writing is considered the most challenging skill to master when learning English as a foreign language.

Writing is vital and multidimensional; thus, students' writing in the EFL classroom context needs to display their awareness of communicative goals, reader, and writing context (Ahmed, 2016, p.5). Learners can communicate a variety of messages to various readers. Recently, such communication has been extremely significant whether the interaction takes the form of paper-and-pencil writing or online writing because through writing, people can communicate a multiplicity of messages to a close or distant, known or unknown reader. Writing has been viewed as an act of communication. Therefore, the ability to express ideas fluently, accurately and coherently in writing should be emphasized and cultivated (Olshtain, 2001).

Dokchandra (2018), Kusumaningrum, Cahyono and Prayogo (2019) and Kolin (2023) agreed that there are four basic writing stages of the writing process; planning, drafting (writing), revising (redrafting), and editing. However, the teacher can improve writng by adding three other stages, namely, responding (sharing), evaluating, and post-writing.

According to Gebhard (2006), the first aspect of writing is a cognitive aspect that is related to thinking because writing cannot be done without thinking. Writing is associated with the choice of words, use of syntax, grammar, mechanics and organization of ideas into a coherent and cohesive form. In addition, writing also includes an emphasis on readers and purpose. For instance, to present at a conference, graduate students need to think about how to write a conference proposal for the conference participants instead of professors. Each stage of the process needs thinking.

McLeod (1987) said that an emotional activity should be added to the cognitive aspect of writing because students feel it during writing. McLeod presented the experience of observing the behaviors of college freshmen while taking a writing test. The behaviors demonstrated by the Journal of Faculty of Educaiton No (134) April, Part (3), 2023 5 students during writing showed that writing is not merely cognitively but emotionally demanding (p. 426).

Writing is a productive skill as well as a fundamental basis for developing other language sub-skills. It can be said that EFL writing performance skills include content, organization, accuracy, mechanics of writing, and lexical complexity. Without these sub-skills writing performance will be negatively affected less. Accuracy in general is described as the ability to be free of errors either in oral or written communication.

Writing performance is defined as the degree to which a written product sticks to the target language norms. Accuracy can be described also as a feature associated with a learner's capacity to deal with the current level of inter-language complexity the learner has achieved. Thus, writing performance can be characterized as the number of error-free clauses, including the errors related to syntax, morphology, and lexical choice. Writing performance is a significant concern in EFL writing classrooms because students' writing performance is usually evaluated based on how accurate they are in using vocabulary, word register, and grammar structure (Safdari, 2021).

Saeidi and Sahebkheir (2011) investigated the effect of the use of model essays on EFL learners' attention to four different aspects of writing: lexicon, grammar, discourse and content; their study attempted to determine the effect of model essays on developing the performance and complexity of EFL learners' writing performance. Results revealed that model essays significantly affected the accuracy and complexity of EFL learners' writing performance. Due to the importance of performance in writing, there is a need for using a new style of learning for developing EFL writing accuracy among students.

Generative learning seems to be that suitable style of learning because an individual's existing knowledge is combined with incoming information which leads to generating new meaning and understanding. This style of learning can be used in team-based learning exercises, where other students are challenged to view old information in a new or innovative way. As a result, generative learning can make the classroom environment more enjoyable, inspiring, and exciting for students.

Generative learning, as defined by Wittrock (1991), is the learning of the types of relations that learners must construct between stored knowledge, memories, and new information for comprehension to arise. To comprehend instruction, students invent new models and explanations or use or revise old models and explanations to organize the new information into coherent wholes that make sense to them and are coherent with their experience and knowledge.

Fiorella and Mayer (2016) asserted Wittrock's definition by defining generative learning as "the process of transforming incoming information (e.g., words and pictures) into usable knowledge (e.g., mental models, schemas)" (p.717). According to Fiorella and Mayer (2015), learning is a generative activity since learners actively try to make sense of the instructional material presented to them. The students achieve this goal by actively engaging in generative processing during learning, including paying attention to the relevant aspects of incoming material (selecting), organizing it into a coherent cognitive structure in working memory (organizing), and integrating cognitive structures with relevant prior knowledge activated from long-term memory (integrating) (P. 5).

The three principles of generative learning are cognitive flexibility, cognitive generativeness and sociocultural interaction. These principles identify the learning that is responsible for the knowledge production

and creative abilities of the learner (Karpov, 2010& 2016).Generative learning theory has its roots in Bartlett's (1932) view of learning as an act of construction, in which people invest effort after meaning by integrating new experiences with their existing knowledge structures or schemas.

Nevertheless; the real start of the theory was by an American educational psychologist called Wittrock in 1974. Basic to generative learning theory is the belief that learning is developed through a series of stages: a- First, is the cognitive stage, in which the learner gradually develops a rough mental representation of task requirements. b- Second, the learner refines and strengthens this representation in the second associative stage of learning but sometimes needs outside support during performing the task. c- Third, in the autonomous stage, the learner refines the task and is now able to perform the task automatically. Generative learning theory is based on the structure of knowledge and cognitive development and is focused on the learner (Anderson, 1983).

Generative learning strategies are "learner activities that are intended to cause learners to engage in the cognitive processes of selecting, organizing, and integrating during learning"(Fiorella & Mayer, 2015). Jefferson and Anderson (2017) agreed with Fiorella and Myer that " generative learning strategies are interventions that help learners to select, organize and integrate knowledge and skills" (p.56). Fiorella and Mayer (2015) summarized examples of learning strategies that support three instructional goals:

1- Selecting – helping students attend to the relevant material.

2- Organizing – helping students mentally organize the relevant material into a coherent cognitive structure.

3- Integrating – helping students activate relevant prior knowledge and connect it with incoming material (see Table 1).

Table 1. Examples of learning strategies to support three goals of instruction (Fiorella & Mayer, 2015, p. 13)

Goal	Learning strategy
Foster selecting	Teach students how to distinguish between important and unimportant information (e.g., by summarizing)
Foster organizing	Teach students how to organize information within a coherent structure (e.g., by mapping)
Foster integrating	Teach students how to relate incoming information with relevant prior knowledge (e.g., by self-explaining)

The importance of applying generative learning strategies in education was confirmed by (Wittrock, 1992; Fiorella& Mayer, 2016; Prawita& Prayitno, 2019; and Laarschot, 2022) as these strategies:

- Offer a positive instructional learning environment to work independently.
- Assist students to generate their ideas and interpretation.
- Help the learners' mental process to be active to make links between prior knowledge and newly learned one.
- Inspire a higher-order level of thinking.
- Encourage self-efficacy of students.
- Emphasize knowledge formation by students.
- Empower students with the ability to express their viewpoints.

Fiorella and Mayer (2016) added the eight generative learning strategies: summarizing, mapping, drawing, imagining, self-testing, self-explaining, teaching, and enacting. These eight strategies were classified based on the mode of representation constructed by students during learning. Summarizing, self-testing, self-explaining, and teaching involve generating a primarily verbal representation of the material (verbal generative strategies), whereas mapping, drawing, imagining, and enacting involve generating a spatial representation of the material (spatial generative strategies) (p. 717).

Izzati (2018) stated that imagining is one of the generative learning strategies which involves synthesis that combine aspects from remembrance, memories, or experience to be a mental construction that is different from a past event or to be the new reality in right. Everyone can imagine and the point that distinguishes it is the sharpness of a person in seeing and interpreting the reality of life in the surrounding. The ability of a student's imagination is the part of brain activity that has a benefit for intelligence. Imagining can make the student develop inspired ideas. Students' imagination arises from the result of imitation, imitating comes from impressions that are watched or the influence of the fairy tale that is heard (p. 8-9).

Imagining as a generative learning strategy works when a learner acquires new knowledge, learns a new skill, observes something new, and then reflects on it. In other words, imagination begins when taking information looking at it differently, and exploring new ways to use that information (Menton, 2015, p. 28). Imagining helps learners bring to mind future possibilities. Besides, it also enables learners to make use of past experiences. The past experiences are also essential components of inquiry because these past experiences suggest alternative possibilities, as well as a means for bringing about these possibilities. For example; If a problematic situation is completely unfamiliar to learners, and there is no relevant prior knowledge to help learners make sense of it, the learners will be unable to meaningfully reconstruct it (Bleazby, 2012, p. 101).

Fiorella and Mayer (2015) indicated that in imagining strategy, learners create mental images that depict the content of a lesson. Imagining appears to be more effective for students with high rather than low prior knowledge. Learning by imagining includes determining which components to include in an image and how to arrange them spatially to show their structural and causal connections. Learning by imagining is likely to be most effective when students have had practice in how to engage in productive imagining, when students are given specific prompts for what to imagine, and when they are somewhat familiar with the domain. The rationale for using imagining as a generative learning strategy in education is that the act of forming mental images that correspond to text can prepare learners in terms of the generative processes of selecting (in which learners choose which components to include), organizing (in which learners arrange the components in a spatial layout), and integrating (in which learners translate words to the picture) (p. 80).

Masoud and Mostafa (2020) asserted that writing skills are generative by nature as they promote learners to select the most relevant information from the lesson, organize it into a coherent structure (e.g. outlining) and integrate it with prior experience and existing information and produce a new material (e.g. an essay, stating opinions on the passage) (p.118).

Azmi's study (2020) has proved that using a generative learning model strategy can improve the writing of students' recount texts in the first grade of High School. Participants were twenty-three students, eleven male students, and twelve female students, the instruments used were writing tests, teacher and student observation sheets, interviews and documentation.

Moreover, Buchner (2022) compared two mobile augmented reality learning environments with or without generative learning strategies. Participants were 56 primary school students assigned as an experimental group and a control group. The experimental group learned with augmented reality and generative learning strategies, namely, self-explanation and self-testing. The control group learned only with augmented reality. Results indicated that learners who learned with both augmented reality and generative learning strategies were more skeptical about augmented reality as a learning technology than those who learned only with augmented reality.

Context of the Problem

As an English language teacher, the researcher has noticed that some secondary school students encounter difficulties in EFL writing performance skills. They have problems in using a variety of appropriate grammatical structures and rules correctly, using precise, clear and variety of vocabulary appropriate to the topic of the essay, in addition to using the appropriate word register for the writing.

Besides, some studies such as Abdel-Rahman, (2017); Al-Rashidy, (2018); Elquradahj, (2019); Hussein, (2017); Nagy, (2018); Nassar, (2017) and Suleiman, (2017) concluded that these problems are due to the regular methods of teaching adopted by most English language teachers, the lack of feedback students get from their

teachers, the lack of training students on how to write appropriately; as well as the teachers focus on the product rather than the process of writing in general and accuracy in particular.

This problem was also confirmed by the pilot study conducted by the researcher to find out the level of second-year secondary school students' writing performance. The participants were 35 students in the first year at Qwesna Secondary School for Boys , Menofia Educational Administration on 3rd December 2022. The pilot study included an EFL writing accuracy test and a rubric to score the writing performance adopted from Anderson (2003, p. 92). Results of the writing accuracy test indicated the poor level of students' writing accuracy as 77% of the participants couldn't achieve 60% or more of the test as shown in Table (2).

Table 2: Number of students who achieved and those who did not achieve the mastery level and their percentages concerning their total marks.

	Students number	Percentage
N1	29	77%
N2	9	23%
Total	38	100%

N1: Students whose total mark percentages are less than 60% (did not achieve the mastery level).
N2: Students whose total mark percentages are 60% or more (achieved the mastery level).

Statement of the Problem

The problem of this study lied in the low level of first-year secondary stage students in EFL writing performance, thus; there is a need to use new strategies such as imagining generative learning strategy to develop their EFL writing performance

Significance of the Study

The significance of the present study can be looked at from four different perspectives:

EFL Second-Year Secondary Stage Students

- It sheds the light on using generative learning which helps them to learn in an effective learner-centered classroom.
- It helps students in developing EFL writing performance skills.
- It supports group work and collaboration.
- It encourages them to use individual feedback and peer feedback.
- It helps overcome the difficulties usually facing them during writing.

EFL Secondary Stage teachers:

- It shows secondary stage teachers the importance of imagining generative learning in EFL teaching and learning.
- It provides them with the necessary data and materials which help them to apply the generative learning inside the classroom.
- It builds a good relationship between teachers and pupils.
- It provides them with various instruments for assessing EFL writing accuracy skills.

EFL Curriculum Planners

- It can direct the attention of EFL curriculum designers to the efficacy of imagining generative learning strategy in developing EFL writing performance skills.

EFL Researchers

- It can encourage researchers to use generative learning in their research.
- It can provide them with the procedures of using generative learning to develop EFL writing performance skills to be used among secondary-stage students.

Questions of the Study

To achieve the purpose of the study, the following questions were postulated to be answered:

1- What are the EFL writing accuracy skills required for first-year secondary school students?

2- What are the features of imagining generative learning strategy for developing EFL writing performance among first-year secondary school students?

What is the effect of imagining generative learning strategy in developing second-year secondary school students' EFL writing performance?

Hypotheses of the study

In the light of the reviewing the literature and related studies, the following hypotheses were formulated:

1- There is a statistically significant difference between the mean score of the experimental group in the pre-post application of the writing performance skills test in favor of the post application.

2- There is a statistically significant difference between the mean score of the experimental group and the control group in the post-administration of the overall EFL writing performance skills test in favor of the experimental group.

Delimitations of the Study

The present study was delimited to the following:

- Sixty first year secondary stage students at Qwesna Secondary School for Boys in Menofia Governorate during the school year 2022/2023.
- Some EFL writing performance skills are required for secondary-stage students.

Participants of the Study

The participants of the study were two intact classes (class 2/A & class 2/B) and were selected from first year secondary stage students during the first semester of the 2022-2023 academic year. They comprised 60 female students enrolled in the first year at Qwesna Secondary School for Boys in Menofia Governorate. Their age ranged from sixteen to seventeen years old. Class 2/A comprised the experimental group and Class 2/B comprised the control group. The experimental group (N=30) was taught using the imagining generative learning strategy. The control group (N=30) was taught using the regular method.

To test if there is no statistically significant difference between the mean scores of the control group and that of the experimental group in the pre-assessment of the overall EFL writing performance skills test, the independent-samples t-test was used. This result indicated that there was homogeneity between the control and the experimental group in the pre-assessment of the overall writing accuracy skills test as shown in the following table.

Table (3): The value of the t-test and the level of its significance for the difference between the experimental and the control groups in the pre-test of EFL writing accuracy skills

	Group	N	M	±SD	D.F	T Value	Sig
EFL Writing Accuracy Skills	Experimental group	30	1.49	0.670	82	0.404	0.688
	Control group	30	0.57	0.991			

The previous table shows that there is no statistically significant difference at (0.05) level between responses of the experimental group and those of the control group in the pre-application of the EFL writing performance writing test.

Instruments and Materials of the Study

To achieve the purpose of the study, the following instruments were developed and used by the researcher:

(1) An EFL writing performance skills checklist is required for first-year secondary-stage students.

(2) An EFL writing performance skills test was used as a pre-posttest for measuring second-year secondary-stage students' EFL writing performance.

(3) An analytic rubric for scoring and analyzing students' performance on the EFL writing test.

Description of the Instruments and Materials of the Study

a- The EFL writing performance skills checklist

Reviewing literature and related studies on writing performance, a list of writing performance skills was prepared. The list included three sub-skills (grammatical structures and rules, vocabulary, and word register). The checklist of the writing performance skills was submitted to a panel of jury members specialized in curricula and methods of teaching English (N=12) to validitate it. They were requested to:

1- Determine the importance of each skill according to its appropriateness.

2- Add any appropriate skill(s) required for the second-year secondary stage students.

3- Omit any unnecessary sub-skills.

4- Make any suggestions or modifications.

b- The EFL writing accuracy skills test

The following table gives a specification of the EFL performance skill test. E. g., it shows the EFL performance skill and the items measuring it. The test items were developed to assess the sub-skills of EFL performance skills. There were three sub-skills (grammatical structures and rules, vocabulary, and word register). The total score of the test is '100 scores' divided into two parts as follows:

Table (4): EFL accuracy Skill Test Specification Table

Questions		Total Score
Part (one)	(A) Choose the correct answer	**22**
	(b) Write a suitable title for the following text, and then paraphrase it.	**8**
Part (two)	Write a well-organized essay	**80**
Total		**110**

The total score of the test is '110 scores' divided into two parts as follows:

- '30' scores for part 'one'. This part contains two questions (A and B), the question 'A' did not need the rubric for scoring since it included mcq questions. On the other hand; question 'B' needed the rubric for scoring.

- '80' scores for part 'three'. This part contains only one question which needed the rubric for scoring.

Validity of the EFL Performance Skills Test

To validate the EFL accuracy skills test, internal consistency was used as follows:

- Internal consistency

Internal consistency was calculated through piloting the test on (20) students. Calculating of the Pearson correlation coefficient among the total scores of the main skill in addition to each sub-skill separately as shown in the following table.

Table (5): The correlation coefficient between the EFL accuracy skill and sub-skills.

EFL Accuracy Skill	
Sub-skill	**Co. coff of sub to main skill**
Grammar	**0.705**
Vocabulary	**0.825**
Word register	**0.771**

The previous table shows that the correlation coefficient between the test skills and the score of the test ranged between (0.705) and (0.825); all of which are statistically significant at the level of (0.01).

Reliability of EFL accuracy skill test

For estimating the reliability of EFL accuracy skill test, the Alpha Cronbach method, test-retest reliability, and inter-rater reliability methods were used as follows:

a- Alpha Cronbach method

The researcher used the Alpha Cronbach method to calculate the reliability of the test by piloting the test to a sample of 20 students enrolled in the first year at Qwesna Secondary School for Boys in Menofia Governorate. Alpha Cronbach coefficient for the value of the Cronbach Alpha for the overall test was (0.984**).

b- Test re-test method

The reliability of the test was calculated by the method of application and re-application using the Pearson correlation coefficient, where the researcher reapplied the test on 20 students after two weeks after the first

application. The value of the reliability coefficient was (0.851) which is significant at the level of (0.01). The value indicates that the test has an appropriate degree of reliability to measure the EFL accuracy skill of the students.

c- Inter-rater reliability

It refers to the degree to which two or more raters/observers give a consistent rating on the same test; its goal is to achieve objectivity factors in scoring. Accordingly, the test was scored by two raters. The first rater was the present study researcher. The second one was another researcher* 'an English teacher'. The correlation coefficient between the scores of the two raters was (0.970**) which is significant at the (0.01) level according to the Pearson correlation coefficient.

The Steps for Implementing Imagining Generative Learning Strategy

The imagining generative learning strategy is applied through three main phases as follows:

(1) Phase 1: Modeling

In this phase,

- The teacher selected a text as a model for the students to engage in.
- After that, the teacher explained to the students the three different generative processes of generative learning:

  1- Selecting

  2- Organizing

  3- Integrating

- The teacher gave examples for each process.
- The student was the center of the learning process. The students were working in small groups, each member of the group had her responsibility and the performance of each group was dependent on the performance of the individuals. This shift from the teacher-centered classroom to the students-centered classroom encouraged the students in reading extracts, view, and share ideas.

(2) Phase 2: guided practice

In this phase;

- The students started practicing imagining generative learning strategy via EFL writing accuracy skill by reflecting on the text selected through:

  a- Making Description

  The students described as briefly as objectively as possible.

  b- Asking questions

The teacher created a safe and respectful classroom culture for the students to practice writing reflection during practice. The teacher illustrated to the students how to develop a question-answer cycle based on the text sequence. The teacher supported the students and guided them to use the question-answer technique by applying the following:

- Asking the students to compose their questions to direct them to the whole class or the group of the class to prompt group discussions.
- Writing questions- answer down on the board to present group discussions.

- Questions should not only include answers that are specific to the text but also answers which include personal thoughts or reflections.

- The students first wrote down sheet responses regarding the text being read and then rewrote it formally.

- The students identified not only the relevant points in the text but also could summarize the main points through personal reflection.

C- Creating reflection

- The teacher illustrated to the students that reflection during writing is a critical step in personalizing and internalizing the knowledge that depends on making relations among thoughts, events, or information that varies from one person to another.

The teacher also explained to the students that reflection requires them to think about and evaluate information acquired from reading the text and find a relation to the available knowledge.

- The students gave their responses in written form.

- The teacher encouraged the students to write down their reflections by asking them the following questions:

1- What is the main point of the text?

2- What information did you find surprising? Why or why not?

3- What did you find confusing? Why?

4- How to rewrite your information about the text in your way?

- The teacher guided the students in practicing creation activities to help them perform the tasks in an accepted way as:

1- Plan-act-observe and plan again "how to write".

2- Read-practice-retell and summarize "what you write".

3- Make differences between interactive practice with the group and the traditional one.

4- Use the think-pair-share technique to encourage responsive learning.

5- Practice a trial of think-pair share to give a final form of writing performance.

(3) Phase 3: independent practice

In this phase;

- The students worked independently to evaluate what they performed and what they already wrote and what they will do next.

Results of EFL writing performance skills test

Hypothesis 1

To test the validity of this hypothesis, the dependent-samples t-test was used in the pre-posttest of EFL writing accuracy skills for the experimental group for statistical analysis. The following table shows the result:

Table (6) The value of the t-test and the level of significance for the differences between the pre and post-test of EFL writing accuracy skills for the experimental group

	Test	N	M	Mean paired difference	STD.	T value
Writing Accuracy Skills	Pre	30	1.51	6.90	1.251	1.551
	Post	30	8.50		0.740	

It is clear from the table above that there is a statistically significant difference between the mean score of the experimental group in the pre-posttest of writing performance skills. The difference is in favor of the post-test. The level of significance is (0.05) which indicates an improvement in the students' writing performance skills. This is due to the effectiveness of imagining generative learning strategy. The following figure shows this result.

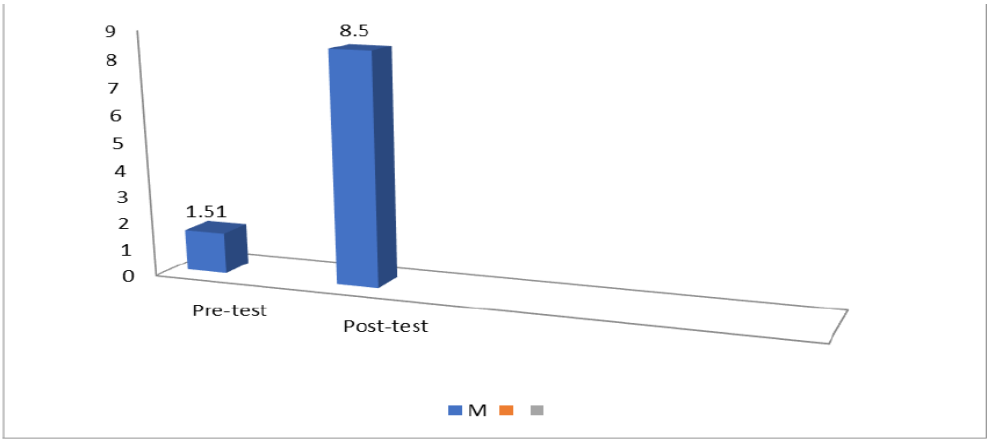

Figure (1): the mean scores of the experimental group in the pre-posttest of writing performance skills

Hypothesis 2

To test the validity of this hypothesis, the (T) test was used for the two independent samples; the experimental and control group in the post-test for writing performance skills. The following table shows this:

Table (7) The value of the t-test and the level of significance for the differences between the experimental group and the control group in the EFL post-writing accuracy skills test

	Group	N	M	±SD	D.F	T Value	Sig
Writing Accuracy Skills	Experimental group	30	8.50	0.780	82	45.510	0.001
	Control group	30	1.40	0.522			

Table (7) revealed that there is a statistically significant difference between the mean score of the experimental group and that of the control group in the post-assessment of the post-writing performance skills test in favor of the experimental group. Subsequently, the second hypothesis was accepted. Figure (2) presents this result. Figure (2) presents this result.

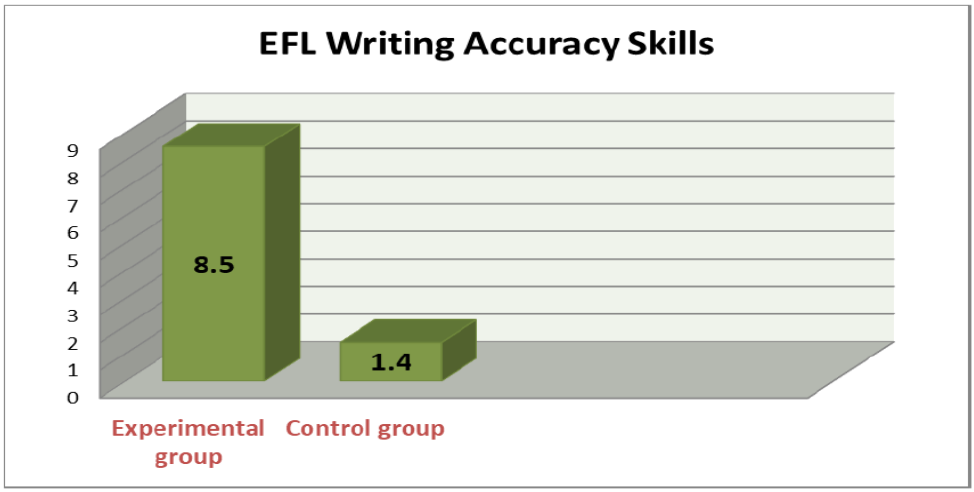

Figure (2): the mean scores of the experimental group and that of the control group in the post-writing performance skills test.

Discussion and interpretation of the study

The qualitative analysis of the results aimed to enable the researcher to focus on the development of learners' writing accuracy skills. The researcher dealt with students before and after the implementation. Before the implementation of the imagining generative learning strategy, students used to avoid participating in the writing activities. Moreover, students lacked self-confidence and were not motivated to write. Students did not spend time preparing for writing correctly or generating ideas. Their vocabulary was improper to some extent, in addition to using word register unsuitably and their grammar structure was sometimes incorrect. It was noticed that the students who got the highest score in the pre-test lacked some writing performance sub-skills.

In addition, it was noted that students were able to construct some grammatical structures but no doubt that there were some grammatical mistakes. When a student named Esraa had some mistakes concerning using the correct tenses. When Esraa wrote, *"I did not have to send the report to the General Manager; he needed it urgently"* And another student named Hala said, "*I am so sorry; if I had free time, I'd have met you yesterday*". On the other hand, a third one by the name Aya could not use the appropriate vocabulary when she wrote *"Did you know that Indian food is one of the popular foods in the UK?"*. Moreover, Hend could not choose the correct vocabulary for example *"COVID-19 can spread in crowded places, so we should be careful to avoid perfection"*, *"She felt proud for making her sister angry, so she apologized to her"* and " *You should be careful enough to use tricky websites".*

After the use of the imagining generative learning strategy, it was noted that students began to maintain a high degree of EFL writing accuracy. Errors in choosing vocabulary, word register, and grammar structure were few and generally corrected when the students discovered them. Students spent enough time during the pre-writing stage to prepare the grammatical structures accurately and the appropriate vocabulary that would be used. For example, Esraa wrote:

" I have many plans for the future, however every plan needs effort, work hard, and steps. Every one should do his/her best to achieve the wanted goals". Esraa used correct tense and appropriate vocabulary. And another student named Hala wrote *" Air pollution is most caused by burning fossil fuels like coal and natural gas. Old cars and buses are causes too. Burning trees in many countries is very harmful for the environment".* Alaa also could choose the correct vocabulary " *I must consult my doctor; I feel chest pain".* A third one by the name Haneen added "*From my childhood I want to be a doctor to help people who suffer from diseases. I wish I can treat them and cure their diseases. Thus, I want to study in Medicine Faculty"*. Aya wrote *"After we had finished our lunch, we played tennis in the open air"*. Aya used the grammatical structures correctly and the appropriate tenses and at the same time, and used suitable vocabulary.

Duration of using imagining generative learning strategy

The implementation of using the imagining generative learning strategy was fifteen sessions that lasted for two months in the first semester of the academic-year 2022/2023. The sessions did not take the same time, some sessions took two hours and others took two hours and half.

Conclusion

In the light of the results of the statistical analysis of data and the qualitative analysis of the study, it could be concluded that using the imagining generative learning strategy was effective in developing the second-year secondary stage students' EFL writing performance.

Recommendations

In the light of the results of the present study, the following recommendations are suggested:

- EFL students should be provided with a relaxing, effective, and interactive environment that raises interaction and helps to develop the students' writing performance skills.
- Secondary-stage students should be given enough time inside and outside their classes to write as much as possible.
- EFL students should be motivated to read more because reading and writing are related interactive processes that display in different contexts.
- Teachers should be aware of the importance of implementing generative learning strategies in general, and the imagining strategy in particular in teaching EFL writing instruction contexts.
- EFL curricula designers, teacher-trainers and textbook writers should provide strategies based on using generative learning in general, and imagining strategy in particular in teaching writing to EFL learners at all stages.

The Ministry of Education and course designers are advised to prepare and publish instructional materials to use generative learning strategies for different levels in the school.

- The activities and tasks included in the textbooks should be based on realistic and authentic examples rather than invented ones.

Suggestions for further future studies

In the light of the present study results, the researcher suggests the following studies:

- Using imagining strategy in developing EFL academic writing skills among secondary stage students.
- Investigating the impact of imagining strategy on the development of EFL literacy skills among secondary stage students.
- Using imagining-based tasks for developing secondary stage students' EFL writing competence and linguistic knowledge.
- Using imagining strategy in developing EFL literacy skills among secondary stage students.
- The effect of imagination strategy on developing EFL critical writing skills and reducing EFL writing apprehension among secondary stage students.

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