THE IMPACT OF THE CONSTRUCTIVIST TEACHING MODEL IN ENHANCING READING SKILLS

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Abstract

The aim of the study was to examine the impact of the constructivist teaching Model on the reading skills of third-grade children in the Galileel region. The study use quasi-experimental approach. The study sample consisted of all third-grade students from Hussein Yassin Primary School in the Galilee region, with a total of (39) female and male, who were divided into two groups: the control group (20) students and the experimental group (39) student. The study's findings revealed statistically significant differences in the performance of the study group. As a result of the constructivist learning strategy's effectiveness in improving reading comprehension, the results favored the constructivist learning model (experimental group). The researcher suggests that Arabic language curricula include applied models and lessons based on constructivist theory strategies, particularly constructivist teaching; it also indicates that Arabic language teachers benefit from it in their teaching and that field studies be conducted to reveal

the preferred constructivist learning environments, particularly for students at all academic levels.

Keywords

Constructive Learning, Reading Comprehension, Third Grade, Galilee Region.

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1. Introduction

People in the world today are witnessing tremendous development in various fields of life, which is reflected in the various teaching methods and means offered by the school that help students meet their needs and aspirations, as the demand for teaching methods and strategies that can keep up with current challenges and developments is growing, actively contributing to development in its various forms.

According to Zeitoun (2003), educational research has experienced a fundamental shift in its vision of the teaching and learning process over the last two decades, with the focus shifting from external factors that influence the learner's learning, such as the teacher, the learning environment, the curriculum, and learning outcomes, to internal factors that influence the learner's understanding. The learner, in particular, what is going on in his mind, such as his prior knowledge, mental capacity, information processing method, thinking patterns, learning style, and cognitive style. The transition from "surface learning" to "meaningful learning," or true learning direction, has been made.

Reading is a positive active process that demands the reader to have several levels of comprehension, beginning with visual processing and progressing to various levels of thinking. Depending on the linguistic level of the reader, the printed words can take on new meanings. Reading comprehension is the top cornerstone of reading skills (Taimah, 2000).

Reading, according to Abdul Bari (2010), is primarily a psychological process because it is related to the reader's general ability, his preparations for reading, his motivation for reading material, his purpose for reading a specific material, and his tendency to read in some areas that concern him.

Reading comprehension is considered the most important cornerstone for a student's skills because it is one of the prerequisites on which his learning is based, and it has a significant impact on the student's academic life, particularly in the early academic stages, when the student is in the early stages. As well as acquiring knowledge and skills (Al-Jaafrah, 2011).

The teaching process becomes more effective when teachers are acutely aware of the strategies that will improve student learning. These strategies should allow students to explain or clarify their thoughts. As the emphasis is on knowledge development, education development necessitates teaching practices that encourage student participation in their learning (Kaur, 2016).

In comparison to other educational theories, constructivism established a knowledge shift in the humanities, how to deal with knowledge and organize its delivery methods, to set essential rules for both the teacher and the learner, the content and the educational environment, and to result in models based on the structural foundation of knowledge. To become a means of gaining access to knowledge used by those working in the educational field (Al-Nasrallah, 2016). Constructivism is a broad term that is used from various perspectives. The educational concept of constructivism is that learners form their knowledge of the topics they are studying in light of their prior experiences rather than having them prepared for them by the teacher (Kauchak & Eggen, 2004).

The constructivist approach to teaching is the most recent approach to teaching, and it focuses on what happens inside the minds of learners when they are exposed to educational situations, such as their prior knowledge and superficial understanding of concepts, their ability to remember, their ability to process information, their motivation to learn, and learning pattern. Constructivism is based on the concept that everything students develop becomes meaningful, allowing them to build their learning perspective through systems and individual experiences. Constructivism focuses on teaching students how to solve problems in ambiguous situations (Mohammed, 2004).

According to Bybee (2000), constructivism is based on several assumptions, including that learning is an active, continuous, and purpose-oriented constructivism process that provides the learner with the best learning conditions when confronted with a real problem or task, that the learning process includes reconstructing learners' knowledge through a process of social negotiation with Others, and that the learner's prior knowledge is a prerequisite for building meaningful.

According to Ryan (2011), constructivist teaching practices emphasize the need for the teacher to accept the learner as an individual, researcher, and explorer, to support and motivate

his investigative skills, to provide authentic, realistic experiences that challenge his previous perceptions, to provide learning activities that enhance the integration of his cognitive systems, and to use learners' responses to guide lessons. To provide activities that stimulate learners' mental curiosity, encourage group dialogues and cooperative integration in educational activities, emphasize past experiences in the construction of new knowledge, pay attention to performance and understanding in the assessment process, and diversify their methods based on real-world learning contexts.

2. Problem of the Study

Reading is one of the most important ways of gaining knowledge because it allows a person to have direct contact with human knowledge in the present and past, as well as a means of human contact with other people's minds and ideas, in addition to having a significant impact on the formation of the human personality in various dimensions (Kamps et al., 2008). Because reading comprehension is a significant talent, instead it is the essential skill that reading education aims to improve because reading and comprehension is the prime purpose of reading that the instructor strives for and that the educational process strives for. Read without comprehension; it can be argued, also isn't reading in the correct sense. (Jaballah, Makkawi, and Abdelbari, 2011).

Based on previous studies on reading comprehension levels and the researcher's work in the educational field, the researcher noticed that students' reading comprehension skills are weak for a variety of reasons. According to the researcher, one of the most essential and relevant issues in this field is the weaknesses in the methods used to teach reading. According to the study, the constructivist learning model was not included in the official curriculum to enhance reading comprehension. As a result, the researcher came up with the idea of conducting this study to see how effective the constructivist learning model improves third-grade students' reading comprehension. This is done by answering the following question:

Are there statistically significant differences at the level of statistical significance (α = 0.05) between the averages of the performance of a sample of third grade students on the reading comprehension skills test due to the variable of the teaching strategy (the conventional method, the constructivist learning model)?

3. Importance of the Study

The significance of the current study is represented by two factors:

3.1. First, Theoretical Importance: It is hoped that this study will contribute to enriching knowledge by providing an appropriate theoretical framework and that it will contribute to improving and developing teaching methods, which will positively reflect on the educational process as a whole, thus constituting a scientific addition. New educational material on the topic of study and reflections on the subject are being added to the Arab library.

3.2. Second, Practical Significance: It is hoped that the findings of this study will help curricula and educational materials developers in developing reading instruction, particularly aspects related to reading comprehension, using the constructivist learning model, as well as assisting Arabic language teachers in improving their teaching performance in teaching reading, particularly those related to reading comprehension using the constructivist learning model.

4. Purpose of the Study

The purposes of this study are as follows:

To determine the efficacy of using the constructivist learning model in improving the reading comprehension of third-grade students at Hussein Yassin Primary School in the Galilee region, to improve the effectiveness of teaching methods and strategies.

Identifying and resolving the differences between the conventional method and the constructivist learning model on the reading comprehension skills test.

5. Limitations of the study

The study was restricted to the following limitations:

- **Objective limits**: The effectiveness of the constructivist learning model in improving reading comprehension
- **Human limits:** third-grade students.
- **Spatial boundaries**: Hussein Yassin Primary School in the Galilee region.
- **Time limits**: the first semester of the 2020-2021 academic year

6. Operational Definition

The constructivist learning model: the researcher defines it procedurally as a constructivist model used to improve reading comprehension and motivation towards reading among third-grade students at Hussein Yassin Primary School in the Galilee region, and it emphasizes the interaction between students and the teacher; where students use their information and knowledge to build new knowledge; and it is applied according to four stages: the stage of advocacy; the stage of exploration; the stage of proposing solutions and explanations; and the stage of taking action.

Reading comprehension: is defined procedurally by the researcher as a set of skills addressed in Arabic language lessons at Hussein Yassin Primary School in the Galilee region. It is represented by identifying vocabulary, extracting ideas, and appreciating values, and it is graded the stages of understanding the text, deduction comprehension, and analytical comprehension; also, it is measured by the degree achieved by the study sample in the reading comprehension test that was designed for this purpose.

7. Literature Review

Al-(2014) Zoubi's study aimed to examine the impact of a constructivist learning program on enhancing reading comprehension to read among fifth graders with learning disabilities. The study sample consisted of 30 students who were intentionally chosen from students in Kuwaiti schools who struggled to learn to read, and they were divided into two equal groups: one was an experimental group that studied reading topics using constructivist learning, and the other was a control group that studied using the conventional method. The researchers used the quasi-experimental approach and the pre and post-tests to measure attitudes towards reading as tools for the study. The results showed that there was a statistically significant difference in the results of the post-test reading comprehension in favor of the experimental group.

Bani Issa (2016) conducted a study to investigate the efficiency of two constructivist-based teaching strategies in increasing students' motivation to learn science. The study sample consisted of (212) male and female eighth-grade students from schools in the United Arab Emirates, who were divided into three groups: the first experimental group, in which the

educational material was taught using the Bybee (5E's) model, and it included (71) female and male; the second group, in which the educational material was taught using the John Zahorek model, and it had (70) female and male; while third group (the control group), which consisted of 71 male and female students, was taught using the conventional way.The scale of motivation for learning science was used as a tool in the study. The results showed that there were statistically significant differences in the average responses of the study sample members on the total scale due to the effect of the teaching model in favor of the two experimental groups when compared to the control group and in favor of the group that studied with the Bybe model when compared to the group that studied with the John Zahorek model and the group that studied in a conventional way.

Cahyarini and Yahmin (2016) conducted a study to see how using the constructivist learning model affected students' critical thinking skills in chemistry. The study used a quasi-experimental approach, with a sample of 64 high school students from Malang, Indonesia, chosen randomly and divided into two equal groups: experimental and control. As a study tool, the achievement exam was used. According to the findings of this study, the students who learnt using the constructivist model had higher levels of critical thinking skills than those who learned the conventional way,

El-Adawy, Samman, and Shehata (2017) conducted a study to enhance reading comprehension levels and skills in secondary school students using the reciprocal teaching strategy. In the study, the experimental method was used, and the study sample was limited to a group of first-year secondary students in Cairo Governorate who were chosen on purpose. To achieve the study objective, a list of appropriate reading comprehension levels for first-year secondary school students was developed, as well as a reading comprehension test for first-year secondary school students and a program based on the reciprocal teaching strategy to develop secondary school students' comprehension levels. The study's findings showed that there were statistically significant differences between the experimental and control groups' average scores in the measurement of reading comprehension skill achievement in favor of the experimental group, as well as the effectiveness of the reciprocal teaching strategy-based program in developing secondary school students' levels and reading comprehension skills.

Toomey's study (Tohamey, 2020) aimed to identify the effect of implementing a proposed program based on constructivist theory on students' text analysis and creative writing

skills, as well as their motivation toward them. The study applied a one-group design (pre and post design), and the study sample included (90) male and female English language students from Minya University in Egypt who participated in the constructivist activities program. A test of text analysis skills, a test of creative writing skills, a scale Progressive assessment of student performance in creative writing, and a measure of motivation were also included in the study tools. The results revealed statistically significant differences in favor of the post-testing, indicating the program's success in increasing text analysis and creative writing skills, as well as motivation for them.

(Hamedi, Lotfi, and Sarkeshikian, 2020) aimed to see how using predictive evidence and conceptual maps affected the reading comprehension of English language learners. The study used a quasi-experimental approach, with the study sample consisting of (90) seventh-grade students in Iran who are learning English as a foreign language; they were chosen based on the results of a preparatory test, and they were divided into two equal groups: control and experimental. The results showed that there were statistically significant differences between the two groups' averages in the experimental class.

8. What Distinguishes this Study Besides the Previous Studies?

By reviewing the previous studies, the research found that she dealt with the constructivist model using a variety of approaches, including quasi-experimental, experimental, and descriptive, as well as its impact on a variety of teaching fields, including scientific and literary ones. While it differs from it in that it combines the constructivist learning model and reading comprehension in one study, it is also the only one that is applied in the Galilee region, according to the researcher's knowledge. The current study benefitted from previous and other studies in terms of developing and implementing study techniques, as well as developing a theoretical framework and analyzing the findings.

9. Methodology and Procedures

9.1. Methodology of the study

To achieve the study's objectives, the study conducted a quasi-experimental method.

9.2. Population of the study

The study population included all of the Galilee region's third-grade students, a total of (1300) male and female students.

9.3. Sample of the study

The study's sample included all third-grade students at Hussein Yassin Primary School in the Galilee region, a total of 39 male and female students who were chosen at random because it is the school where the researcher works, and the kids were divided into 2 groups (control group = 20) and (experimental group = 19).

9.4. Instrument of the study

The study instrument was a multiple-choice objective test that assessed the study sample members' reading comprehension skills for three lessons outside of the third-grade curriculum: the wise philosopher, an interview with an Arab scientist, the fox, and the partridge.

9.6. Validity of the Study

The instrument for the reading comprehension test related to the three lessons was applied to an exploratory sample of (50) participants at other schools to verify its validity, and it was re-applying a month following the first application. The Pearson correlation coefficient was calculated between the degree of the question and the total of the sub-test (R1), and the corrected correlation coefficient was calculated between the degree of the items and the total of the sub-test (R2) as shown in Table (1)

Table 1: *(Pearson's Correlation Coefficients between the Question's Degree and the Total of the Sub-Test (R1), and the Corrected Correlation Coefficient between the Item's Degree and the Total of the Sub-Test (R2) for the Reading Comprehension Test)*

The lesson	No.	R1	R2	The lesson	No	R1	R2
The wise philosopher	1	0.74^{**}	0.54	The fox, and the partridge	23	0.59^{**}	0.43
	2	0.65^{**}	0.49		24	0.65^{**}	0.54
	3	0.77^{**}	0.63		25	0.58^{**}	0.49
	4	0.53^{**}	0.55		26	0.53^{**}	0.41
	5	0.62^{**}	0.46		27	0.56^{**}	0.45
	6	0.57^{**}	0.60		28	0.51^{**}	0.40
	7	0.66^{**}	0.50		29	0.72^{**}	0.61
	8	0.58^{**}	0.53		30	0.59^{**}	0.47
	9	0.65^{**}	0.57		31	0.73^{**}	0.61
	10	0.58^{**}	0.62		32	0.58^{**}	0.48

	11	0.53^{**}	0.45		33	0.65^{**}	0.58
An interview with an Arab scientist	12	0.56^{**}	0.51				
	13	0.50^{**}	0.54				
	14	0.72^{**}	0.56				
	15	0.59^{**}	0.45				
	16	0.72^{**}	0.51				
	17	0.56^{**}	0.43				
	18	0.44^{**}	0.36				
	19	0.40^{**}	0.37				
	20	0.72^{**}	0.53				
	21	0.65^{**}	0.51				
	22	0.78^{**}	0.62				

Source: (Authors Own Work)

Table 1 shows that the Pearson correlation coefficients (R1) between the question score and the total score for the sub-test ranged from (0.53) to (0.77) for the wise Philosopher's lesson questions, from (0.40) to (0.78) for the interview questions with an Arab scientist, and from (0.51) to (0.73) for the fox and partridge lesson questions, all of which are statistically significant (P.01) and higher than the cut-off mark (0.35) referred to (Bryman & Cramer, 1997). This shows the reading comprehension test's construct validity (Brown, 1983). For the wise philosopher lesson questions, the corrected correlation coefficients between the paragraph degree and the total for the sub-test (R2) ranged between (0.45) and (0.63), between (0.37) and (0.62) for the interview questions with an Arab scientist, and between (0.40) and (0.61) for the fox and partridge lesson questions, all of which are statistically significant (P.01), and higher than the minimum (0.30) referred to in (Leech, et al (Brown , 1983; Leech et al., 2011).

9.6. Reliability of the Study

Cronbach's equation was used for the test questions and the test as a whole to calculate the reliability of internal consistency to measure reading comprehension skill, as shown in Table (2).

Table 2: *(Results of Cronbach's Alpha Reliability Coefficients for Reading Comprehension Test)*

The lesson	Number of questions	Cronbach's Alpha
The wise philosopher	11	0.77
An interview with an Arab	11	0.78

scientist		
The fox, and the partridge	11	0.82
Total	33	0.83

Source: (Authors Own Work)

Cronbach's alpha coefficients for the three sub-tests ranged from (0.77) to (0.82), and for the test as a whole, from (0.83), all of which are higher than the minimum (0.70) referred to in (Cronbach, 1951), indicating that the test has a high degree of

9.7. Variables of the study

The study included the following variables:

9.7.1. Independent variable

The teaching strategy has two levels: (the constructivist learning model, and the conventional method).

9.7.2. Dependent variable

Improving the reading comprehension of third grade students

9.7.3. Limitations of the study

Spatial limitations: *Galileel School*

Time limitations: first semester of the academic years (2021/2022)

9.7.4. Statistical Analysis

Pearson's correlation coefficient, Cronbach's alpha internal consistency coefficient, and the difficulty and discrimination coefficient were all used by the researcher. The averages, standard deviations, and adjusted averages for the control and experimental study groups' reading comprehension skills were calculated to answer the study question. The accompanying one-way analysis of variance (ANCOVA) was designed to examine the significance of the differences between the post averages according to the teaching method variable. Average, standard deviations, and adjusted averages were calculated for the two study groups' reading comprehension performance and an accompanying one-way multiple analysis of variance (MANCOVA) was used to examine the significance of the differences between the average according to the variable of the teaching strategy. Finally, the Eta Square indicator was used to find out the effect size of the teaching strategy.

10. Results of the Study

Results related to the answer to the study question: "Are there statistically significant differences at the level of statistical significance (= 0.05) between the averages of the performance of a sample of third-grade students on the reading comprehension skills test due to the variable of teaching strategy (conventional method, constructivist learning model)?"

To answer this question; the averages and standard deviations of the pre/post-tests in reading skills were calculated for the two study groups (experimental and control) according to the variable of teaching strategy (constructive learning and conventional method), as shown in Table (3).

Table 3: (*The Averages and Standard Deviations of the Pre and Post Tests for the Two Study Groups (Experimental and Control) in Reading Comprehension)*

Total	Pretest		Post-test	
	Average	standard deviation	Average	standard deviation
Control group	18.00	2.79	27.15	2.37
Experimental group	17.00	2.67	31.05	1.51
Total	17.51	2.74	29.05	2.79

**Maximum mark = 33, Minimum mark = 0

Source: (Authors Own Work)

Table (3) shows that there are differences between the averages in the post-test of the two study groups' in reading comprehension, in the experimental group. According to the variable of the teaching strategy (constructive learning, conventional method), where the average performance of the experimental group was greater than the average performance of the control group in reading comprehension

To control the effect of differences in the pre-test for the both groups, and the statistical significance test for differences in the post-test for the two study groups on reading comprehension, ANCOVA was used in one way, as shown in Table (4).

Table 4 :(*ANCOVA) Results to Test the Statistical Significance of the Differences in the Post-Test of the Two Groups in Reading Comprehension, According to the Variable of Teaching Strategy after Controlling for the Effect of the Pre-Test)*

Source	Sum of squares	Degrees of freedom	Mean squares	F	Sig	Eta square
Pre-test	4.44	1	4.44	1.12	0.30	0.03

Teaching strategy	134.18	1	134.18	33.77	0.00	0.48
The error	143.06	36	3.97			
Total	33211.00	39				

Source: (Authors Own Work)

Table (4) shows that there is a statistically significant effect of the teaching strategy on reading comprehension, and it explains 48% of the variance in the post-test, in favor of the experimental group.

To compare between the tests averages of the experimental group and the control group after controlling for the effect of the pre-test differences on reading comprehension, the adjusted averages of the two study groups' tests on reading comprehension were calculated. As shown in Table (5)

Table 5: *(The Averages of the Experimental and Control Groups in Reading Comprehension, Before and After Adjusting for Pre-Differences)*

Group	Pretest		Post-test	
	Average	standard deviation	Average	standard error
Control group	90.70	0.85	27.21	0.45
Experimental group	117.42	0.88	31.00	0.46

*Maximum degree = 33, minimum degree = 0

Source: (Authors Own Work)

Table (5) shows that there is a difference between the averages of the two study groups in reading comprehension and in favor of the experimental group. And based on the results of the accompanying one-way variance analysis, constructivist learning has a statistically significant effect on improving the reading comprehension of the experimental group.

11. Discussion of the Results and Recommendations

Discussing the results of the study question, which states, " Are there statistically significant differences at the level of statistical significance ($\alpha = 0.05$) between the averages of the performance of a sample of third grade students on the reading comprehension skills test due to the variable of the teaching strategy (the conventional method, the constructivist learning model)"?

The study's findings showed a statistically significant difference between the two averages of the study sample test for the effectiveness of the constructivist learning model in enhancing reading comprehension among third-grade students in favor of the experimental group.

The researcher attributes the result to the benefits of constructivist learning environments that require students' attention. The teacher's planning to encourage students to participate successfully in performing an activity, solving a specific problem, or addressing a specific phenomenon may play an essential role in encouraging students to learn. It is the stage that occurs at the start of new learning steps. Where the teacher draws the students' attention and stimulates their interest in what he is about to offer to them, whether it is a new lesson or a specific problem that he wants them to solve.

The result can also be attributed to the exploration stage, in which students' abilities are challenged to find answers to the questions included in those activities, tasks, or questions that they have during their search, exploration, and experimentation, and to facilitate their reading comprehension; as a result of what it includes multimedia of sound, image, movement, and illustrations, conducting virtual experiments that simulate real experiments, and other techniques, students' abilities are challenged to find answers to the questions included in those activities, tasks, or questions that they have during their search, exploration which is capable of facilitating the process of acquiring knowledge from a variety of sources, allowing ease of validation and interaction with many parties involved in the educational process.

These results can also be attributed to the constructivist learning environment's ability to allow students to collaborate, dialogue, and participate in raising ideas and questions that interest them, as well as freely exchange opinions and experiences among themselves, because the constructivist learning environment allows students to communicate through dialogue and discussion contained within that environment. It also gives them the opportunity to pursue help and assistance from a variety of sources in order to solve problems they encounter while learning the reading comprehension skill, suggesting that the constructivist learning environment helps students overcome obstacles to understanding certain concepts, distinguishing it from the traditional learning environment. This is in line with Al-(2003) Najdi's emphasis on the importance of sharing viewpoints between the teacher and students, as well as between groups of students, through talks and dialogue sessions under the teacher's supervision.

This finding can be attributed to the fact that the Arabic language is a live language that deals with a variety of issues in its content, including grammar, listening exercises, conversation, and so on. And through the use of a variety of learning activities, which emphasizes the teacher's responsibility as a facilitator of the learning process while separating him from conventional teaching methods.

This result could be attributed to Arabic language teachers' interest in their basic tasks, particularly the tasks of implementing the lessons used by Arabic language teachers to provide an appropriate learning environment and maintaining its continuity so that teachers can implement lessons with student participation, which leads to the achievement of the desired educational goals.

This conclusion can also be attributed to the fact that using many sources in reading and listening, as well as encouraging students to use various sources to enhance their learning, plays an important part in students' cultural and educational development. This emphasizes the necessity of a diverse set of learning resources. Constructive education increases the teaching process and students' language skills, as well as the ability of teachers to use time and spend it more efficiently.

The findings of this study confirmed those of Cahyarini and Yahmin (2016), who found that students who learned using the constructivist model had higher levels of critical thinking skills than those who learned the traditional way, as well as the findings of Al-Zoubi (2014), who found a statistically significant difference in the post-application of the reading comprehension test in favor of the experimental group. And the findings of Al-Adawi and others (2017), which showed an effect of constructivist learning in raising students' reading comprehension levels and skills, and the findings of Hamdi and others (2020), which showed an effect of the constructivist learning model on the reading comprehension skill.

12. Recommendations

The following recommendations can be made based on the study's findings:

- The necessity to motivate and train teachers to create and develop constructivist learning environments for teaching a variety of educational subjects in accordance with students' interests in this field; To increase educational and scientific results

- Conducting field studies to identify students' preferred constructivist learning environments, particularly at all academic levels.

- Inclusion of applicable models and lessons in Arabic language curricula based on constructivist theory methodologies, particularly constructivist teaching; to help Arabic language teachers in their teaching.

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