



## **The Effectiveness of Using Direct Instruction in Teaching Comprehension Skill of Third-Grade Students**

**Kholoud Subhi Yaghmour**

Assoc. Prof., Dep. of Educational Science, Al-Balqa Applied University, Irbid College, Jordan, [kholoudsy@bau.edu.jo](mailto:kholoudsy@bau.edu.jo)

**Luai Taleb Obaidat**

Asst. Prof., Kindergarten department, Faculty of Educational Sciences / Jadara University, Jordan, [l.obaidat@jadara.edu.jo](mailto:l.obaidat@jadara.edu.jo)

Direct instruction is required in the use of different comprehension skills in order to advance students' ability to independently comprehend texts. Being able to make connections is an important reading comprehension strategy which allows students make meaning of what they are reading. The aim of the current study was to investigate the effectiveness of using the direct instruction method in developing the reading comprehension skills among a sample of third-grade students in Irbid Kasbah District that comprised of 60 students distributed into an experimental group 30 students from public schools, who were taught by using the direct instruction "routine", and a control group that consisted of 30 students from private schools who were taught by the conventional teaching method. A test of 20 items was used to measure the effectiveness of using the direct instruction "routine" in developing the reading comprehension skills. The researchers checked the validity, and the reliability of the test, and the statistical analysis was extracted. The findings revealed statistically significant differences attributed to the effect of the teaching method, in favor of the experimental group, and significant differences attributed to the gender effect in favor of females, while there are no statistically significant differences due to the interaction between variables group and gender. From the findings of this study, the research concludes that the teaching method has notable effects on the reading comprehension skills of students regardless of their age, gender or other socio-demographic characteristics. More importantly, the study has demonstrated that direct instruction method has immensely positive effects on the comprehension skills of third grade students.

**Keywords:** direct instruction, teaching, reading comprehension, effectiveness, third-grade students

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## INTRODUCTION

Not so much time has been spent teaching students how to understand text. A lot of reading instruction is rather spent building automatic and accurate word recognition skill as well as improving the fluency of oral reading. Nevertheless, there is no guarantee that in this way, students will build the necessary skills to read expository texts effectively. In addition, while extensive reading is imperative, this does not also do much to get students ready for thoughtful, careful reading of expository texts (Cunningham & Wall, 1994). Furthermore, according to (Dole *et al.*, 1991; Reutzel & Cooter, 1996), simply exposing students to comprehension worksheets or other tasks requiring them to recall information found in a text also does very little to increase their ability to comprehend texts. Direct instruction is required in the use of different comprehension skills in order to advance students' ability to independently comprehend texts (Guthrie *et al.*, 1996). Thus, the need for the topic "The Effectiveness of Using Direct Instruction in Teaching Comprehension Skill of Third-Grade Students.

Johnson, (1996); Perkins, (1986) defined comprehension skills as the strategies a reader uses to construct meaning and retrieve information from a text. Comprehension skills are very much like thinking skills. A thinking skill is a cognitive process that can be broken down into steps and taught explicitly". "Comprehension skills are also cognitive processes which can be broken into steps and taught explicitly". Some authors have explained the differences between a strategy and a skill (Paris, Wasik, & Turner, 1991; Dole *et al.*, 1991). "Skills are highly automatic behaviors that are developed through drill and practice and can be consistently applied across many different kinds of texts. Strategies are conscious plans for solving problems or constructing meaning". They are the intentional use of a skill.

According to Muhassin, Annisa & Hidayati (2021), Good readers can identify and understand the text which they read". Good readers make connection as they read. Being able to make connections is an important reading comprehension strategy which allows students make meaning of what they are reading. When connections are made to the texts read by students, it helps them not only to make meaning/sense out of what they read, but also to aid better retention of such information and connect more with the text itself.

The researchers have added that reading includes several sub-skills: the basic ones are "recognizing the script of a language", inferring the meaning and use of unfamiliar lexical items, understanding "explicitly stated information", and information implicitly mentioned. Reading is an activity involving "predictions", "previewing", and "anticipation" also mentioned that the aim of prediction is to train the students to make "guesses when reading a text", and indicates that the more students look forward to reading and anticipate in their minds what the text could hold in store for them, the easier it would be to comprehend the basic points of the passage" (Ghada & Mar, 2018).

when we read a text, we need a concentration. Reading cannot merely be seen as looking at and remembering any paragraph of a book. In this phase, we also need analysis skills

in the reading process to get the details from the document that we interpret. We need to recognize the important thing in the process of reading (Mohammad et al, 2021).

Reading comprehension makes sense when integrating a sort of complicated mechanisms including vocabulary, word awareness, and eloquence (Soleimani & Hajghani, 2013) Good readers can identify and understand the text which they read.

The reader who is unable to interpret well will not grasp the text they are reading without supporting from others. Reading awareness encompasses more than readers' reactions to text (Mohammad, Jihan, & Dewi, 2021). This concerns on the readers as well as the document they are processing. Nevertheless, it is not only a question of context, but also in the steps of reading comprehension. Readers are experienced when they grasp the nature of text and utilize their insight to understand the essence or intent of the text that they interpret (Mohammad et al, 2021). Without this kind of ability to understand and communicate with language, the message may fail (Pourhosein Gilakjani & Sabouri, 2016).

Reading has been considered as one of the most essential characteristics which distinguish an individual from other members of his society. Further, it is one of the most critical standards by which societies are evaluated in terms of development or backwardness. The good reader in this context is not the literate person who can only read and write, rather, the bibliophile who sees reading as spiritual and intellectual enlightenment; through it he becomes self- acquainted, and communicates consciously with his surrounding. A Reading Society in this regard is an advanced society that produces culture and knowledge and evolves it in a way that serves its development and the progress of humanity. It is the society that produces books and creativity.

Reading, in its multiple dimensions, is a developmental behavior, economic ability, authority, psychological readiness. It is a sort of practice or abstinence from practicing, it has an optional dimension, rather than an obligation (Al-Sheikh, 1996).

Reading is one of the most important language arts that require conscious study in which the scientific method is considered, because of its great importance for the educated person who seeks knowledge, and it is the foremost window through which he overlooks knowledge and culture in the world, and through which he communicates with his heritage, refines his personality, and achieve his self-awareness. Reading from the rest of the branches of language is distinguished by its long-term association with the educated person in the different educational stages (Al-Elwan & Al-Tal, 2010).

Generally, reading aims to contribute to building the personality of the individual by educating the mind and acquiring knowledge. Through it, the reader acquires knowledge, concepts, facts, opinions, ideas, and theories contained in books, pamphlets, and periodicals. Furthermore, reading is considered a tool of education in school life. The learner cannot progress in his learning unless he can master the skills of reading (Al-Hassan, 2007). The strategy for direct instruction "routine" in teaching reading comprehension and reading skills includes (Ministry of Education, 2016): Direct instruction routine which is the preparation for the skill, by stating its purpose, as if the teacher says, Today we will learn a new sound, which is the sound of the (M), and there

are many words that start with the sound of (M); Modeling, being the process of changing behavior as a result of observing the behavior of others, and this process is essential in most stages of human learning as learning most responses is by observing and imitating others, and it is the first step according to Silvia instruction model. Where the teacher models the new skill and performs the skill he expects the student to do later.

Another strategy is 'guided practice' which is a process through which learning is done in cooperation between the teacher and students, where the steps of the model are repeated with the accompaniment of the students, and it is the second step according to Silvia's instruction model. Here, students perform the skill directly and similarly to the model that the teacher presented during modeling. The teacher supervises students' performance at this stage and directs their performance through questions, instructions, or keywords. Others are: Feedback (after listening to the students' answers in the guided practice, the teacher provides the necessary corrective feedback to the students and directing their learning); Independent practice (A method in which students learn from each other under the supervision of an instructor, and it is the third step according to Silvia's instruction model. In this stage, students apply the new skill to a new task that is more challenging than the one in which they have been trained in guided practice, with less assistance from the teacher. They may work independently, in pairs, or groups); and Procedural evaluation: By observing students' performance during independent practice, the teacher conducts a procedural evaluation of his teaching and the extent to which students were able to learn the new skill and their ability to integrate it to become part of their cognitive structure.

### **Research Problems**

Reading comprehension skills are one of the hindrances that students face in their academic growth, restricting their advancement in the education process and their level of knowledge acquisition. It is also one of the issues affecting them most. It can be seen on those suffering from the difficulty of reading comprehension as they can neither comprehend what they read properly nor recognize the meanings, letters, and symbols found in the texts, which affects their academic achievement negatively in different academic subjects, and it is a critical problem that must be dealt with in the earlier stages. Difficulty in reading comprehension is a major focus of the issues described under the heading of academic learning difficulties, and this is due to the detrimental impact that this challenge has on academic and social achievement, such that the child suffers from self-image disturbance, lack of motivation, anger, and anxiety, and recognizes that he lacks compatibility with his peers and the felicitous interaction with others. Thus, the current study seeks to investigate the effectiveness of using the direct instruction method "routine" in teaching reading in developing the reading comprehension skills of third-grade students in Irbid Kasbah. It also aims to find out whether there is a statistically significant difference between direct instruction and the comprehension skill of third-grade students; and to identify the impact of the independent variables (teaching method, gender) and the correlation between them.

### Research Questions

From the above standpoint, this study came to demonstrate the efficiency of utilizing direct instruction in developing the reading comprehension skills of third-grade basic students in Irbid Kasbah by answering this study question.

- Are there statistically significant differences ( $\alpha = 0.05$ ) in the development of the reading comprehension skills among the third-grade basic students in Irbid Kasbah attributed to the teaching method (the use of direct instruction routine in teaching early reading, the conventional method), gender (male, female) and the correlation between them.

### The significance of the study

The significance of the current study comes from the fact that it aims to reveal the effectiveness of using direct teaching "routine" in teaching reading in developing the reading comprehension skill of the third-grade basic students who face difficulties with reading comprehension in Irbid Kasbah. The study is expected to boost further studies in Jordan, addressing the efficacy of other remedial programs and teaching approaches in the development of reading comprehension skills. It may also benefit teachers of the lower basic stage and Arabic language teachers by providing them with a new strategy in teaching the Arabic language, which is hoped to bring about a qualitative change in teaching reading and to impart relevant reading comprehension skills to early childhood students.

### The limitation of the study

This study addresses the effectiveness of using direct instruction in developing the reading comprehension skills of third-grade basic students in Irbid Kasbah. This study was applied in the schools of the Directorate of Education of Irbid Kasbah, because of the facilities provided by the Directorate of Education of Irbid Kasbah in implementing this study. The study was applied to teachers of the basic stage in Irbid Kasbah.

### Definitions

**Direct Instruction:** Procedurally, it is a strategy applied by the teacher in teaching Arabic language skills, beginning with the preparation for the activity, followed by modeling (teacher), direct practice (teacher-student), feedback, student independent practice, and finally the evaluation stage. Idiomatically, it is the method in which (Direct Instruction) is based on the concepts of behavior modification, as this method provides clear and specific steps for both the student and the teacher; Where the focus in this method is on a set of procedures such as reinforcement, feedback, direct observation, frequent measurement, and task analysis (Mahalla, 2009).

**Reading comprehension:** Is the process of building meaning through interaction with the written text. Or a process in which the learner establishes his understanding of what he is reading. Shaalan & Muhammad (2017) defined it as a constructive, cumulative mental process based on the interaction between the student and the text to be read, whereby the student extracts the main and subsidiary ideas and defines the general meaning of the

text. Procedurally, it is defined as the overall score of the reading comprehension test in its two forms (aloud and silent), and it is expressed in this study as the arithmetic means of the students' performance scores on the reading comprehension test prepared for this study.

Reading: a cognitive process that requires extracting meaning from the written material and analyzing its symbols visually, to attain the recognition of words, comprehension, focusing, remembering, recalling, and fluency.

The conventional method is the teacher's procedural plan during the class. Procedurally, it is defined as displaying the educational material using various traditional educational means such as the whiteboard, chalk, paper, and pen. This method is demonstrated by the dominant role of the teacher and the limited involvement of the students.

### **Literature Review**

Reading comprehension is a significant topic in the field of reading and it is the focus of the reading process that the educational system seeks to provide for the readers. Some researchers (Lerner, 2000) consider it the ultimate goal of the reading process, as it is said, whoever does not understand what he reads, has not read. Reading comprehension is among the mental skills most closely linked to the learning process and the most influential in academic excellence in the various educational tasks, therefore, due to its significance, many educational and psychological researchers have studied its components, levels, and factors affecting it. Furthermore, many educators and psychologists have set multiple definitions of the concept of reading comprehension. Snow (2002, p11) clarified that reading comprehension is the process by which the reader can extract meaning and construct it through his interaction with the written page. It includes three components: the reader, the reading text, and the context."

Lipson & Wixon (2009) Achieved through reading the text and the reader's abilities to interpret while reading through the integration between the knowledge of the reader and the good information available in the text. While Smith (1997) considered it A complicated process involving linking the information revealed in the text to the previous experiences of the reader. Thus, it is difficult for a person to describe himself as a skilled reader unless he carefully thinks about the topic of reading, analyzes the relationships between its various parts, and relates the ideas proposed by the text writer to what he has of previous knowledge about the text and compares them with what he has learned before (Lipson & Wixon ,2009).

Regarding the classifications of reading comprehension, researchers have varied in terms of the number of levels and their titles, but it can be said that there is a great similarity between these classifications and the skills involved in their varying levels. Reading comprehension was classified by (Al-Abdallat & Al-Samadi, 2016) in to three levels including:

- Literal comprehension: the reader is asked at this level to understand the words, sentences, and paragraphs contained in the text and remember details such as the

series of events and facts to meet the general idea that the author of the text requires.

- Interpretive comprehension: the reader at this level is expected to be able to read between the lines to determine what is meant by what is stated, and this is evident through the reader's deduction of secondary ideas, crystallizing his own opinions, visualizing the endings in the stories, formulating a suitable title for the text, and linking the causes with the results (Al-Abdallat & Al-Samadi, 2016; Mercer & Pullen, 2008).
- Evaluative comprehension: At this level, judgments are made on the readable text after evaluating it by comparing the text and its ideas with other texts and ideas that the reader has previously exposed to, and his judgments are about the accuracy of the information contained in this text, in addition to evaluating the beliefs of the writer and the readable text (Al-Abdallat & Al-Samadi, 2016; Mercer & Pullen, 2008). Kamhi and Catts 1999 classify reading comprehension into four levels:
  - Literal level: It includes literal knowledge of phrases and words.
  - Survey level: It includes reading the text to gain a general understanding of it.
  - Interpretive level: This includes an understanding of the implications of the text.
  - Comparative critical level: This includes evaluating and critiquing the text and comparing it with similar texts.

Although researchers differ in their classifications in terms of the number of levels and their names, they are very similar in content, as they all view reading comprehension as a mental process based on remembering facts and concepts, retrieving literal details, and deducing general and partial direct and implicit ideas from them. Various studies have shown that reading comprehension is subject to many dynamic factors and influences that interact with each other to affect the individual's comprehension, either positively or negatively. Despite the multiplicity of opinions regarding the factors influencing the process of reading comprehension, these opinions confirm the importance of the following factors:

1. Characteristics of the script: It refers to the basic syntax of the sentences within the text, and the meanings and connotations of the vocabulary. The reader's knowledge of the rules of the language and the various grammatical issues improves his ability to comprehend the texts presented to him, in addition to the fact that the reader has an ample collection of vocabulary, and his knowledge of their meanings and connotations is a necessity that must be met to be able to comprehend the texts presented to him. The difficulty of vocabulary has a great effect on impeding the process of reading comprehension, as a sentence that contains unknown vocabulary is more difficult to comprehend than those that do not include such vocabulary (Smith, 1997).

2. Reader's characteristics: This means the reader's intelligence, knowledge background, mastery of language and its grammar, and his ability to focus, analyze, investigate, control words, and pronounce them (Mustafa, 2001).
3. Teaching method: Studies indicate that the teaching method is important in helping the reader to comprehend the texts presented to him. Therefore, the teacher is advised to diversify his teaching methods to facilitate the reading comprehension process (Asr, 1999).
4. Type of reading: It means silent and aloud reading. Silent reading is the best option when the goal is reading comprehension.
5. The purpose of reading: students usually read for different purposes, including learning new information, performing a task, comprehending, or for entertainment (Bergeson, 2006). Educational literature has focused on reading comprehension skills, activities, and strategies, which are techniques or procedures that enable the reader to learn to solve problems and complete tasks independently, and they are as follows (Hassan, 2016):
  - Preparatory strategy: which stimulates previous knowledge on a specific topic and is used to make students think about the topic they will read, and it is easier to preserve information on a specific topic that the student is familiar with.
  - Organizational strategy: It is a scanning and skimming strategy aim to define the significant details, understand the whole topic, classify information, determine relevant information, arrange, and summarize ideas to build an overall understanding of the text.
  - Verbosity strategy: it is an additional treatment of the text by the reader that increases comprehension and includes forming relationships between the text and the reader's knowledge background on the topic, making inferences and conclusions, creating mental perceptions, and asking questions.
  - Control: It is the person's perception of his mental processes, and it is an advanced technique that includes a great deal of independent thinking, and it occurs when the reader realizes that he did not comprehend what he just read, so control is knowing how the reader returns to a certain part to comprehend what he read in the text.

Al-Abdallat & Al-Samadi (2016) assume that the reading comprehension process consists of four main factors that combine to form comprehension: visualization, is the first of these factors, where the eyes recognize words by receiving them visually, perception is the second factor, which is to understand words and vocabulary and perceive their meanings. The third factor consists of the reader's knowledge and familiarity with the rules to ensure understanding the sentences and the text, and the meaning is the fourth and final factor interpretation, an attempt is made to reach an understanding of the text in general and to draw conclusions and specific ideas.



### Previous studies

Several studies have addressed the topic of direct instruction strategy and the reading comprehension skills of students, and among these studies, the study of Al-Tal & Al-Shehab (2017), which aimed to reveal the impact of the direct instruction strategy of metacognitive thinking skills in each of learning concepts, the transmission of the learning effect, and the trends of the achievement goal among the eighth-grade female students. To achieve this, the concepts learning test, the learning effect transmission test, the achievement goal orientation scale were utilized. The sample of the research consisted of 69 female students from the eighth grade at Rabah Al-Adawiya Basic School in Jordan. They were chosen by the intentional method and divided into two cohorts: an experimental cohort including 23 students, and a control group of 23 students. The experimental group was studied by the direct instruction strategy of metacognitive thinking skills for two months, while the control group was taught using the conventional teaching method. The findings revealed statistically significant differences between the two groups that came in favor of the experimental group that was taught by direct instruction of metacognitive thinking skills on each of the learning concepts, the transmission of the learning effect, and the attitudes of the goal of achievement.

Elyan's study (2016) aimed to measure the impact of the two strategies of direct instruction and independent instruction on the achievement of basic stage students in mathematics in Jordan. To achieve the objective of the study, a semi-experimental curriculum was adopted on a sample of 103 students. The findings indicated significant differences in favor of the independent instruction strategy in the first place, and the direct instruction strategy to a lesser extent, compared with the results of the application of the conventional education method.

In (2016) Hassan conducted a study aimed to reveal the level of reading comprehension skills among tenth-grade students in the Hashemite Kingdom of Jordan considering some variables. A test consisting of 29 multiple-choice questions was designed and applied to a sample of 98 Male students 82, female students. The study showed that the level of reading comprehension of tenth-grade students was of an average degree on both types of aloud and silent reading, and the results also showed statistically significant differences in the level of reading comprehension among tenth-grade students attributable to gender variable (females), and with different achievements in the Arabic language for the benefit of those with higher achievement.

The study of Al-Hawamdeh & Al-Blehed (2016) aimed to identify the efficacy of a guided reading approach in enhancing the reading comprehension skills of sixth-grade students. The experimental group consisted of 41 students, while the control group consisted of 43 students from Al-Jawf school in Saudi Arabia. To achieve the goals of the research, a reading comprehension test was prepared, and validity and reliability were verified. After conducting the research, applying the test (pre-post test), and conducting the appropriate statistical analyzes, the results of the study showed a difference between the two overall arithmetic averages of the study sample's responses on the reading comprehension test, and on each skill of the reading comprehension test

attributed to the group variable (experimental group), that was taught using a guided reading strategy.

Al-Abdallat & Al-Samadi (2016) in their study compared the effectiveness of the direct and reciprocal teaching methods in improving the reading comprehension skills of students with learning difficulties in reading from the fifth-grade level. The sample of the study consisted of 30 female and male students, who were chosen by the intentional method. The sample was distributed equally into three groups, two experimental groups, the first group was taught by employing the direct instruction method, where the second taught by employing the interactive teaching strategy, and the third group (the control group) did not study using any of these strategies. The study used the quasi-experimental method, and the validity and reliability indicators of the two tests were extracted. The averages and standard deviations were extracted, in addition to using ANCOVA to extract comparisons. It was found that there were differences between the average performance on the post-test between the first and second group and the control group, in favor of the first and second group, and there were statistically significant differences between the first group and the second experimental group in favor of the second experimental group indicating that the interactive teaching strategy was more effective in improving reading comprehension skills than the direct instruction strategy.

The study of Jabboori's (2015) aimed to find out the impact of applying Pairs Check on learners' achievement in learning comprehension. The research sample which was chosen randomly (n= 80) students (experimental= 40) students and (control= 40) students from Al- Yarmouk secondary school for girls. To attain the goal of the current study, an experiment was designed (a post-test for the control and experimental groups). The researcher designed an achievement test consisting of 20 items that were presented to experienced arbitrators to confirm its validity. The test data were analyzed statistically using the T-test formula for two independent samples. It was found that there was a significant difference between the performance of the two groups and that the experimental group showed a better performance in reading comprehension skills.

Mahdi's study (2014) identify the impact of the direct activity of reading strategy on reading comprehension of fifth-grade students. The research included a sample of 60 students. The researcher designed a test for reading comprehension, and he confirmed its validity and reliability, the compatibility of its paragraphs, its difficulty coefficient, and the effectiveness of its erroneous alternatives. The results of the study showed that there is a statistically significant difference between the mean scores of the two groups of research students in reading comprehension, for the benefit of the experimental group students who study the reading material using the direct activity reading strategy. Considering the results of this research, the researcher concluded that the ability of basic school students and their preparations, especially the fifth-grade students, contributed to increasing their understanding, as it is an interesting and exciting new strategy.

Abdul Majeed (2013) carried out a study to investigate the impact of employing mutual instruction on improving college students' achievement in reading comprehension compared to the traditional method or (the lecture method). To achieve the goals of the study, a 4-week experiment was conducted using the pretest experimental design of

asymmetric groups. Two groups were selected each involved 30 first-stage students / College of Education for Girls - Department of English Language. One of the two groups called (CD) was chosen as an experimental group, and the other called (EF) was chosen as a control group, and both groups were subject to pre and post-test. The test was applied to the independent samples, it was found that there is a statistically significant difference in favor of the experimental group, thus, it is advisable to use mutual teaching in reading comprehension.

Abu Al-Samen (2005) Carried out a study aimed to measure the impact of teaching life sciences using the direct instruction strategy and strategy of developing creative thinking and supra-cognitive perception among tenth-grade students. It adopted the quasi-experimental approach that was applied to a sample of 114 female students from Nusseibeh School. The study sample was divided into three groups, the first consisted of 32 students who studied with direct instruction strategy, the second consisted of 32 students who studied using the strategy of developing creative thinking, and the third as a control group consisted of 32 students who studied the traditional method. The results of the study showed that there is a clear effect of direct instruction strategy in developing creative thinking, and strategy of developing creative thinking in developing supra-cognitive perception among the participants which increased the level of academic achievement in the scientific subject within the life sciences curriculum.

*Comments on previous studies*, after examining the previous studies, it was noted that the studies did not discuss the efficacy of direct instruction routine in reading teaching in improving reading comprehension skills. It was also noted that all the previous studies dealt with the experimental and quasi-experimental method, which was also adopted by this study. Some studies addressed direct instruction methods, such as the study of (Al-Tal and Al-Shehab, 2017; Elyan, 2016; Abu Al-Samen, 2005). Some other studies dealt with reading comprehension without dealing with direct instruction methods, such as the study of (Hassan, 2016; Al-Hawamdeh and Al-Blehed, 2016). The researchers benefited from previous studies, literature, and tools in reaching the definition of the study plan and methodology and choosing its study tools and methods of statistical treatment. However, this study investigates the effectiveness of using the direct instruction method in developing the reading comprehension skills among third-grade students.

## METHOD

The study used the quasi-experimental approach, because of its relevance to the nature of the current study, and its ability to achieve its objectives, by applying a post-measurement on the two groups (experimental and control).

**Sample:** The population of the current study is the third-grade students in the basic education stage in Irbid Kasbah, where the study sample comprised of 100 students divided into an experimental group 25 female and 25 male students, and a control group 25 female and 25 male students distributed into two schools. After applying the tests on the use of direct instruction routine in teaching early reading, the sample was randomly distributed into two groups, as shown in Table (1):

Table 1  
Distribution of the participants (gender, group) variables

Variables	Level	Frequency	percentage
Gender	Male	50	50
	Female	50	50
	Total	100	100
Group	Control	50	50
	experimental	50	50
	Total	100	100

### **Instruments**

The study implemented two tools to achieve its goals:

*First: The educational material:* It was divided into two parts:

*The strategy (direct instruction routine) and its implementation mechanism*

Teachers in both schools were asked to use the direct instruction method in teaching their students after checking their extent of knowledge of this method. Then the worksheets and activities related to the Arabic language units were discussed with the teachers. The teachers were required to use the direct instruction method, regardless of the time it may take. While it was not used for students who had studied according to the conventional method.

#### *A. The educational material used in the direct instruction method*

This study was applied to a unit in the Arabic language textbook for the third- grade, the unit requires 32 lessons to be applied properly, lasting eight weeks, at a rate of four lessons per week for each group. The content regarding the Arabic language was referred to, and the lessons included many educational means that integrate learners effectively when using the direct instruction method, whereby teachers employed the educational material flexibly. The lessons were implemented using the (direct instruction routine) with a specific pattern and a specific mechanism, by recalling the previous experiences of the new lesson, followed by the presentation of educational goals and outcomes. The teacher models and perform the new skill, then he engages the students with him, the following step requires students' independence by implementing the activities independently, and this includes interaction and motivation by the teacher and students. The strategy also requires preparing various worksheets for students to use.

#### *B. The teaching material for the conventional teaching method:*

Regarding the educational material used in this section, it is the Arabic language textbook for the third-grade approved by the Ministry of Education for the academic year 2018/2019. The behavioral objectives that were expected to be achieved were determined, considering their diversity in terms of fields and levels, and the teaching plans were prepared. The educational material was taught using the traditional classroom teaching method by the third-grade teachers.

*Second: the achievement test*

20 multiple-choice questions (4 options) were developed, and after modifications were made by the arbitrators, 20 questions were approved.

**Test correction:**

The test is corrected by giving one score for the correct answer and a score of (zero) for the wrong answer. The total mark of the test is 20.

**Item difficulty index and discrimination coefficient for the test**

To confirm the validity of the test, the difficulty index and discrimination coefficient were extracted for all its items and the overall test as indicated in Table (2).

Table 2

Difficulty index and discrimination coefficient for the test items and the whole test

NO.	Difficulty Index	Discrimination Coefficient	NO.	Difficulty Index	Discrimination Coefficient
1	0.55	0.61	11	0.53	0.56
2	0.46	0.51	12	0.55	0.59
3	0.61	0.53	13	0.59	0.63
4	0.52	0.58	14	0.48	0.52
5	0.66	0.51	15	0.62	0.67
6	0.41	0.47	16	0.50	0.61
7	0.46	0.52	17	0.43	0.48
8	0.44	0.45	18	0.45	0.49
9	0.51	0.49	19	0.59	0.63
10	0.55	0.61	20	0.41	0.43
Total	0.52	0.58			

Table (2) illustrates that the difficulty index for the test items ranges between 0.41 - 0.66 and the difficulty index for the whole test is 0.41. This suggests a moderate level of difficulty appropriate for the application of the test.

Regarding the discrimination coefficients, which indicates the ability of the items of the test to distinguish between the group with a weak achievement and the group with a strong achievement, they ranged between 0.41 - 0.67 and the discrimination coefficient for the whole test was 0.58, indicating an acceptable discrimination ability to apply the test, where the test is considered acceptable if it the discrimination coefficient increases over (0.30).

*Instrument validity*

Face validity, the instrument was presented to 9 specialized arbitrators in curricula and teaching methods in Jordanian universities, and some experienced basic education supervisors and teachers in Irbid Kasbah. They were asked to check the relevance of the questions to the objectives of the study and to evaluate its linguistic clarity. Based on the results, some questions were paraphrased, and the percentage of arbitrators' agreement on the scale reached (87%) which is considered a valid and logical criterion.

### *Instrument reliability*

The reliability of the study instrument was assessed by applying the test-retest method on a group of 20 participants from outside the study sample after two weeks. The Pearson correlation coefficient was calculated between their scores and it reached (0.89). The reliability coefficient was also calculated using the internal consistency method according to the Kuder–Richardson formulas-20, and it scores (0.78), these values are considered appropriate for this study.

### **Study variables**

- The independent variable: Teaching strategy (direct instruction method, the conventional method).
- The dependent variable: Developing the skills of reading comprehension

### **Statistical treatment**

The (SPSS) program was used to assess the equivalence of the control and experimental groups by TWO- Way ANOVA, the arithmetic means, and the standard deviations of the pre-and post-measurements according to the group and gender variables was calculated. The independent t-test was applied to find the differences between the averages of both group and gender in post-measurement, and the ANCOVA to detect differences between experimental and control groups in the post-measurement.

### **FINDINGS AND DISCUSSION**

**Hypothesis:** There are no statistically significant differences ( $\alpha = 0.05$ ) in the development of reading comprehension skills among third-grade students in basic education in Irbid Kasbah attributable to the teaching method (the direct instruction, the conventional method), and gender (male, female) and the interaction between them.

To test this hypothesis, arithmetic means were extracted for the pre-and post-measurements according to the group and gender variables, and the adjusted means and the (ANCOVA) were used to reveal the differences between the two groups in the post-measurement, with the pre-measurement as a concomitant variable. The results are presented below.

#### **Equivalence between the two groups:**

To confirm the equivalence of the two groups on the pre-measurement, the TWO-WAY ANOVA test was applied to detect the differences between the control and experimental groups in the pretest measurement.

Table 3  
Results of the (Two-way ANOVA) test to detect differences according to the group and gender variables

Source of variance	SS	df	MS	F-value	Sig
Group	0.810	1	0.810	0.126	0.724
Gender	5.290	1	5.290	0.822	0.367
Gender× Group	6.250	1	6.250	0.971	0.327
Error	618.160	96	6.439		
Total	3733.000	100			
Corrected total	630.510	99			

Table (3) shows that:

- There are no significant differences at the level of significance 0.05 for the group variable on the pre-measurement (the test of reading comprehension skills), where the F value 0.126 and with statistical significance 0.724.
- There are no significant differences at the level of significance 0.05 for the gender variable on the pre-measurement (the test of reading comprehension skills), where the F value 0.822 and with statistical significance 0.367.
- There are no significant differences at the level of significance 0.05 attributed to the effect of the interaction between the group and the gender on the pre-measurement (the test of reading comprehension skills), where the F value 0.971 and in statistical terms 0.327, and this indicates the equivalence of groups in terms of group and gender and the interaction between them.

Through these results, it was found that there is an equivalence between the two groups in the pre-measurement.

To test this hypothesis, the (ANCOVA) was used to reveal the differences between the types of questions that teachers ask in the class, and their effect on students' performance between the experimental and control groups in the post-measurement, in the presence of the pre-measurement as a concomitant variable.

Table 4

Means and the standard deviations of the two measures (pre-post) and the adjusted means according to the group and gender variables

Group	Gender	Pre		Post		Adjusted mean	Error	NO
		Mean*	SD	Mean	SS			
Control	Male	5.68	2.495	12.60	2.92	12.574	0.521	25
	female	5.64	2.797	15.64	2.74	15.623	0.521	25
	Total	5.66	2.623	14.12	3.19	14.099	0.368	50
Experimental	Male	5.00	2.160	9.96	2.44	10.096	0.524	25
	Female	5.96	2.653	11.88	2.52	11.787	0.522	25
	Total	5.48	2.443	10.92	2.64	10.941	0.368	50
Total	Male	5.34	2.335	11.28	2.98	11.335	0.369	50
	Female	5.80	2.703	13.76	3.22	13.705	0.369	50
	Total	5.57	2.524	12.52	3.33	12.520	0.260	100

The arithmetic means of 20 degrees.

Table (4) illustrates that there are apparent variances between the pre-and post-measurements of the control and experimental groups, and to reveal the statistical significance of these variances, the (ANCOVA) was applied and the effect size was extracted by the value of (Eta) as shown in Table (5).

Table 5

The results of the (ANCOVA) to reveal the differences between the experimental and control groups in the post-measurement in the presence of the pre-measurement, and the effect size (Eta)

Source of variance	SS	Df	MS	F value	Sig	Size effect (Eta)
Pre-test (concomitant)	35.167	1	35.167	5.186	0.025	0.052
Teaching method	249.240	1	249.240	36.756	0.000	0.279
Gender	140.012	1	140.012	20.648	0.000	0.179
method× gender	11.419	1	11.419	1.684	0.198	0.017
Error	644.193	95	6.781			
Total	16772.000	100				
Adjusted total	1096.960	99				

Table (5) illustrates that:

- There are statistically significant differences at the level of 0.05 for the pre-measurement, where the F value (5.186) and with a statistical significance 0.025.

- There are statistically significant differences ( $\alpha = 0.05$ ) attributed to the effect of the teaching method, where the F value 36.756 with a statistical significance 0.000. The differences are in favor of the experimental group which taught using direct instruction with an adjusted mean 14.099. Where the adjusted mean of the students 'marks in the



control group 11,335, to reveal the extent of the effectiveness of teaching by using direct instruction in teaching early reading in acquiring the skills of reading comprehension, the effect size ( $Eta=0.279$ ),

-That shows that 27.9 percent of the variation in the acquisition of reading comprehension skills among third-level students is due to the teaching method. While the remainder is due to other variables that are not being controlled. The researchers attribute this finding to the fact that the direct instruction method is one of the relevant teaching methods for presenting the greatest amount of knowledge to learners and can be designed to enable learners to participate effectively through questions or discussions. Although direct instruction is an effective technique for transmitting as much information as possible to learners from a teacher's point of view, it can be adapted to enable learners to understand and assimilate key ideas in the presentation by providing them with some questions and discussions. The results may be attributed to the fact that teachers prefer to use the direct method of instruction in its different forms because they practice it within the classroom, and it is closer to the realistic application because the technique of direct instruction and student achievement is a practical implementation of this method. This study agrees with the study of (Al-Tal and Al-Shehab, 2017; Al-Abdallat and Al-Samadi, 2016; Abu Al-Samen, 2005) that demonstrated the effectiveness of the direct instruction strategy. There are statistically significant differences ( $\alpha = 0.05$ ) attributed to the effect of gender, where the F value 20.648 and in statistical terms of (0.000), and the differences came in favor of females. The researchers attribute this result to the fact that the nature of bringing up females is radically different from that of males, makes girls accustomed to a kind of discipline in behavior, which in turn makes them more disciplined than males in school. The upbringing and training that the girl receives make her in most cases make a greater effort to show her success, although distinction and excellence are the result of personal effort and are not related to the supernatural abilities of either gender, and discipline among girls is attributed to the fact that they are constantly followed by their families compared to males, not on learning only, but in all walks of life, the upbringing that a girl receives from her childhood makes her more capable of attention, organization, completion of duties, good listening and following instructions accurately to prove herself and be successful. This study is consistent with the study of (Hassan, 2016), which showed significant differences in the level of reading comprehension among tenth-grade students according to the difference in gender in favor of females.

-There are no statistically significant differences ( $\alpha = 0.05$ ) attributed to the effect of the interaction between the group and the sex, as the F-value 1.684 and a statistically significant 0.198. Since the F-value is not statistically significant, we accept the null hypothesis, which hypothesizes that "the result is due to chance alone". There is no relationship between the interaction between the group and the sex.

## **CONCLUSION AND RECOMMENDATIONS**

From the findings of this study, the research concludes that the teaching method has notable effects on the reading comprehension skills of students regardless of their age,

gender or other socio-demographic characteristics. More importantly, the study has demonstrated that direct instruction method has immensely positive effects on the comprehension skills of third grade students.

Based on the above conclusions, the following recommendations were made: Encouraging early childhood teachers and Arabic language teachers to implement the direct instruction routine strategy in teaching reading skills; Giving more attention to Arabic language teachers and train them on the employment of modern teaching strategies to develop reading comprehension skills at all academic levels; Adopting the direct reading activity strategy in teaching reading to fifth-grade students ;Conducting several studies such as the current study for other educational stages

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