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Enhancing EFL Secondary School Students' Writing Skills through a Suggested Model Based on Constructivism

Mejorando las habilidades de escritura de los estudiantes de secundaria del EFL a través de un modelo sugerido basado en el constructivismo

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ARTICLE INFO	A B S T R A C T
<i>Keywords:</i> Constructivism Writing skill Secondary School	The aim of this study was to investigate the effect of a suggested model RW based on constructivism on the writing skill performance of the EFL secondary school students in Gaza. The sample consisted of (87) female students in two groups: control 43 and experimental 44. The researchers used quasi-experimental design of two purposefully assigned, randomly chosen groups with pre- and post-tests for each. Different statistical tests included in the Statistical Package for the Social Sciences (SPSS) were used to analyze the data collected while answering the study questions and testing the hypotheses. The results showed that there were statistically significant differences at ($\alpha \le 0.05$) between Experimental group and Control group in relation to the writing skills in favor of Experimental group. Also, the effect size of using the model based on constructivism was significantly large on students' writing skills. The researcher strongly recommended using the suggested model RW in teaching writing skill for the EFL secondary school students.
	R E S U M E N
Palabras clave: Constructivismo Habilidades de escritura Escuela secundaria	El objetivo del presente estudio es investigar el efecto de un modelo sugerido de RW basado en el constructivismo del rendimiento en exámenes de escritura de los estudiantes de la escuela secundaria EFL, en la Franja de Gaza. Para crear la muestra, se recurrió a 87 estudi- antes femeninas. Luego la muestra fue dividida en dos grupos: un grupo de control, con 43 integrantes, y un grupo experimental con las restantes 44 estudiantes. Los investigadores utilizaron un diseño cuasi experimental de dos grupos elegidos al azar y asignados de una forma no aleatoria mediante pruebas previas y posteriores para cada uno. Se realizaron dif- erentes pruebas estadísticas incluidas en SPSS (siglas de <i>Statistical Package for the Social Sciences</i> , un programa informático estadístico) para analizar los datos recopilados mientras las estudiantes respondían las preguntas del estudio y se efectuaban las pruebas de hipótesis. Los resultados arrojaron diferencias estadísticamente significativas con un grado de confi- anza del 95% ($\alpha \le 0,05$) entre el grupo experimental y el grupo de control a favor del primero en relación con las habilidades de escritura. Por otra parte, el tamaño de la muestra incidió significativamente en el uso del modelo basado en el constructivismo para analizar las hab- ilidades de escritura de los estudiantes. El investigador se pronunció rotundamente a favor del uso del modelo sugerido de RW en la enseñanza de la escritura para los estudiantes de la escuela secundaria EFL.

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1. Introduction

The current century witnesses very rapid and continuous development worldwide in which has a very dynamic and crucial effect on societies. These societies tend to spend time, effort, and money in order to update their educational systems to produce efficient learners who are capable of competing in this world. Therefore, they try hard to adopt the most effective strategies in teaching and learning. Also, they tend to change educational curricula to match with these developments and to gain high learning outcomes.

Constructivism as a paradigm of teaching and learning is one of the methods adopted by many educators. It is different from the traditional view because it relies mainly on the belief that knowledge is not a thing that can be simply given by the teacher at the front of the room to students in their desks. Rather, it is basically constructed by learners themselves during an active progressive process; learners are supposed to be the builders and producers of meaning and knowledge.

English is considered as the first international language. It is the language of science and technology. Learning English has become a necessity in this competitive world. Communities rush to enhance their youth's English language as they can earn many skills as a result. In Palestine, students get instruction in English language since grade 1. They learn the four skills of English language: listening, speaking, reading and writing.

Writing is a visual representation of speech. Torwong (2003) indicated that writing is a basic skill for communicating with other people from all over the world. Brown (2001) believed that the communicative approach considers writing as a conscious basic skill that requires mental effort in order to produce meaningful and communicative ideas. Akkaya stated that "writing, as the chief means of expressing feelings, thoughts, desires, and plans, is mainly aimed at allowing people to effectively communicate in today communicative world" (Akkaya & Kirmiz, 2010). Moreover, learners' experiment with words and sentences to convey their ideas efficiently and effectively plays a vital role in improving language acquisition in addition to reinforce their vocabulary and grammar which they learn in their classrooms.

On the other hand, writing is dealt with by non-native learners and even native learners as the most challenging and difficult learning skill. It is a productive language skill that requires many other skills to be mastered. That's why it is complex and complicated skill. It also requires a continuous interaction between growing knowledge and production, i.e., it requires a high level of productive language control (Luchini, 2010), as cited in (Liaghat, 2018).

Liaghat confirms this by stating that "EFL students usually find difficulty in mastering this skill and the most difficult areas are in generating, organizing and transforming ideas into readable text" (Liaghat, 2018). Many other researchers confirm this; Toubat (2003), for example, indicated that learners in general are very weak in the writing skill, and they need to improve and enhance their writing performance. They face many difficulties and obstacles in composing which it is required to produce good sentences and ideas, arranged them logically, and using suitable words, vocabulary items and structures.

No-one ever said writing documents was easy. The idea of having to put one's own words to paper makes them want to stop writing immediately. But consider this: it might not be the writing skills that are the problem. It could be the reading ones. The fact is what we read matters. Moreover, it will feed directly into what and how we write. As Stephen King wrote once: "If you don't have time to read, you don't have the time (or the tools) to write. Simple as that".

The researchers adopted the constructivism theory to build their suggested model RW upon for the reasons mentioned above. Also, it has been proved that constructivism-based models in teaching have a positive effect on students writing performance.

2. Objective of the study

The current study main goal was to provide evidence for the efficiency of a suggested model RW based on constructivism on the EFL twelfth graders' writing performance.

3. Statement of the Problem

The researchers have been teachers of English as a foreign language for a long time. Teaching secondary school and university students, they noticed major weakness in writing skill for the majority of the students they teach. Unfortunately, most students do not get the proper instruction in writing. In fact, they tend to

memorize instead of generating new ideas. The twelfth graders who are weak in this crucial skill, they have to enhance their writing performance in order to produce meaningful sentences that comprise coherent text. Al-Haq and Al-Sobh (2012) stated that there are many reasons behind EFL learners" weakness in the writing skill, the most essential reason is the strategies and techniques of teaching. Moreover, they believe that there is a need to adopt new teaching techniques for teaching writing skill that may help students be better writers.

To be successful, students today need strong literacy skills, and also need to be able to use these skills as tools for ongoing learning (Graham & Herbert 2010). Without the basic writing skills needed for success, students face difficulties at writing as they reach college. In addition, there is no definite model for teaching writing skills for the secondary school students. For this, the researcher tended to build this model in order to present clear procedures that are based on scientific notions in which are agreed to have a positive influence on the performance of the secondary school writing performance.

4. Significance of the study

The study attempted to accomplish the following:

- 1. Suggesting a new model for teaching English language writing skills for the Twelfth graders.
- 2. Helping the Twelfth graders to learn new strategies for developing writing skills.
- 3. Raising the awareness of English language curricula developers to the importance of using the new writing model that may lead to a serious change in the organizing of the Twelfth-grade English language units.

5. Previous studies

There were many studies that showed that constructivism teaching strategies can be very effective across subjects and academic ability. For example, AL-Ghazo and Al-Zoubi (2018) carried out a study to determine the effect of constructivist learning design on college students' writing skill. The participants of the study consisted of two sections 15 students. The results also showed that there were clear differences between the mean scores of the EFL students in experimental group in the post-test in favor of the experimental group.

AL-Ghazo and Al-Zoubi (2018), for example, found that constructivist-learning design enhanced college students' writing skill. She stated that most of the traditional strategies have not improved the learners' abilities in writing skill. Thus, EFL students need more practice to gain English writing skills and there should be special attention to students of English who have limitations in their English learning abilities. Consequently, teachers have to choose suitable and effective activities and strategies for developing their students' writing skills.

Supriyadi (2013) conducted a study to develop teaching material that depends on constructivism approach in order to improve learners" skill in writing scientific paper. The results showed that using the constructivism approach in learning reflected with four activities. These activities are orientation, exploration of concept, interpretation/concept inquiry, and concept application. The results also revealed that learning outcomes in writing scientific paper was improved through learning process with teaching material of development product.

Moallem (2001) used an instructional design principles and models to design and develop Web-based course. In his paper, he tried to prove that there is a useful link between learning theories and instructional design practices. When the learners implement the instructional design in creating WBI, they can construct their learning experiences in alignment with prescribed curriculum.

In fact, after surveying the related previous studies, no study dealt with constructivism-based models to enhance EFL secondary school students writing skill. So, the current study came to fill this gap using the suggested model RW with its clear goal and steps.

6. Questions of the study

The study tried to answer the following questions:

What are the elements of the suggested model that is supposed to help to develop writing skills for the twelfth graders?

Are there any statistically significant differences at ($a \le 0.05$) between the mean score of the experimental group and the control group on the post administration of the writing test?

7. Hypothesis

Based on the questions of the study, one hypothesis was formulated:

There is no statistically significant difference at (a \leq 0.05) between the mean score of the experimental group and the control group on the post administration of the writing test favoring the experimental one.

8. Methodology

8.1. Research design

Adopting the experimental approach, the experimental and control group were pre-tested on the writing skills. The experimental group was taught through the suggested writing model, while the control group received the regular teaching. Both the experimental and control groups were post-tested in writing skills to conclude any probable enhancement.

8.2. Research Variables

- A) Independent variable: Model Based on Constructivism.
- B) Dependent variable: Writing Skills (mechanics and grammar)

Mechanics refers to the rules of the written language, e.g., capitalization, punctuation and spelling. While grammar is the structure of written language. It refers to the parts of speech and how they combine together to form sentences.

8.3. The Population and Sample of the Study

The population of the study consisted of The Twelfth Graders in Gaza 87 students enrolled in the first semester of the academic year (2019/2020).

The researchers carried out this study at "Hayel Abdul Hameed" Secondary School. The school was chosen purposefully but the sample of the study was selected randomly out of two classes. The study sample of 87 female students at the twelfth grade has been selected. The students were assigned purposefully but selected randomly to an experimental group 44, and a control one 43. Students' age-range from sixteen to seventeen years.

8.4. Limitations of the study

Sample bias: the twelfth graders have been already assigned at classes when the researcher carried out this study. The issue here was to randomly choose the control and experimental groups.

Time constrains: the twelfth-grade students have very limited periods across the scholastic year which usually starts in September and ends in April with 4 English periods a week. It was really a kind of struggle to get the permission from the Palestinian ministry of education to carry out this study on twelfth grade students. However, the researchers managed to get it in time to start. It took 10 weeks to teach the experimental group students using the suggested model RW with an average of 2 periods a week: one period for reading while the other for writing.

8.5. Procedures of the study

In order to achieve the goal of the current study the researchers followed various procedures. These include holding a workshop with some English teachers of the twelfth grade to discuss the major weakness areas in writing skill. In addition to surveying the related literature and previous studies that dealt with constructivist models in teaching English skills. Accordingly, the researchers built up the model that is based on constructivism Read to Write (RW). Then they consulted some university and schoolteachers to modify the model according to their notes. Here the time had come to build an appropriate writing test considering mechanics of writing and grammar. Since one of the researchers works at a secondary school, she randomly chose two twelfth grade classes at Hayel Abdul Hameed Secondary School. They were separated into control and experimental groups.

To check the validity and reliability of the test, it was implemented on a pilot sample of 30 students who have the same characteristics as the sample of the study then to the two groups at the same time as pretest.

The researcher taught the experimental group according to the model RW, while the control group was taught by the traditional way. After 10 weeks, she implemented the post test on both groups. Finally, the data had been collected and analyzed using SPSS to show the results.

8.6. Instruments

For accomplishing the target of the current study, the researchers have built writing skills test. The test consisted of a text and 14 MCQ questions and then to write a paragraph as a reflection to the text mentioned above. It tended to measure to what extent these students writing skill has been enhanced as a result of implementing the suggested model RW.

8.6.1. Validity and Reliability of the Instrument

A valid test measures what it is designed to measure. To ensure that, the researcher used construct and referee validity.

- A number of TEFL and linguistics specialists in Gazan universities helped assessing the test. To check the reliability of the test, the researcher conducted a pilot study and modified the writing test accordingly.
- The writing test was applied to a random sample of (30) students from "Hayel Abdul Hameed" Secondary School in Gaza City, who had the same characteristics of the sample of the study. The results were recorded and statistically analyzed to assess the validity and reliability of the test.

8.6.1.1. Internal Consistency Validity

The internal consistency indicates the correlation of the degree of each item with the total degree of the test. The following Table 1 shows the correlation coefficient of each item with the whole degree of the test.

8.6.1.2. Writing test construct validity

As shown in the Table 1 and Table 2, there is a correlation between the domains and the total score of the test at sig. level ($\alpha \le 0.05$), which shows a high internal consistency of the Writing test. This reinforces the validity of the test.

8.6.2. Reliability of the test

The test is regarded reliable when it gives the same results in case of applying it again for the same aim in the same conditions. The reliability of the test was measured by the spilt-half technique.

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No.	Correlation Coefficient	Sig. level	No.	Correlation Coefficient	Sig. level
1	0.413*	0.05	8	0.543**	0.01
2	0.711**	0.01	9	0.461**	0.01
3	0.370*	0.05	10	0.591**	0.01
4	0.270	No	11	0.550**	0.01
5	0.594**	0.01	12	0.627**	0.01
6	0.615**	0.01	13	0.488**	0.01
7	0.645**	0.01	14	0.364*	0.05

Table 1. Correlation Coefficient of the Items with the total degree of the test.

Table 2. The Correlation Coefficient of each domain with the whole test.

No.	Correlation Coefficient	Sig. level
1	0.929**	0.01
2	0.873**	0.01

Table 3. KR20 and Split half coefficients of the Writing test.

Domains	No. of Items	KR20	Split half coefficients of the test domains
Writing test	7	0.72	0.80

Table 4. Difficulty coefficient for each item of the Writing test.

No.	Difficulty coefficient	No.	Difficulty coefficient
1	0.58	8	0.55
2	0.53	9	0.58
3	0.50	10	0.45
4	0.58	11	0.33
5	0.50	12	0.60
6	0.50	13	0.45
7	0.53	14	0.45

The reliability of the test was measured by the (KR20) and Spilt-half techniques. Table 3 shows KR20 and Split half coefficients of the Writing test.

The results showed that the Spilt-half coefficient was (0.80) and KR20 was (0.72), which indicates that the reliability of the test was high and strong.

8.6.3 Difficulty coefficient of the test

The difficulty coefficient was measured on the pilot study by finding out the percentage of the wrong answers of each item made by the students. The coefficient of difficulty of each item was calculated according to the following formula for the pilot study which was (30) students. The findings are shown in Table 4, below.

Table 4 shows the difficulty coefficient wobbled is between (0.33 - 0.60) with a total mean score of (0.49), which means that each item was acceptable or in the normal limit of difficulty according to the viewpoint of assessment and evaluation specialists.

8.7. Discrimination coefficient

Discrimination coefficient means the test is able to differentiate between the high achievers and the low achievers.

Table 5 shows that the discrimination coefficient wobbled between (0.30 - 0.80) with a total average of (0.52), which means that each item was acceptable or in the normal limit of discrimination according to the viewpoint of assessment and evaluation specialists.

8.8. Controlling the writing variable

To make sure that the sample subjects were equivalent in their prior writing, the researcher applied the writing pretest. Findings of the subjects were recorded and statistically analyzed using t-test.

From Table 6, it can be seen that the analysis of the findings indicates that there were no statistically significant differences between the experimental and the control groups at the significance level ($\alpha \le 0.05$).

9. Results

This study aimed at investigating The Effect of a Suggested Model Based on Constructivism to Enhance Writing Skills and Reflective Thinking of The Twelfth Graders in Gaza. This section tackles the statistical analysis of the study findings as well as its statistical significance. The researcher used different statistical tests included in the Statistical Package for the Social Sciences (SPSS) to analyze the data collected while answering the study questions and testing the hypotheses.

9.1. Answers to Research Questions

Following are the analyses of the research findings in connection with the study questions and hypothesis.

No.	Discrimination coefficient	No.	Discrimination coefficient
1	0.30	8	0.60
2	0.70	9	0.50
3	0.40	10	0.60
4	0.30	11	0.80
5	0.60	12	0.50
6	0.70	13	0.50
7	0.50	14	0.50

Table 5. Discrimination coefficient for each item of the Writing test.

Table 6. T-test independent samples findings of differences between the experimental and the control group in writing skills in the pretest.

Domain	Group	N	Mean	Std. Deviation	Т	Sig. value
Mechanics	Experimental	44	1.86	0.98	0.537	0.593
	Control	43	1.98	0.99		
Grammar	experimental	44	1.00	0.75	0.546	0.586
	Control	43	1.09	0.84		
total	experimental	44	2.86	1.27	0.760	0.449
	Control	43	3.07	1.26		

* t- table value at (85) df. at (0.05) sig. level equal 1.998

** t- table value at (85) df. at (0.01) sig. level equal 2.639

9.2. Answer to the first question

The first research question was formulated as follows:

9.2.1. What are the elements of the suggested model that is supposed to help to develop writing skills for the twelfth graders?

In order to instruct learners effectively by using constructivism, George W. Gagnon, Jr. and Michelle Collay (2006) stated that "Constructive Learning Design emphasizes six important elements. These elements are Situation, Groupings, Bridge, Questions, Exhibit, and Reflections".

- Situation: develop goals, tasks, and curriculum standards. The work of Duckworth (1972) describes situations to engage students in having their own wonderful ideas about science, Steffe and D'Ambrosio (1995) use situations for students to explain in math, and Fosnot (1996) provides similar examples from writing and art.
- Grouping: group students and materials, and cooperative learning and heterogeneous groupings are common to the cooperative learning work of Johnson and Johnson (1975) or Slavin (1980). The materials category is often included in lesson plans.
- Bridge: recall prior knowledge using students' cognitive maps, skills, values, motivation, and expectations.
- Questions: There is precedence in Bloom's taxonomy of educational objectives in the cognitive domain which led to higher level thinking questions (IACBE, 2001).
- Task: use higher level thinking skills and problem-based learning.
- Exhibit: arrange student portfolios and work samples.
- Reflection: synthesize critical thinking and knowledge" Therefore, engaging students in tasks, help them think for themselves, and support them in making meaning of their learning! We see earlier work of Schön (1991) about reflective practice of teachers, which also applies to student learning, reflection about learning through journaling as described by Cooper (1991), and Brookfield's (1986) work on critical reflection. These precedents provide a theoretical framework for a constructivist learning design (Gagnon & Collay, 2006).

This model has been adopted from a model in Villanova University. The researcher adapted it to the course she teaches. Also, she added some points to enhance reflective thinking during implementing it. The following points were considered during all the sessions.

- Provide enough wait-time for students to reflect when responding to questions.
- Provide emotionally supportive environments in the classroom encouraging conclusions and reducing anxiety.
- Prompt reviews of the learning situation, what is known, what is not yet known, and what has been learned. This is adopted from KWL model.
- Provide authentic tasks involving ill-structured data to encourage reflective thinking during learning activities.
- Prompt students' reflection by asking questions that seek reasons and evidence.
- Provide collaborative environment such as employing peer-group works and small group activities to allow students to see other points of view.

The suggested model: Read to Write

This model suggests reading, note-taking, and writing strategies for when you need to use reading texts as the springboard for writing a paper. For the twelfth graders, the syllabus contains 10 units, 5 for each semester. Each unit starts with reading lessons followed with grammar and vocabulary. Then come the writing tasks that are supposed to be derived from the reading title and content. The researcher has another opinion in organizing the units. She thinks that it would be evidently better to follow reading texts with writing tasks because there is a relation.

The following are instructions for the eleventh graders to accomplish the writing task.

Reading strategies

- The teacher organizes the students in groups giving them the following instructions:
 - Read (or at least skim) all parts of the reading: the title, introduction, illustrations, source and any-thing can provide you with valuable information.
 - Identify the genre of the reading. Why was it written?
 - Consider the author. What do you know or what can you learn about this person? Why did he or she write the article?
 - Guess why your instructor assigned the reading. How does it fit in with other readings, class discussions, major course themes, or the purpose of the class?
 - Get out a note and plan your reading.
 - As you read, record your reactions and questions. Any reaction or question is valid, from the specific ("What's that word mean?") to the general ("What's her point?"). Write them down now so that you'll remember them later. These reactions and questions can serve as material for a group and class discussion, or they can be the jumping off point for brainstorming.
 - Read with a group or a partner. Discuss the reading and the notes. Ask questions, share your reactions
 - Think about what is missing in the reading. Issues, events, or ideas that are missing, left out, avoided, or not discussed/addressed in the article might be important. Thinking about these omissions can give you a critical perspective on the reading by showing you what the author (consciously or unconsciously) doesn't want to deal with.

Writing strategies:

1. While reading

- Write as you read. Record your reactions informally and briefly after you've read for a while. When you're done reading a paragraph, write for five minutes to capture your personal thoughts, reactions, and questions as you go along.
- Share your informal writing with your group or partner.
- Draw while you read. Drawing pictures, maps or diagrams of relationships or important issues that you see emerging from the reading can help you understand them. Be willing to revise or redraw the map as you read.

2. After you read

- React to the whole reading. Take twenty minutes to record your reactions to the reading as a whole. (Return to the reading strategies list to get you started if you need to.) Don't be afraid to guess, hypothesize, or follow a tangent.
- Reread the writing assignment.
- Plan your essay and think about citation. Be sure to cite any quoted information or information that was not generated by your own analysis. Your teacher can answer all of your questions about this important step.
- Write a draft.
- Get feedback from your partner or one of your group.
- Proofread your paper to catch errors before handing it in.

3. When you get your paper back

Read all of your teachers' comments. Assess your strengths and weaknesses in completing this reading/writing assignment. Plan what adjustments you'll make in the process for the next reading/writing assignment you will undertake. It may help to save all of your old papers so that you can refer back to them and look for patterns in your teachers' comments. You may also want to keep a small notebook for your own assessment writing down

that you did not leave ample time for revision on one paper, for example, may help you remember to schedule your time more effectively for the next paper.

9.3. The answer to the second research question

The second research question was formulated as follows:

Is there any statistically significant difference at ($a \le 0.05$) between the mean score of the experimental group and the control group on the post administration of the writing test?

To answer this question, the researchers tested the following null hypothesis:

There is no statistically significant difference at ($a \le 0.05$) between the mean score of the experimental group and the control group on the post administration of the writing test favoring the experimental one.

To answer the question and examine the hypothesis, the writing skills, means and standard deviations of both groups findings in the posttest were computed. Independent Samples T-test was used to measure the significance of the differences. Table 7 describes those results.

Table 7 and Figure 1 show that the significant value is less than (0.01), and (t) calculated is more than (t) tabulated.

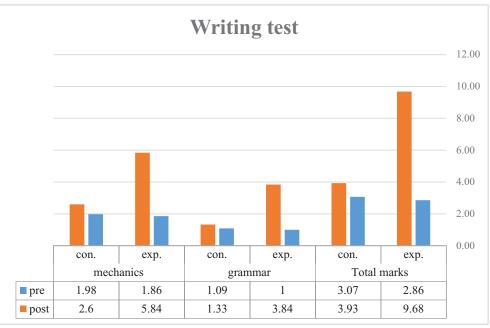
Domain	Group	Ν	Mean	Std. Deviation	Т	Sig. value
Mechanics	Experimental	44	5.84	1.06	13.766	0.001
	Control	43	2.60	1.14		
Grammar	experimental	44	3.84	1.24	10.343	0.001
	control	43	1.33	1.02		
Total	experimental	44	9.68	1.39	17.471	0.001
	control	43	3.93	1.67	-	

Table 7. T-test independent samples findings of differences between the experimental and the control group in writing skills in the posttest.

* t- table value at (85) df. at (0.05) sig. level equal 1.998

** t- table value at (85) df. at (0.01) sig. level equal 2.639

Figure 1. Writing test results



Domain	t value	η2	Effect size
Mechanics	13.766	0.690	Large
Grammar	10.343	0.557	Large
Total	17.471	0.782	Large

Table 8. The effect Size of the model based on constructivism on the experimental group in writing Skills in the posttest.

The mean of the post-test in the experimental group was (9.68), whereas that of the control group was (3.93). This means that there were clearly differences between the mean scores of the twelfth graders in both groups; control and experimental in the post-test in favor of the experimental group. This result indicates that teaching the twelfth-grade students using the suggested model has enhanced the performance of their writing skill.

To find out the effect size of the implementing the suggested model based on constructivism RW, the researcher applied the " $^{2}\eta$ " and -d2 formulae.

Table 8 shows that the effect size of using suggested model based on constructivism RW is significantly large on students' writing skills. This large effect may show the role of administration the model based on constructivism RW to enhance students' writing skills.

10. Discussion

Much research ensures that teaching by applying the notions of constructivism in teaching strategies is an effective way to teach. Constructivism calls for active and meaningful and that each learner is responsible for his own learning process. For this reason, teachers must be trained well in order to grow professionally towards a constructivist practice. This is very clear through the results of this study. This result matches well with many other research results. Take (MS & Rachmadtullah, 2018), for instance, who found that that narrative writing learning which is provided with a constructivist practices improves students' ability to write in elementary schools because the constructivism approach to learning is a teaching and learning process in which students themselves are mentally active, build their knowledge, based on their cognitive structure. In addition, AL-Ghazo and Al-Zoubi (2018) carried out a study which revealed that EFL students' writing skills and abilities could be improved by employing constructivist learning design. Teaching under this design showed that there will be progress in their essay writing in terms of the organization of content, mechanics of writing, and language that emerged from their creative thinking abilities.

Having benefited from the teachers' guidance and the model steps, the students who had been taught by following the suggested model based on constructivism, worked on various writing tasks, as well as gradually receiving their peer corrective feedback.

The researcher observations through the application of this model and the test results indicate that students face difficulties in expressing their ideas in writing and that it is really challenging for them to transmit their ideas into written forms. Many students speak and tell what they think about in a verbal way well, but when some asks them to write it down; to write it, they find it difficult. There are many factors for this, but one factor is that they lack the necessary knowledge about good sentence structure. Also, they need more vocabulary than they already have had. To overcome this, the researcher guided students by giving stimulus questions, showing situations, exposing them to contract ideas so that it can guide students to actualize ideas and put them in correct sentences and sense. This guidance was according to the characteristics of students. It differs from one to one. Of course, minds are varied and so we treat each differently.

No doubt, students have a previously set idea that writing is a difficult task that cannot be ever completed perfectly. The idea here is not about producing perfect writing pieces, rather, it is all about generating new ideas and interpret them in correct sentences. Also, to infer, argue, and make deductions. It is always important to tell the students that writing is an organized task that requires high quality skills in organizing and creativity. It is a written product of a mental process. This skill certainly requires many other skills to be mastered. Teachers must make the writing objectives and rules very clear. They also need to encourage composing many drafts while working in groups, pairs. Most importantly, teachers may have to foster the students' positive attitude toward writing skill at all. In fact, positive attitude toward writing motivates learners to invest more in it, whereas negative attitude inhibits effective writing t. On the other hand, exposing the students to different stages associated with writing process, may lead to o break down the daunting skill of writing into its component parts. This

might create states of frustration and complexity of writing in English language to some extent. For this reason, the researcher has decided that the writing task should immediately follow the reading text. Another potential reason for the efficacy of suggested model based on constructivism in improving writing performance is that receiving clear practical instruction based on constructivism the fact that receiving clear instructions based on such an approach can reduce the psychological barriers of writing in English language. These psychological barriers including anxiety, which is as ascertained by Thompson and Zeuli (1999) that states "it is regarded as the most notable example". The main reason for writing anxiety is that the teachers care about confronting the errors.

Benefiting from this model, learners' anxiety is reduced to a great extent, in as much as errors are supposed to be minimized during the process of text production. Accordingly, learners can cultivate a positive attitude toward writing and, as a result, achieve success in conveying their thoughts on a given topic with consummate ease.

Learning to write with a constructivism-based model RW was one of the appropriate models to improve the ability to write essays in high school students. With this model, students were faced with challenging issues that were related to everyday life in real terms. Students were given the opportunity to construct knowledge that already existed.

11. Conclusions

The goal of the current study was to figure out the effect of a model based on constructivism RW on developing students "writing skill at Hayel Abdul Hameed Secondary School. It was obvious that student's writing performance by the help of the suggested model, which was based on constructivism, was better than the traditional teaching to control group who did not receive the same instructions. The results showed that administration the constructivist model had a positive effect on the twelfth graders writing skill. This meant that the mean scores of student's writing performance revealed significant difference between control and experimental groups favoring the experimental group. In other words, the constructivist model could influence the twelfth graders writing skill performance. This supports previous research claiming students to improve their writing abilities when they use constructivist learning. In general, the results of this study indicated that EFL students" writing skills and abilities could be improved by employing constructivist learning design. Teaching under this model showed that there will be progress in their essay writing in terms of the mechanics of writing, and grammar. This study recommended strongly applying the RW model that is based on constructivism in teaching writing for the twelfth graders. In addition, there must be a change in the organization of the periods in the book. Writing tasks should follow reading texts in order to get the ultimate benefit while the administration of this model.

References

- Akkaya, N., & Kirmiz, F. S. (2010). Relationship between attitudes to reading and time allotted to writing in primary education, *Procedia Social and Behavioral Sciences*, *2*(2), 4742-4746. https://doi.org/10.1016/j. sbspro.2010.03.761
- AL-Ghazo, A., & Al-Zoubi, S. M. (2018). How to Develop Writing Skill through Constructivist Design Model. International Journal of Business and Social Science, 9(5), 91-98. https://doi.org/10.30845/ijbss.v9n5p11
- Al-Haq, F. A. & Al-Sobh, M. A. (2012). Online linguistic messages of the Jordanian secondary students and their opinions toward a web-based writing instructional EFL program. *International Journal of Humanities and Social Science.* 2(6), 288-299. https://doi.org/10.29140/jaltcall.v6n3.101

Brookfield, S. (1986). Understanding and facilitating adult learning (2nd ed.). Jossey-Bass.

- Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). San Francisco State University.
- Cooper, J. (1991). Telling our own stories: The reading and writing of journals or diaries. In C. Witherell & N. Noddings (Eds.), *Stories Lives Tell*. Teachers College Press.
- Duckworth, E. (1972). The having of wonderful ideas. Harvard Educational Review, 42(2), 217–231. https://doi. org/10.17763/haer.42.2.g71724846u525up3

Fosnot, C. (1996). Constructivism: Theory, perspectives, and practice. Teachers College Press.

Gagnon, G., & Collay, M. (2006). Constructivist Learning Design: Key Questions for Teaching to Standards. Corwin.

- Graham, S., & Hebert, M. (2010). Writing to read: evidence for how writing can improve reading. A report from *Carnegie Corporation of New York*. Alliance for Excellent Education.
- IACBE. (2001). *Bloom's Taxonomy of educational objectives and writing intended learning outcomes statements*. International Assembly for Collegiate Business Education. https://bit.ly/3gTObus.
- Johnson, D., & Johnson, R. (1975). Learning together and alone. Prentice Hall.
- Liaghat. F. (2018). A Comparative Study on Mentor Text Modelling and Common Approaches to Teaching Writing in Iranian EFL Context. *International Journal of Instruction*, 11(3), 701-720. https://doi.org/10.12973/ iji.2018.11347a
- Luchini, P. L. (2010). Evaluating the effectiveness of a complimentary approach to teaching writing skills. *International Journal of Language Studies*, (3-4), 73-92.
- Moallem, M. (2001). Applying Constructivist and Objectivist Learning Theories in the Design of a Web-Based Course: Implications for Practice. *Educational Technology & Society*, *4*(3).
- MS, Z., & Rachmadtullah, R. (2018). Constructivism approach in learning to write narrative at elementary school. *1st International Conference on Innovation in Education (ICoIE 2018)* (pp. 287–290). Atlantis Press. https:// doi.org/10.2991/icoie-18.2019.64
- Schön, D. A. (1991). *The reflective turn: Case Studies in and on educational practice*. Teachers Press, Columbia University.
- Slavin, R. E. (1980). Cooperative Learning. *Review of educational research*, *50*(2), 317-343. https://doi. org/10.3102/00346543050002315
- Steffe, L. P. & D'Ambrosio, B. S. (1995). Toward a working model of constructivist teaching: A reaction to Simon. *Journal for Research in Mathematics Education*, *26*(2), 146-159. https://doi.org/10.2307/749206
- Supriyadi (2013). Developing Teaching Material of Writing Scientific Paper using Constructivism Approach. *Journal of Education and Practice*, 4(24), 34-41.
- Thompson, C. L., & Zeuli, J. S. (1999). The frame and the tapestry: Standards-based reform and professional development. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 341–375). Jossey-Bass.

Torwong, P. (2003). Peer Review Technique: A Proposed Model for Thai EFL Writing. https://bit.ly/3vz4VLI

Toubat, M. (2003). *The Effect of a Discoursal Technique on the Writing Skills of the Jordanian Academic Eleventh Graders*. (Unpublished Ph. Thesis). Amman Arab University, Amman, Jordan.