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The effect of the listening triangle strategy on developing reading comprehension levels among sixth-grade students

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Abstract

This study aimed to investigate the effect of the Listening Triangle Strategy on developing reading comprehension levels (critical, appreciative, and creative) among sixth-grade students in the Busaira District. The quasi-experimental approach was employed with two groups: the experimental group, consisting of 21 students who were taught using the Listening Triangle Strategy, and the control group, also consisting of 21 students who were taught using traditional methods. After ensuring the validity and reliability of the study tools, represented by the reading comprehension checklist and test, the study was conducted at the beginning of the first semester of the 2024/2025 academic year. The reading comprehension test was applied pre- and post-study to measure the effect of the Listening Triangle Strategy on both groups. The results revealed statistically significant differences between the pre- and post-application of the reading comprehension test in favor of the experimental group, indicating a noticeable effect of the Listening Triangle Strategy on developing reading comprehension levels (critical, appreciative, and creative). The study recommended incorporating the Listening Triangle Strategy into the teaching of reading comprehension texts and including practical models of strategy in Arabic language teacher training programs, particularly for teaching reading comprehension skills.

Keywords: Listening, Reading comprehension, Triangle strategy.

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1. Introduction

The Arabic language has garnered significant attention from researchers, who have studied its sciences, arts, methodologies, teaching methods, and tools for learning and instruction [1]. Language serves as the learner's tool for understanding the vast flow of knowledge generated by the technological and informational explosion of our time. It is also the most effective means of comprehending various sciences and arts. In this regard, the role of the Arabic language teacher is to facilitate and refine this tool by developing students' skills and enabling them to use the language optimally. Today's learners face a considerable challenge in processing the overwhelming amount of information received from various learning sources. Traditional teaching methods have proven insufficient and even ineffective at equipping students with the tools needed to keep pace with these developments. Consequently, teachers must adopt more effective strategies to confront this challenge, shifting from information delivery to developing reading and reading comprehension skills among learners [2]. It is widely acknowledged that any attempt to enhance students' skills in Arabic must begin with the skill of reading, as it is the most important among Arabic language skills. Through reading, learners can acquire knowledge and sciences, using it as a gateway to explore humanity's contributions across various fields. Reading is the cornerstone for building an aware and cultured personality [3].

Reading comprehension skills, in particular, stand out as among the most critical reading skills that must be cultivated and developed in today's learners. These skills have become the key to success and the central focus of the teaching and learning process. The ultimate goal of any educational context is to ensure learners comprehend what they read [4]. Moreover, mastery of reading comprehension skills provides learners with a vast window into knowledge, culture, self-development, and self-appreciation. It fosters intelligence development, enhances self-directed learning skills, and strengthens abilities in critical thinking, expressing opinions, and forming judgments. Additionally, these skills empower learners to solve problems, promote intellectual and cultural advancement for individuals and societies, and enable them to explore the experiences, intellectual heritage, and civilizations of others, as well as the scientific and intellectual achievements resulting from human progress [5].

Learners may face certain difficulties that hinder their reading comprehension, which can generally be attributed to factors related to the reader, such as a limited vocabulary, low cognitive maturity, and lack of motivation. Other challenges stem from the text itself, such as the complexity of the vocabulary used, the convoluted presentation of information, and the weak connection between the topic and the reader's prior experiences. Additionally, traditional teaching methods are often ineffective in developing reading comprehension, as they fail to consider learners' interests, stimulate their engagement, challenge their thinking, or provide opportunities for active participation in their learning process [6]. The concept of reading has evolved from being a simple, mechanical process to a more complex understanding based on the premise that reading is a cognitive activity requiring the involvement of all aspects of a person's character. Reading is considered a composite linguistic skill, encompassing two main aspects: a physiological aspect related to performance and decoding symbols, and a cognitive aspect associated with comprehension Sadoski [7].

Fox [8] defines reading comprehension as "a complex process that involves connecting the information in the text to the reader's prior experiences. This entails deeply contemplating the subject of reading, analyzing the relationships between its various parts, linking the ideas within the text to one's existing knowledge, and comparing it with what has been previously learned." Researchers conclude that the reading process begins with the visual decoding of written symbols, combining words through visual and auditory knowledge inputs that are processed by the brain using a series of complex operations, ultimately leading to reading comprehension. This comprehension represents the essence of the reading process, reflecting the reader's interaction with the text, including its ideas, informational content, and values [9].

Studies addressing reading comprehension have highlighted its significant impact on learners. Ningsih, et al. [10] emphasizes that reading plays a crucial role in education and learning, as there is no education without reading. Reading serves as the gateway to sciences, the learner's tool and method for acquiring knowledge, accompanying them through all educational stages and beyond. It is considered a life skill and a learning tool for all academic subjects. It is worth noting that a student's lack of reading comprehension skills deprives them of learning and the full school experience. Weak reading comprehension threatens the student's academic, intellectual, and cultural achievement, leading to failure in school life and affecting their self-esteem as learners. In some cases, it may even lead to dropping out of school altogether [11]. On the other hand, effectively developing reading comprehension among students opens a wide window for them towards knowledge, culture, self-building, and self-appreciation. It enhances their ability to critique and express opinions, equips them with problem-solving skills, fosters a preference for literary reading, and contributes to the intellectual and cultural advancement of both the individual and society. It also helps them recognize the experiences and heritage of others [12].

Reading comprehension is influenced by a set of factors, as mentioned by researchers in their studies [13, 14]. These include the characteristics of the text being read in terms of its structure, language, simplicity, and clarity, as well as its appropriateness for the target age group. The text's introduction, its formulation, the consideration of punctuation marks, and attention to the use of connectors also play a significant role. Comprehension is shaped by a variety of interconnected factors. The reader's cognitive and physical abilities, prior knowledge, purpose for reading, and motivation play a key role. Equally important are the environmental, emotional, social, and economic contexts in which reading takes place. Additionally, the educational environment has a profound impact—factors such as the teacher's expertise and enthusiasm, the structure and content of the curriculum, the time dedicated to reading, and the dynamics of classroom interactions all contribute significantly to how well reading is understood [15].

Reading comprehension skills have significantly expanded and diversified, leading scholars and researchers to categorize them into levels to facilitate study and understanding. While these classifications vary among researchers, they share notable similarities with some differences in the number of levels and the categorization of skills. A prominent

classification by McCarthy and Goldman [16] identifies three levels: the literal level, which includes building vocabulary, identifying details, determining the main idea, and understanding text structure and organization; the interpretive level, which focuses on interpreting meanings, understanding ideas, drawing conclusions, predicting events, and interpreting emotions; and the applied level, which involves evaluating the writer's accuracy in expression, distinguishing between facts and opinions, and solving problems.

Fadilah [17] categorized reading comprehension into five levels. The first is the direct level, which involves determining meaning from context, identifying synonyms and antonyms, and understanding the main idea of the text. The inferential level follows, focusing on inferring relationships between ideas, causes and effects, the writer's purposes and motives, and the shared attitudes and values within the text. The critical level emphasizes distinguishing between opinion and fact, primary and secondary ideas, and other analytical skills. The aesthetic level pertains to perceiving the aesthetic and semantic value of the text, as well as understanding the emotional state conveyed in its atmosphere. Finally, the creative level involves rearranging events, proposing new solutions, and predicting future developments.

Kostadinovska-Stojchevska [18] divided reading comprehension into five levels. The direct level focuses on identifying word meanings, antonyms, homonyms, and distinguishing between main and secondary ideas. The inferential level involves recognizing similarities and differences, inferring relationships between ideas and causes, identifying the writer's goals, uncovering values within the text, and grasping deeper ideas. The critical level emphasizes distinguishing between main and secondary ideas, opinion and fact, rational and irrational concepts, forming opinions about the text, and assessing the credibility of the writer, the originality of the material, and its relevance. The aesthetic level highlights the reader's empathy with the writer and their ability to perceive the aesthetic, suggestive, and emotional value of the text. Finally, the creative level includes rearranging events, proposing solutions, predicting future developments, and dramatizing the text.

The reader may face some difficulties in comprehending the text, which include a lack of knowledge, issues with basic Arabic language skills, failure to organize information to extract the understanding and meaning intended from the text, in addition to the reader's visual ability, the psychological state accompanying the reading process, the nature of the environment in which the reading takes place, a weak vocabulary stock, a lack of prior experience with the text, low intellectual maturity, low motivation, difficult vocabulary, complexity in the style of presenting information, weak connection between the topic and the reader's previous experiences, or failure to use them optimally, and poor organization of paragraphs [19]. Educators call for the need to overcome all of these difficulties for learners by selecting the best and most appropriate strategies, increasing learners' motivation toward reading comprehension processes, choosing texts based on clear and precise standards, and diagnosing students' physical and mental capabilities and readiness to perform tasks related to reading comprehension at an early stage of education.

Active learning strategies are among the most suitable and widely spread teaching strategies in our era, due to their ease of use, simplicity, variety, suitability for different educational environments, and their alignment with the demands of the 21st century in terms of focusing on the learner's activity and effectiveness in the learning process [20]. One of the most prominent teaching strategies derived from active learning is the "Triangle of Listening" strategy, as it encourages discussion and dialogue, and makes students feel their pivotal role in the teaching and learning process by enabling them to build their own knowledge, which positively impacts their motivation and self-esteem as learners [21].

The "Triangle of Listening" strategy is one of the active learning strategies that makes the learner an active participant, relying on their own skills and abilities, collaborative, and engaged in thinking, reviewing, and interacting with students in triadic groups. In this approach, all students think about what they are learning and listening to. The learner can either be a speaker, a listener, or an observer who summarizes the questions. This strategy helps attract the students' attention to the learning process by incorporating an element of excitement and interaction with the lesson. It encourages students to engage positively in the learning process, enabling them to use their mental abilities and motivating them to develop their listening and speaking skills through triadic groups. Each student in a group of three has a specific role: the first is the speaker who explains the lesson, the second listens attentively and asks the first student questions, requesting further details, and the third observes the lesson between their peers, takes notes on the questions, and provides feedback when it is their turn. The third student reads the questions about what their peers have mentioned, and the teacher redistributes the roles among the triadic groups, repeating the steps with the remaining parts of the lesson Ez-Zaouia and Carrillo [22].

Ahmed, et al. [23] point out that the Triangle of Listening strategy offers numerous advantages. It provides learners with the opportunity to exchange ideas, information, and opinions, contributing to the generation of solutions within an environment characterized by teamwork and mutual respect. The Triangle of Listening strategy enhances student focus and attention to the educational content presented, while fostering critical thinking through mutual feedback. It improves speaking, writing, and summarizing skills, and encourages students to ask questions and seek clarification when faced with confusion, thereby strengthening learning and skill mastery as they perform roles assigned by the teacher. The strategy promotes positive cognitive habits such as attentive listening, patience, and intellectual collaboration. Additionally, it boosts students' enjoyment and satisfaction with learning, develops speaking and teamwork skills, and reduces feelings of frustration and failure. By maximizing time efficiency during triadic group work, the strategy activates active learning, fosters positive attitudes toward the subject matter, and reinforces knowledge through group discussions.

According to Uyen, et al. [24] the Triangle of Listening technique goes through multiple stages. Each student is given a specific role by the teacher, who divides the class into triadic groups. The lesson, concept, or idea to be learned is read aloud or explained by the first student (the speaker). The listener, the second student, pays close attention and probes the speaker for clarification on any points that are unclear. The third student, known as the observer, is in charge of keeping tabs on the group's development, documenting the conversations and exchanges between the first and second students, and

offering comments and observations as required. In other learning scenarios, the roles are switched around periodically so that every student can practice every role they are given. By giving them a variety of skills and improving their learning, this rotation aids students in becoming more proficient in their subject matter.

Establishing distinct roles for the teacher and the pupils is the foundation of the Triangle of Listening technique. The literature and earlier research make it abundantly evident that the teacher's responsibilities include setting up the classroom, creating activities and lessons that follow the steps of the strategy, and providing the conditions required for its implementation [25]. Additionally, the instructor strives to foster cooperation among students, cultivate positive relationships with them, consider individual differences, and facilitate an engaging lesson plan aimed at accomplishing the learning goals. The student's role revolves around being the core of the educational process, where they are encouraged to ask questions that reflect their cognitive needs, collaborate with peers to find answers, actively engage in assigned activities, contribute to problem-solving, and participate in writing summaries and providing feedback within their group [16]. Researchers aim to explore the impact of employing modern teaching strategies, such as the Triangle of Listening strategy, which seeks to enhance reading comprehension among elementary students. This strategy is a component of active learning, focusing on engaging students and fostering their active participation in the educational process. It is anticipated to play a significant role in improving the reading comprehension levels of sixth-grade students.

Several studies have examined the Triangle of Listening strategy and its impact on reading skills. One such study, conducted by Al-Shara'h and Al-Khawaldeh [26] aimed to explore the effectiveness of the Triangle of Listening strategy in improving reading comprehension among fifth-grade female students in elementary schools in Babil Governorate, Iraq. The researchers adopted a quasi-experimental approach, involving 66 fifth-grade students from Aden School for Girls. The participants were divided into two groups: an experimental group of 32 students and a control group of 34 students. The study tool, a reading comprehension test, was applied to both groups before and after the intervention. The results revealed significant differences in reading comprehension skills in favor of the experimental group. The study recommended adopting the Triangle of Listening strategy in teaching Arabic and emphasized the importance of training teachers before implementing this strategy.

A study by Altwijri, et al. [27] sought to determine how well the Triangle of Listening technique combined with Student Response System (SRS) tools helped students in teacher preparation programs improve their critical listening abilities in English. Two groups were included in the study: a control group of the same size that received instruction using conventional methods, and an experimental group of thirty students who were taught using a combination of technology and strategy. Critical listening abilities were assessed using a unique test. The experimental group performed better than the control group, according to the results, demonstrating that creative teaching methods coupled with technology greatly improve language learning abilities, especially critical listening.

The objective of the " Talafeh " study Ahmed, et al. [23] is to know the impact of the use of the listening triangle strategy on the development of comprehension assimilation among female basic third graders in the Al- Muwaqqar - Amman brigade. The study followed the semi-experimental curriculum. The study was made up of 30 students for the pilot group and 30 students for the control group. The study tool of the comprehension test was applied tribally and individually to the two study groups. The results showed significant differences at the levels: The study recommended that the listening triangle strategy should be used to teach Arabic in view of its significant impact on the development of students' comprehension skills.

A study was conducted by Abdulrahman and Ibrahim [28] aimed at identifying the impact of the listening triangle strategy on the achievement of reading and Kurdish literature by university students at the Institute of Fine Arts. The study adopted the pilot curriculum for two groups: Experimental and control, 36 randomized students were selected, the pilot group studied using the listening triangle strategy, the control group studied in the traditional way, and the study personnel were subjected to a 30-paragraph reader understanding test spread across different levels of understanding. (verbatim understanding, implicit understanding, contextual understanding), the results showed the superiority of the pilot group students who studied using the listening triangle strategy over their peers in the control group. The study also highlighted the role of this strategy in promoting interaction among students and motivating them to develop their reading and understanding skills. The study recommended adopting a listening triangle strategy in teaching other subjects because of its active role in improving comprehension skills. Similar studies were also proposed to explore the strategy's impact on other categories of students or in different educational contexts.

In a study conducted by Allam Othman Allam [29] they found that the listening triangle strategy improved the reading skills of students attending the first seminar in the UAE. The researcher adopted the semi-experimental curriculum. The study members are 48 students from the fourth grade of Al-Manara Private School Abu Dhabi. The students were divided into two groups: experimental and control. A reading comprehension test was administered both pre- and post-study to assess the students' comprehension levels. The results indicated statistically significant differences in comprehension levels (literal, inferential, and critical) in favor of the experimental group. The study recommended adopting the Triangle of Listening strategy in teacher guides and emphasized the importance of supervisors and teachers providing active learning environments that enhance students' motivation and attitudes toward learning.

It is noteworthy that the current study shares common ground with previous studies by adopting a quasi-experimental approach and focusing on reading comprehension as a dependent variable. Additionally, it addresses the Triangle of Listening strategy and its impact on enhancing reading comprehension among primary school students. However, the current study distinguishes itself by addressing specific levels of reading comprehension, including critical, aesthetic, and creative comprehension. The researchers benefited from previous studies in formulating the research methodology, determining procedures, constructing the research problem, and developing the necessary tools, which contributed to

enhancing the accuracy and reliability of the current study. In light of the importance of developing reading comprehension and the need for modern teaching strategies that enable learners to enhance their comprehension skills, the researchers proposed the idea of employing the Triangle of Listening strategy to develop certain levels of reading comprehension. The researchers identified three levels for the study: critical, aesthetic, and creative.

Results from national and international tests in the Arabic language reveal weaknesses among students in Jordan in reading comprehension skills. The National Reading Strategy Initiative (2023-2028) highlighted a decline in reading comprehension among primary education students in national surveys conducted between (2014 and 2019), with only slow improvements in recent years. Students aged between (10 and 14) years are still below the required level of reading and comprehension skills. The World Bank's education poverty reports have shown that 52% of Jordanian students are unable to read a short, age-appropriate passage at the age of ten compared to students from other selected countries. Additionally, the results of the PISA test indicated that 76% of students aged 15 read only at the basic level or below, with 41% reading at a level insufficient for effective and productive participation in life. Through the researchers' work in the fields of learning, growth, and teaching Arabic language, they have observed that the problem of students' weakness in reading comprehension is particularly significant among primary school students, especially in the sixth grade. This issue is attributed to the lack of appropriate reading comprehension skills, as well as the teachers' approach to teaching texts, which often focuses only on the literal and interpretive levels, neglecting other levels, particularly the critical, aesthetic, and creative ones.

Previous studies Adeoye, et al. [30] and George [31] emphasized the necessity of developing reading comprehension skills among learners to equip them with the abilities needed to handle the vast flow of knowledge in our contemporary era. These studies also pointed out the weaknesses in reading comprehension skills, particularly in primary education, and highlighted the need for more effective teaching strategies that help learners acquire skills enabling them to confront the increasing cognitive and technological developments. Such strategies would enhance their personal competence in building knowledge and developing skills. However, this study aimed to examine the impact of teaching using the Triangle Listening Strategy compared to traditional methods on the development of reading comprehension levels—critical, aesthetic, and creative—among sixth-grade students. Additionally, it seeks to introduce the Triangle Listening Strategy and demonstrate its implementation in teaching reading comprehension texts across these three levels through practical instructional models [32, 33].

The significance of this study is both theoretical and practical. Theoretically, it may contribute to providing teachers with information and instructional plans regarding the Triangle Listening Strategy and its impact on developing reading comprehension. It offers Arabic language teachers a framework of reading comprehension skills at the critical, aesthetic, and creative levels appropriate for sixth-grade students and enriches libraries, teacher guides, and curricula with valuable theoretical insights to enhance reading comprehension. Practically, the study provides teachers with concrete models for implementing the Triangle Listening Strategy in teaching reading comprehension, guiding its execution in classrooms, and supporting teacher training in modern instructional strategies. Moreover, the findings are expected to stimulate further research in this area, encouraging continued exploration of effective teaching strategies in Arabic language education.

2. Methodology

2.1. Study Design

The study followed the experimental method with a quasi-experimental design due to its suitability for the nature and objectives of the study.

2.2. Study Sample

The study members are from 42 students from the sixth grade in the Basira Basic Boys School, the Directorate of Education of the Basirah Brigade-Tafila Governorate, selected in the intentional manner and randomly distributed in two groups: experimental (21) students, and control group (21) students.

2.3. Study Tools

2.3.1. The Reading Comprehension Checklist

With a view to preparing for the readability test, researchers prepared a list of comprehension levels (Critic, Tasting, Creative) which includes skills suitable for basic sixth graders, so researchers have identified the objective of the comprehension List, which is to prepare a list of comprehension levels. (Critic, tasting, creative) and the skills arising therefrom suitable for basic sixth graders, to build the comprehension test in the light of it, and the list has been prepared based on a set of comprehension lists available from relevant studies [23]. To verify the veracity of the list, researchers compared the list with the comprehension lists available in previous studies and theoretical literature relevant to the study's subject matter, and then presented it as a preliminary version to the competent; In order to express their views on the list, the arbitrators' observations were taken into account and the required adjustments were made towards the deletion of skills below 80% of the arbitrators' agreement, merging some skills of a single nature with each other, separating some skills for independence and different nature, reformulating some skills by deleting or adding some words or phrases, not deleting or modifying many skills for the strength of their connotation and the integrity of their formulation. After making the appropriate adjustments and considering the reviewers' suggestions, the researchers finalized the reading comprehension checklist with its levels (critical, aesthetic, and creative) suitable for sixth-grade students. The final checklist consisted of three levels, with twelve skills distributed as follows:

The study categorizes reading comprehension into three levels. At the critical level, students are expected to distinguish between opinion and fact, issue judgments to defend, accept, or reject a character, position, or presented issue, differentiate reality from fiction, and understand the author's purpose in the text. At the aesthetic level, students should recognize the dominant emotion and prevailing values in the text, evaluate expressions in terms of beauty and strength, and interpret nuanced meanings of expressions such as irony, pride, or seriousness. At the creative level, students are encouraged to propose new solutions to issues presented, suggest alternative titles for texts, apply the content to real-life situations, and creatively reorder or summarize the text. The final list aligns with the findings of studies Allam Othman Allam [29] which included similar skills. However, it differs in that the current list is specifically tailored for the age group it was designed for, which is sixth-grade students [34].

2.3.2. The Reading Comprehension Test

To achieve the objectives of the study, the researchers prepared a reading comprehension test to measure the pre- and post-levels of reading comprehension (critical, evaluative, and creative) for sixth-grade students. The reading comprehension texts for the test were selected to be appropriate for this age group and to meet the specifications of being good test texts (such as "The Spring of Beauty," "Ann Sylvan," and "The Little Storyteller") in terms of paragraph count and coverage of all targeted levels of reading comprehension. The texts were fully formed, and the test items were created with 24 multiple-choice items, with two items for each indicator in each level of reading comprehension. The test instructions were formulated after reviewing instructions from similar tests that the researchers had examined, ensuring they guide the students during their responses. Table 1 shows the specifications of the reading comprehension test, including the relative weights and number of items for each level.

Table 1.
Reading Comprehension Test Specifications, Weights, and Items.

No.	Level	Number of skills	Relative weight	Number of items	Item number
1	Critical Level	4	33.3%	8	1-3-5-6-10-11-17-19
2	Aesthetic Level	4	33.3%	8	2-4-7-9-12-13-15-18
3	Creative Level	4	33.3%	8	8-14-16-20-21-22-23-24
Total		20	100%	20	24

2.3.3. Validity of the Reading Comprehension Test

To ensure the validity of the reading comprehension test, its initial version was presented to a group of experts specializing in Arabic language curriculum teaching, as well as experts in measurement and evaluation, educational psychology, and some Arabic language teachers and supervisors. After reviewing their opinions and suggestions, necessary modifications were made, such as removing or modifying some items and changing alternatives for certain questions to improve coherence and consistency. Additionally, the difficulty and discrimination indices of the test items were analyzed by a pilot sample of 20 students outside the main study sample. The difficulty indices were calculated based on the percentage of students who answered incorrectly, and the discrimination indices were computed as the correlation between the item performance and the total score. According to Awad (2010), difficulty indices between 0.25–0.75 and discrimination indices between 0.47–0.68 were considered scientifically acceptable. No items were removed based on the results.

2.3.4. Reliability of the Reading Comprehension Test

To verify the reliability of the test, two methods were used: Test-Retest and the Kuder-Richardson Formula (KR-20). In the Test-Retest method, the test was administered again after two weeks to a sample of 20 students, and the correlation coefficient between the results was (0.89), indicating high reliability. The KR-20 formula was used to calculate the internal consistency reliability, which yielded a value of (0.81), deemed suitable for the purposes of the study. As for the test duration, it was determined based on the average time taken by students in the pilot sample, which was 60 minutes.

2.4. Study Implementation Procedures

The study was implemented through a series of systematic procedures, beginning with a review of relevant literature and previous studies, followed by obtaining official approvals from the Directorate of Education in Bseira and Al-Hussein Bin Talal University. The study tools, including the reading comprehension test list, were then prepared and verified for validity and reliability. Participants were randomly assigned into two groups experimental and control after which a pre-test for reading comprehension was administered to both groups. The experimental group received instruction using the Triangle Listening Strategy, while the control group was taught using traditional methods. Following the intervention, a post-test was conducted, and the collected data were analyzed using statistical software to evaluate the outcomes.

2.5. Equivalence of Study Groups

To verify the equivalence of the study groups, the researchers calculated the means and standard deviations of the scores of sixth-grade students on the pre-test reading comprehension for each dimension and the overall score, based on their classification into the experimental and control groups. To determine if there were statistically significant differences between the means of the two groups, the "t-test" was used, and the results are presented in Table 2.

Table 2.
Reading Comprehension Scores by Group.

	Group	No.	Mean	Standard Deviation	T Value	Degrees of Freedom	Statistical Significance
Pre-Critical Thinking Level	Experimental	21	4.43	1.690	0.796	40	0.430
	Control	21	4.05	1.396			
Pre-Aesthetic Level	Experimental	21	5.19	1.123	-0.132	40	0.896
	Control	21	5.24	1.221			
Pre-Creative Level	Experimental	21	4.81	1.504	0.101	40	0.920
	Control	21	4.76	1.546			
Pre-Reading Comprehension Test	Experimental	21	14.43	2.657	0.506	40	0.616
	Control	21	14.05	2.202			

Table 2 shows that there are no statistically significant differences at the significance level ($\alpha \leq 0.05$) attributed to group differences in all dimensions of reading comprehension and the overall score of the pre-test reading comprehension test, indicating equivalence between the groups.

3. Data Analysis and Findings

Research Question: Are there statistically significant differences at the significance level ($\alpha \leq 0.05$) between the mean scores of the experimental group and the control group in the reading comprehension test (as a whole and for each of its levels: critical, interpretive, and creative)?

To answer the research question, the arithmetic means and standard deviations of the grades of sixth-grade students in the reading comprehension test, before and after the implementation, were calculated based on the teaching strategy. The results are presented in Table 3.

Table 3.
Arithmetic Means, SDs, and Adjusted Means of Reading Comprehension Scores by Level and Teaching Strategy

Teaching Strategy	No.	Pre-test Measurement		Post-test Measurement		Adjusted Mean	Standard Error
		Mean	Standard Deviation	Mean	Standard Deviation		
Listening Triangle	21	14.43	2.657	20.24	2.022	20.162	0.341
Traditional	21	14.05	2.202	14.57	1.599	14.648	0.341

The data in Table 3 suggests apparent differences between the arithmetic means and adjusted means of the study participants' scores on the reading comprehension test for both the pre-test and post-test, based on the teaching strategy used. To verify the significance of these apparent differences, a One-way ANCOVA was conducted on the post-test scores for the reading comprehension test, controlling for the effect of the pre-test scores. Table 4 presents the detailed results.

Table 4.
One-way ANCOVA Results for Post-test Reading Comprehension Scores by Teaching Strategy.

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square	F Value	Significance Level	Eta Squared (η^2)
Teaching Strategy	317.238	1	317.238	130.483	0.000	0.770
Pre-test Measurement (Accompanying)	38.133	1	38.133	15.685	0.000	0.287
Error	94.819	39	2.431			
Total	470.119	41				

Table 4 shows the presence of statistically significant differences at the significance level ($\alpha = 0.05$) between the scores of sixth-grade students in the reading comprehension test, based on the teaching strategy used, in favor of the Listening Triangle strategy. The value of F was (130.483) with a statistical significance of (0.000). The results also show that the teaching method had a significant effect, with an eta squared (η^2) value of approximately (77%), reflecting the large effect size of this strategy in explaining the variance in the dependent variable (reading comprehension test). Additionally, the mean scores, standard deviations, and the adjusted mean scores of the students' grades in the pre-test and post-test for the reading comprehension test domains were calculated, according to the teaching strategy used, as shown in Table 5.

Table 5.

Means, SDs, and Adjusted Means of Reading Comprehension Test Dimensions by Group.

Dimensions	Teaching Strategy	Number	Pre-test Measurement		Post-test Measurement		Adjusted Mean	Standard Error
			Mean	Standard Deviation	Mean	Standard Deviation		
Critical Level	Listening Triangle	21	4.43	1.690	6.52	1.030	6.469	0.239
	Traditional	21	4.05	1.396	4.24	1.261	4.293	0.239
Aesthetic Level	Listening Triangle	21	5.19	1.123	7.05	1.322	7.059	0.244
	Traditional	21	5.24	1.221	5.24	.889	5.226	0.244
Creative Level	Listening Triangle	21	4.81	1.504	6.67	.856	6.654	0.198
	Traditional	21	4.76	1.546	5.10	1.221	5.108	0.198

Table 5 indicates that there are differences in the mean scores and adjusted mean scores between the pre- and post-test for the reading comprehension test, resulting from the difference in teaching strategies. To determine the significance of these differences, a One-way Multivariate Analysis of Covariance (One-way MANCOVA) was applied, as shown in Table 6.

Table 6.

One-way MANCOVA of Post-test Scores by Teaching Strategy and Comprehension Dimension.

Source of Variance		Sum of Squares	Degrees of Freedom	Mean Square	F	Error Probability	Effect Size η^2
Pre-test (Accompanying) Critical Level	Critical Level Post-Test	7.065	1	7.065	5.947	0.020	0.138
Pre-test (Accompanying) Aesthetic Level	Aesthetic Level Post-Test	3.996	1	3.996	3.236	0.080	0.080
Pre-test (Accompanying) Creative Level	Creative Level Post-Test	13.781	1	13.781	16.924	0.000	0.314
Teaching Strategy	Critical Level Post-Test	48.715	1	48.715	41.003	0.000	0.526
Hotelling = 3.804	Aesthetic Level Post-Test	34.570	1	34.570	27.993	0.000	0.431
p = 0.000	Creative Level Post-Test	24.570	1	24.570	30.174	0.000	0.449
Error	Critical Level Post-Test	43.959	37	1.188			
	Aesthetic Level Post-Test	45.692	37	1.235			
	Creative Level Post-Test	30.128	37	.814			
Corrected Total	Critical Level Post-Test	107.905	41				
	Post-test Aesthetic Level	85.143	41				
	Post-test Creative Level	70.405	41				

Table 6 shows that there are statistically significant differences at the significance level ($\alpha \leq 0.05$) between the groups based on the teaching strategy in all areas of reading comprehension. The differences favored the students who received instruction using the "Listening Triangle" strategy compared to those who were taught using the traditional method. The results also showed that the effect size was large in all areas, with the explained variance (η^2) being 43.1% for the aesthetic level, 44.9% for the creative level, and 52.6% for the critical level. The study states that the Listening Triangle's strategy for teaching comprehension texts is effective because it is based on the principles of constructive learning and has greatly contributed to the promotion of active interaction between students and educational content. Through active participation in tripartite groups, this strategy has been successful in increasing pleasure and interaction in the educational process, enhancing students' level of understanding and assimilation. By using the strategy, students' critical thinking and taste were

enhanced through exchanges of views and information, which enabled them to make critical judgements about personalities or attitudes presented in comprehension texts. Moreover, it assisted students in distinguishing between facts and opinions and improved their comprehension of emotions and values in texts. The strategy helped students develop collaborative thinking and problem-solving skills through creative ways, as well as supporting collective thinking and problem solving at the creative level. Additionally, it motivated them to think critically and creatively, as well as develop their own ability to manage the learning process. Previous research [11, 20, 24, 35] has shown that the listening triangle strategy is effective in promoting comprehension and increasing students' positive interaction with comprehension texts, which in turn enhances their understanding and assimilation of content.

4. Conclusion and Recommendations

The findings of this study indicate that the Listening Triangle Strategy has a significant positive effect on developing reading comprehension levels—critical, appreciative, and creative—among sixth-grade students. Students who were taught using this strategy demonstrated greater improvement in their reading comprehension skills compared to those who received traditional instruction. This underscores the effectiveness of the Listening Triangle Strategy as an instructional approach that actively engages students, enhances their understanding of texts, and encourages higher-order thinking. Consequently, the study highlights the importance of integrating this strategy into Arabic language teaching, providing teachers with practical models to develop students' comprehension skills, and incorporating it into teacher training programs to improve overall instructional quality.

In light of the findings of this study, several recommendations are proposed. Arabic language teachers should implement the Listening Triangle Strategy when teaching comprehension texts, as it effectively promotes higher levels of comprehension. Teacher training programs should incorporate practical models of this strategy, particularly for developing reading comprehension skills. Educational supervisors are encouraged to raise teachers' awareness of the importance of addressing all levels of reading comprehension, rather than focusing solely on literal and inferential levels. The study's findings can also be used to enrich Arabic language curricula and teacher guides with effective strategies for teaching reading comprehension. Finally, further research is recommended to explore the development of reading comprehension through modern teaching strategies, including the Listening Triangle Strategy.

References

- [1] W. Ma, A. C. Mat, N. Mufidah, and R. Jaafar, "Systematic literature review of innovative Arabic language teaching strategies in STEM education: Sociocultural, linguistic, and professional development perspectives," *Semarak International Journal of Current Research in Language and Human Studies*, vol. 2, no. 1, pp. 1-25, 2025. <https://doi.org/10.37934/sijcrhs.2.1.126>
- [2] O. S. Idowu and I. R. Ogundeko, "Mitigating cognitive challenges faced by teachers of English in teaching and learning reading in Nigerian secondary schools," *PUPIL: International Journal of Teaching, Education and Learning*, vol. 8, no. 1, pp. 47-63, 2024. <https://doi.org/10.20319/pijtel.2024.81.4763>
- [3] H. S. Bahrami, "EFL reading comprehension classes with cultural consciousness-raising orientation and multicultural personal traits development," *Theory and Practice in Language Studies*, vol. 8, no. 1, pp. 113-121, 2018.
- [4] Y. van Rijk, M. Volman, D. de Haan, and B. van Oers, "Maximising meaning: Creating a learning environment for reading comprehension of informative texts from a Vygotskian perspective," *Learning Environments Research*, vol. 20, no. 1, pp. 77-98, 2017. <https://doi.org/10.1007/s10984-016-9218-5>
- [5] A. A. Makhmudova, "Culture is a certain level of historical development of society, human creative power and abilities," *European International Journal of Multidisciplinary Research and Management Studies*, vol. 2, no. 09, pp. 99-105, 2022.
- [6] M. R. A. Chen, G. J. Hwang, and Y. Y. Chang, "A reflective thinking-promoting approach to enhancing graduate students' flipped learning engagement, participation behaviors, reflective thinking and project learning outcomes," *British Journal of Educational Technology*, vol. 50, no. 5, pp. 2288-2307, 2019. <https://doi.org/10.1111/bjet.12823>
- [7] M. Sadoski, "Reading comprehension is embodied: Theoretical and practical considerations," *Educational Psychology Review*, vol. 30, no. 2, pp. 331-349, 2018. <https://doi.org/10.1007/s10648-017-9412-8>
- [8] E. Fox, "The role of reader characteristics in processing and learning from informational text," *Review of Educational Research*, vol. 79, no. 1, pp. 197-261, 2009. <https://doi.org/10.3102/0034654308324654>
- [9] W. Kintsch and E. Kintsch, *Comprehension*. In S. G. Paris & S. A. Stahl (Eds.), *Children's reading comprehension and assessment*. Mahwah, NJ: Lawrence Erlbaum Associates, 2005.
- [10] I. H. Ningsih, R. Winarni, and R. Roemintoyo, "The importance of early reading learning in the face of 21st century education," *AL-ASASIYYA: Journal Of Basic Education*, vol. 3, no. 2, pp. 196-205, 2019. <https://doi.org/10.24269/ajbe.v3i2.1879>
- [11] E. Stranovska, Eva, Z. Gadusova, and Z. Gadusova, "Learners' success and self-esteem in foreign language reading comprehension," *Образование и саморазвитие*, vol. 15, no. 3, pp. 109-119, 2020. <https://doi.org/10.26907/esd15.3.10>
- [12] M. Zamiri and A. Esmaeili, "Strategies, methods, and supports for developing skills within learning communities: A systematic review of the literature," *Administrative Sciences*, vol. 14, no. 9, p. 231, 2024. <https://doi.org/10.3390/admsci14090231>
- [13] U. Taladngoen, N. Palawatwichai, R. H. Estaban, and N. Phuphawan, "A study of factors affecting EFL tertiary students' reading comprehension ability," *Rangsit Journal of Educational Studies*, vol. 7, no. 1, pp. 12-21, 2020. <https://doi.org/10.14456/rjes.2020.9>
- [14] A. P. Gilakjani and N. B. Sabouri, "A study of factors affecting EFL learners' reading comprehension skill and the strategies for improvement," *International Journal of English Linguistics*, vol. 6, no. 5, pp. 180-187, 2016. <https://doi.org/10.5539/ijel.v6n5p180>
- [15] C. Baker, *Literacy practices and social relations in classroom reading events*. In C. Baker & A. Luke (Eds.), *Towards a critical sociology of reading pedagogy: Papers of the xii world congress on reading*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 1991.

- [16] K. S. McCarthy and S. R. Goldman, "Constructing interpretive inferences about literary text: The role of domain-specific knowledge," *Learning and Instruction*, vol. 60, pp. 245-251, 2019. <https://doi.org/10.1016/j.learninstruc.2017.12.004>
- [17] H. N. Fadilah, "The use of synonym and antonym context clues to improve reading comprehension ability at the tenth grade of SMA Purnama Trimurjo central lampung ", Undergraduate Thesis, IAIN Metro IAIN Metro Digital Repository, 2019. <https://repository.metrouniv.ac.id/id/eprint/596>
- [18] B. Kostadinovska-Stojchevska, "The semantic aspect of the acquisition of synonyms, homonyms and antonyms in the teaching process of English as a foreign language," *European Journal of Foreign Language Teaching*, vol. 3, no. 2, pp. 1–14, 2018.
- [19] A. Ahmadi and S. Alavi Zahed, "Language complexity, accuracy and fluency in different types of writing paragraph: Do the raters notice such effect," *Journal of English Language Teaching and Learning*, vol. 9, no. 20, pp. 1-24, 2017.
- [20] E. Care, H. Kim, A. Vista, and K. Anderson, "Education system alignment for 21st century skills: Focus on assessment," Brookings Institution, 2019. <https://www.brookings.edu/articles/education-system-alignment-for-21st-century-skills/>
- [21] F. M. Al-slaiti, R. M. Al-Issa, S. M. A. Al-Hirsh, and A. L. Al-Masaeid, "The effect of using the listening triangle strategy on listening skills among ninth grade students in Jordan and their attitudes toward it," *Jordanian Educational Journal*, vol. 10, no. 3, pp. 656-675, 2025.
- [22] M. Ez-Zaouia and R. Carrillo, "The group folding effect: The role of collaborative process structuring and social interaction in group work," *ACM Transactions on Computer-Human Interaction*, vol. 31, no. 2, pp. 1-44, 2024. <https://doi.org/10.1145/3622783>
- [23] M. r. M. Ahmed, S. M. Saleh, and S. A. Muhammad, "The effectiveness of the listening triangle strategy in the imaginative thinking of second-grade intermediate students," *Journal of Positive School Psychology*, vol. 6, no. 2, pp. 5559–5567, 2022.
- [24] B. P. Uyen, D. H. Tong, and N. T. B. Tram, "Developing mathematical communication skills for students in grade 8 in teaching congruent triangle topics," *European Journal of Educational Research*, vol. 10, no. 3, pp. 1287-1302, 2021. <https://doi.org/10.12973/eu-jer.10.3.1287>
- [25] C. Pu and S. Weng, "Developing teacher candidates' global teaching competence through virtual exchange," *Asia-Pacific Journal of Teacher Education*, vol. 51, no. 5, pp. 458-479, 2023. <https://doi.org/10.1080/1359866X.2023.2235304>
- [26] S. Al-Shara'h and M. A. Al-Khawaldeh, "The effect of directed listening-thinking activity (DLTA) strategy on improving listening comprehension skills among fifth-grade female students in Jordan," *Educational Process: International Journal*, vol. 15, p. e2025145, 2025. <https://doi.org/10.22521/edupij.2025.15.145>
- [27] O. Altwijri, E. Alsadoon, A. A.-W. Shahba, W. Soufan, and S. Alkathiri, "The effect of using "student response systems (SRS)" on faculty performance and student interaction in the classroom," *Sustainability*, vol. 14, no. 22, p. 14957, 2022. <https://doi.org/10.3390/su142214957>
- [28] R. M. Abdulrahman and H. S. Ibrahim, "The impact of using listening triangle and hot chair strategies of knowledge achievement in kurdish literature module among tenth-grade high school students," *Zanco Journal of Human Sciences*, vol. 28, no. SpA, pp. 197-218, 2024.
- [29] S. Allam Othman Allam, "Using the listening triangle strategy to enhance reading skills among students in the Arabic Language and Islamic studies department at the college of education," *Journal of Faculty of Education-Assiut University*, vol. 38, no. 8, pp. 1-60, 2022.
- [30] M. A. Adeoye, E. F. Prastikawati, and Y. O. Abimbowo, "Empowering learning: Pedagogical strategies for advancing 21st century skills and quality education," *Journal of Nonformal Education*, vol. 10, no. 1, pp. 10-21, 2024. <https://doi.org/10.15294/jone.v10i1.1451>
- [31] A. S. George, "Preparing students for an AI-driven world: Rethinking curriculum and pedagogy in the age of artificial intelligence," *Partners Universal Innovative Research Publication*, vol. 1, no. 2, pp. 112-136, 2023.
- [32] Y. Ghaith, U. Ghosh, M. Guerra, Q. Hammouri, Y. Alkhuzai, and M. Ghaith, "Quality management application and educational performance in higher education institutions: A bibliometric analysis," *Uncertain Supply Chain Management*, vol. 11, no. 4, pp. 1657-1666, 2023. <https://doi.org/10.5267/j.uscm.2023.7.003>
- [33] N. M. Nusairat *et al.*, "Game-based student e-learning experience: Empirical evidence from private universities in Jordan," *International Journal of Data and Network Science*, vol. 8, no. 2, pp. 1285–1292, 2024. <https://doi.org/10.5267/j.ijdns.2023.11.006>
- [34] Q. Hammouri and E. Abu-Shanab, "Exploring factors affecting users' satisfaction toward E-learning systems," *International Journal of Information and Communication Technology Education*, vol. 14, no. 1, pp. 44-57, 2018. <https://doi.org/10.4018/IJCTE.2018010104>
- [35] N. M. Nusairat *et al.*, "Student e-learning experience: A nexus among e-learning quality, student engagement and resulting satisfaction," presented at the 2023 International Conference on Business Analytics for Technology and Security (ICBATS), 2023.