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Let's Start!

Effect of Instructional Scaffolding on Students Reading Comprehension and Motivation at Elementary Level

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Abstract

This study investigates the impact of instructional scaffolding on elementary students' reading comprehension and motivation. A true experimental design, specifically the pre-test and post-test control group design, was employed. A sample of 30 elementary students was divided into two groups: one received instructional scaffolding during reading activities, while the other received traditional instruction. Data were collected through classroom-based pre-and post-tests. Reading comprehension was assessed using MCQ tests based on Bloom's Taxonomy (knowledge and comprehension levels), and motivation was measured using a Likert-scale questionnaire. The reliability of the instruments was verified using Cronbach's Alpha, and item analysis was conducted to assess the difficulty and discrimination of the MCQs. Data normality was checked using the Kolmogorov-Smirnov and Shapiro-Wilk tests. An independent samples t-test was used to compare the control and experimental groups, while a paired samples t-test evaluated the pre-and post-test results of the experimental group. The findings revealed a significant improvement in reading comprehension and motivation among students who received instructional scaffolding, highlighting its effectiveness as a valuable pedagogical strategy for enhancing literacy at the elementary level.

Keywords: Scaffolding, Instructional scaffolding, Reading comprehension and motivation

INTRODUCTION

Reading comprehension is one of the most crucial skills students learn across all educational levels (Mason, 2004; Schunemann, Sporer, & Bronstein, 2013; Brevik, 2019). It is essential for both lifelong learning and academic achievement (Wu & Chen, 2018) and plays a significant role in fostering innovative thinking abilities (Saaverda, 2019). However, in lower- and middle-income developing nations like Pakistan, students at the primary, elementary, and secondary school levels exhibit alarmingly low levels of reading comprehension (World Bank, 2019). Language learning strategies are rarely considered, and most public sector schools still follow the outdated grammar translation method in English language instruction (Waris, 2014; Kazi & Iqbal, 2011). Consequently, students taught through this method often become surface learners. Qrosco et al. (2008) state that such learners focus more on surface-level reading elements,

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employ fewer comprehension strategies, rely less on prior knowledge, and possess limited vocabulary.

Instructional scaffolding offers a promising solution for these challenges. It refers to the direct, responsive support that a skilled reader provides to a beginner, acting as a practical aid for students struggling with comprehension (Daniel et al., 2016). Teachers adapt their teaching strategies to ensure that students grasp the meaning of texts (Babino et al., 2019). This concept is rooted in Scaffolding Theory (ST), developed by cognitive scientist Jerome Bruner, which emphasizes providing appropriate support when students are introduced to new material. The theory also underlines the need for learners to engage with more knowledgeable peers and instructors.

According to this framework, children go through two developmental stages: actual development—where they can complete tasks independently—and potential development—where assistance from others is needed. This links directly to Vygotsky's Zone of Proximal Development (ZPD), which describes the gap between what learners can do on their own and what they can achieve with guidance (Chineka & Yasukawa, 2021). Instructional scaffolding takes place within this zone and is gradually removed as the learner gains proficiency (Chang et al., 2002). Unlike traditional methods that emphasize rote memorization and verbal instruction (Ellis & Worthington, 1994), scaffolding facilitates deeper learning by bridging the gap between guided and independent performance.

Several strategies are commonly used in instructional scaffolding. These include modeling, where teachers demonstrate tasks for students; previewing, which activates background knowledge; questioning, which deepens engagement with the text; clarifying, which makes complex content understandable; and summarizing, which helps distill the main ideas. Alongside comprehension, reading motivation plays a crucial role in students' academic growth. Hermosa (2002) defines reading motivation as the interest or desire to read for various reasons. It is essential in both classroom and extracurricular contexts (Grabe & Stoller, 2002), especially given the cognitive demands of comprehension (Brown & Smiley, 1978; Stein & Glenn, 1979). Students develop these skills at different rates (Moore & O'Driscoll, 1983), and their effectiveness is shaped by multiple factors, including age, strategies, motivation, prior knowledge, and experience (Englert & Thomas, 1987).

Motivation fosters the behaviors necessary for successful reading and comprehension. Soonthornmance (2002) notes that increasing students' motivation can improve performance (Maleki & Zangani, 2007). Despite many students being able to read, a lack of motivation persists (Royse, 2001). Guthrie and Wigfield (2000) argue that reading motivation significantly influences attitudes toward reading. Highly motivated students read for enjoyment, use various strategies to overcome challenges, take on learning tasks willingly, and incorporate reading into their daily lives, becoming effective and engaged readers.

STATEMENT OF PROBLEM

Reading without comprehension is essentially a word-by-word activity or spell check. Students in the majority of public schools in Pakistan replicate and memorize texts without

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understanding them. In Pakistan, English-language textbooks cannot foster critical thinking and conceptual comprehension without the proper teaching technique (Naviwala, 2019). According to the research that is currently available, using an ineffective teaching technique can lead to students' poor reading comprehension, which can ultimately force them to drop out of school (Mughal, Aldridge & Monagham, 2019). In this regard, the proposed study would look into how instructional scaffolding affects primary students' motivation and reading comprehension.

HYPOTHESES

H1. There is no significant difference between the academic achievement of the experimental and control group in pre-test reading comprehension.

H2. There is no significant difference between the academic achievement of the experimental and control group in the post-test of reading comprehension.

H3. There is no significant mean difference between the performance of the pre-test and post-test of the experimental group in reading comprehension.

H4. There is no significant difference between the academic achievement of the experimental and control group in pre -test of reading motivation.

H5. There is no significant difference between the academic achievement of the experimental and control group in the post-test of reading motivation.

H6. There is no significant mean difference between the performance of the pretest and post-test of the experimental group in reading motivation.

LITERATURE REVIEW

The literature review for the current study was covered in this section of the investigation. Every variable was thoroughly examined in the earlier research projects. The review covers two important areas:

READING COMPREHENSION

Wanzek et al. (2016) found that 95% of middle school children with reading issues had a decline in their reading comprehension when they entered the ninth grade, and 81% of these kids did not improve in reading. Students in the ninth grade who struggle with reading comprehension have a wide range of needs and strengths. Teachers of ELA and other subjects have had difficulty coming up with strategies to aid pupils in understanding the material covered in class. Students learn how to learn and explore from ELA teachers. Above all, scaffolding enables kids to solve problems, accomplish objectives, and work past their capacity for independent effort (Kim & Lim, 2019).

The author continued by saying that there is no appreciable difference between male and female biology students when the two instructional approaches are used. However, Umuoke and Nwafor (2014) reported that there is a significant difference, favoring male students, between male and female students in Enugu State, Nigeria, when teaching utilizing instructional scaffolding. The authors emphasized that the possibility that male pupils are less able to collaborate than female students may be the cause. According to Uche et al. (2022), students' achievement was shown to be much higher when using a self-regulated learning technique as opposed to the lecture method.

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According to Belland et al. (2017), giving students critical, engaging, and linguistically scaffolded literature helps improve their comprehension skills. Scaffolding is a very successful intervention in classrooms.

Many learning-disabled middle school kids have poor word-reading and reading comprehension skills, despite an abundance of evidence suggesting that early reading interventions can enhance early-grade word-reading performance. Furthermore, 81% of middle school students who struggle with reading also have problems with word definition, decoding, and fluency, according to Wandek et al. (2016). Scammacca et al. (2016) found that adolescents with the lowest reading comprehension scores on an examination were more likely to struggle with reading in all reading component areas, including comprehension.

Over the past 40 years, researchers in education have recognized the value of the scaffolding construct. Researchers in scaffolding from various educational disciplines have used a variety of theoretical frameworks, research questions, and analytical approaches, leading to a wide range of conceptualizations of scaffolding (Reynolds & Daniel, 2018). In a metropolitan public school system in North Texas, the study is required to address the ignorance of ninth-grade instructors on instructor-led scaffolding of reading comprehension in ninth-grade courses. One way that this study may impact societal change is by having ELA instructors use instructor-led scaffolding approaches to make sure that their students comprehend the material they are reading. A significant portion of ninth-grade ELA students struggles with reading comprehension, according to Babino et al. (2019). . Furthermore, 81% of middle school students who struggle with reading also have problems with word definition, decoding, and fluency, according to Wandek et al. (2016).

SCAFFOLDING

According to a sociocultural (Vygotskian) perspective, learning is a socially situated action that learners can first only carry out in a social setting before finally being able to do on their own (Lantolf, 2005). As engaged members of society, we do not acquire information in a vacuum; rather, it is contingent upon our environment and circumstances, including the social context in which we find ourselves learning (Yang and Wilson, 2006). In recent studies (Sahadi and Ghaleb, 2012), scaffolding has been utilized to teach reading by creating the conditions required for the development of meaningful learning, which necessitates the employment of an appropriate instructional strategy.

Where students must clarify or create tasks like self-reflection, semantic mapping, summarizing, tracking their learning, and deriving meaning from a book they have read. According to McGriff (1996), several reading comprehension techniques can be deemed successful. Students can complete an activity or practice that is above their capabilities if given the right help. According to Reiser (2004), scaffolding gives students the help and support they need to do basic activities and advance to more difficult ones. In a similar spirit, Vacca (2008) argues that when children have the proper resources, support, and supervision, they become more responsible, driven, and successful. Because of this, the instructional scaffolding paradigm

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is useful for teaching reading and has an impact on the development of higher functions and abilities that go beyond the learner's limitations.

INSTRUCTIONAL SCAFFOLDING

Instructional scaffolding at the elementary level is a pedagogical approach designed to provide temporary support to students as they engage in learning tasks that are slightly beyond their current level of understanding or skill.

READING COMPREHENSION

A key competency that establishes the groundwork for academic achievement in a variety of courses is reading comprehension. Research suggests that instructional scaffolding significantly contributes to the improvement of reading comprehension among elementary students. The usefulness of scaffolding in reading comprehension education is theoretically supported by Vygotsky's sociocultural theory, which emphasizes the significance of social contact and support in cognitive growth (Wood et al., 1976).

Various scaffolding strategies have been employed to enhance reading comprehension, including explicit instruction, modeling, questioning techniques, and gradual release of responsibility. For instance, explicit instruction involves teachers providing clear explanations of reading strategies and demonstrating how to apply them while reading (Duke & Pearson, 2002). Modeling involves teachers demonstrating proficient reading behaviors, such as making predictions or visualizing while reading, to help students develop similar strategies (Rosenshine & Meister, 1992).

Furthermore, scaffolding through questioning techniques, such as think-aloud and guided discussions, facilitates students' active engagement with the material, tracking of their comprehension, and the development of links between the text and past knowledge (Palincsar & Brown, 1984). According to Pearson and Gallagher (1983), the gradual release of responsibility paradigm, commonly referred to as "I do, we do, you do," progressively transfers learning responsibility from the instructor to the student. This approach promotes independence and self-regulated learning.

SCAFFOLDING STRATEGY

Put another way, it is the act of giving a student in a social setting short-term help, then progressively removing it when the learner gains the ability to function independently and do tasks at a higher level. Similar to construction workers, they also use scaffolding to accomplish specific duties and access higher areas. Scaffolds are therefore only meant to be used temporarily, accomplishing certain goals before being taken down.

The method of providing and modifying support is called instructional scaffolding, and its purpose is to “allow the novice and the expert to work together for the beginner to learn the cognitive approach or methods" (Palincsar, 1986). In one way or another, the majority of educators have employed scaffolding exercises in the classroom. According to research, giving students help and support in the form of instructional scaffolding maximizes their learning. Similar to the scaffolding used by construction workers to support themselves while doing specific tasks, it is equivalent (Huggins & Edwards, 2011).

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Instructional scaffolding, according to Jumaat and Tasir (2014), is the support or guidance given by instructors, teachers, or other qualified people to help students achieve their learning goals. From a conceptual standpoint, scaffolding refers to giving pupils guidance in the early stages of learning and gradually transferring accountability to them as they gain confidence in their knowledge and abilities.

SCAFFOLDING AS A TEACHING STRATEGY

Lev Vygotsky's sociocultural theory is credited for coining the phrase "zone of proximal development" (ZPD), which is the basis for the teaching strategy known as scaffolding instruction. "What children can do on their own and the next learning that they can be helped to achieve with competent assistance is the distance known as the zone of proximal development" (Raymond, 2000, page 176). The scaffolding teaching style provides tailored support based on the learner's ZPD (Chang, Sung, & Chen, 2002). When a more experienced individual uses scaffolding training, they provide the learner with scaffolds or supports to help them advance. Utilizing the scaffolds, students may learn new material and consolidate their prior knowledge. The activities provided in scaffolding education are somewhat more difficult than what a pupil can finish on their own, according to Olson and Pratt (2000). The more capable individual supports the learner through the ZPD by giving scaffolds so they can complete tasks that they otherwise would not be able to (Bransford, Brown, & Cocking, 2000).

Vygotsky defined scaffolding instruction as the "role of teachers and others in supporting the learner's development and providing support structures to get to that next stage or level" (Raymond, 2000, p. 176). One of the most important aspects of scaffolding education is the temporary nature of the scaffolds. As the student's skills advance, the more knowledgeable individual progressively takes down the scaffolding. Finally, the learner can complete the task or understand the subject matter independently (Chang, Sung, & Chen, 2002). Consequently, the purpose of the scaffolding teaching approach is to assist the learner in developing into an autonomous, self-sufficient problem solver and learner (Hartman, 2002).

As the student's knowledge and learning ability increase, the teacher gradually reduces the amount of help provided (Ellis, Larkin, Worthington, n.d.). Vygotsky argues that the educator's external scaffolds can be removed as the student possesses "...more sophisticated cognitive systems, related to fields of learning such as mathematics or language, the system of knowledge itself becomes part of the scaffold or social support for the Think-aloud modeling, signals, prompts, hints, direct instruction, and incomplete responses are a few examples of scaffolds in a learning environment (Hartman, 2002). A partially completed example of a procedural facilitator (hint, cue card, and example) was provided by the authors of Teaching Children and Adolescents with Special Needs. The following list might be used by a teacher to try teaching the mathematical skill of rounding: "The steps of rounding hundreds beginning with the first step of '1." Students can get suggestions by looking at the entire number in the ten's place "(Olson and Platt, 2000). This signal tells the students to complete the next part of the exercise. Instructors can also use questions as support structures to help students solve problems or complete assignments.

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RESEARCH GAP

Although extensive research has highlighted the effectiveness of instructional scaffolding in enhancing reading comprehension, particularly at the elementary and middle school levels, there is limited empirical evidence focusing on the application of instructor-led scaffolding strategies specifically in ninth-grade classrooms. Much of the existing literature emphasizes theoretical underpinnings (e.g., Vygotsky's sociocultural theory) and general scaffolding techniques without addressing how these strategies are practically implemented by English Language Arts (ELA) teachers at the secondary level. Moreover, despite the recognition of persistent reading comprehension challenges among ninth-grade students, especially those with prior reading difficulties, there remains a lack of context-specific research exploring the direct relationship between instructional scaffolding and reading outcomes within this demographic, particularly in settings like metropolitan public schools or under-resourced educational contexts. This study seeks to fill that gap by investigating how scaffolding strategies can be effectively tailored and utilized to support reading comprehension among ninth-grade students.

EXPERIMENTAL DESIGN

This study provides clarification on the investigation of the "impact of instructional scaffolding on elementary school students' motivation and reading comprehension." Relate to one another. By utilizing various research strategies and methodologies, the preceding chapter identified pertinent studies. A pre-test, post-test control group design, one of the true experimental designs, was used to perform this investigation. The two sections of grade 7 were selected by the researchers to comprise the study sample. Two groups were chosen: one for experimentation and the other for control. Pre- and post-tests were used to gather information.

Instrumentation 1

Because the researcher is using a test as an instrument in this study, a pre-test and post-test were administered. The exam consists of a draft of a question taken from the seventh-grade textbook at the school in question. Here, a pre-test was administered before conducting an experimental research study or before instructing students using the scaffolding strategy, and a post-test was administered following the treatment or the scaffolding approach's instruction. Thirty minutes were allotted for each test. The research was finished and meticulously documented. To measure students' cognitive abilities based on Bloom's Taxonomy's levels (knowledge and comprehension), multiple-choice question (MCQ)-type tests were developed. Each test carries 30 marks.

INSTRUMENT'S VALIDITY AND RELIABILITY

The tool was validated by many experts. One expert was subject specialist having M. Phil. in English with 10 years experiences and two teachers with 10 years experiences of teaching English at elementary level. Item analysis was conducted to find out the difficulty and discrimination power.

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INSTRUMENT'S VALIDITY AND RELIABILITY

Items	Difficulty level	Items	Difficulty level
1	0.4	16	0.56
2	0.6	17	0.43
3	0.63	18	0.53
4	0.4	19	0.4
5	0.56	20	0.63
6	0.43	21	0.5
7	0.53	22	0.56
8	0.4	23	0.65
9	0.63	24	0.5
10	0.5	25	0.66
11	0.56	26	0.5
12	0.65	27	0.4
13	0.46	28	0.6
14	0.4	29	0.63
15	0.5	30	0.4

The reliability was calculated using SPSS-23. Cronbach's alpha was employed to assess the instrument's dependability. Significantly, Cronbach's alpha had a value of.747.

When determining whether a measuring test or research instrument is internally consistent, reliability is essential.

RELIABILITY STATISTICS

Cronbach's Alpha	No of Items
.747	30

INSTRUMENT 2

MOTIVATION FOR READING QUESTIONNAIRE (MRQ)

Because the researcher is using a test as an instrument in this study, a questionnaire was used. This survey was created in 1997 by Wigfield and Gurhrie. The intrinsic motivation characteristics of self-efficacy, participation, curiosity, and liking for challenges were evaluated using this questionnaire. Children were asked to rate each item on the questionnaire using a 1-to-4-point Likert scale. The questionnaire was translated and utilized in both languages while taking into account the local context and the depth of the subject of investigation. The reverse translation technique was applied to increase translation accuracy.

VALIDITY AND RELIABILITY

The questionnaire had a pilot test to guarantee dependability. The reliability was calculated using SPSS-23. Cronbach's alpha was employed to assess the instrument's dependability. The Cronbach's alpha score was 705, indicating statistical significance.

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TABLE 3.2 RELIABILITY STATISTICS

Cronbach's Alpha	No of Items
.705	18

DATA COLLECTION

TABLE 4.1 TEST OF NORMALITY FOR PRE-TEST AND POST-TEST SCORES OF COMPREHENSION TEST

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	t	Df	Sig.	T	Df	Sig.
Pre-test	.124	30	.200*	.934	30	.061
Post-test	.141	30	.131	.939	30	.088

TABLE 4.2 TEST OF NORMALITY FOR PRE-TEST AND POST-TEST OF EXPERIMENTAL GROUP

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	T	Df	Sig.	T	Df	Sig.
Pre-test	.111	15	.200*	.948	15	.493
Post-test	.130	15	.200*	.944	15	.437

TABLE 4.3 TEST OF NORMALITY FOR PRE-TEST AND POST-TEST SCORES OF MOTIVATION

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
pretest	.123	30	.200*	.951	30	.175
posttest	.157	30	.059	.916	30	.052

TABLE 4.4 TEST OF NORMALITY FOR PRE-TEST AND POST-TEST OF EXPERIMENTAL GROUP

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Pre-test	.124	15	.200*	.966	15	.802
Post-test	.198	15	.116	.889	15	.064

TABLE 4.5: RESULTS OF INDEPENDENT SAMPLE T-TEST FOR THE DIFFERENCE IN MEAN SCORES OF ACADEMIC ACHIEVEMENT IN PRE-TEST.

Groups	N	M	SD	t-value	Df	p-value
Experimental Group	15	13.9	5.817	0.671	28	.608
Control Group	15	12.4	6.150			

TABLE 4.6: RESULTS OF INDEPENDENT SAMPLE T-TEST FOR THE DIFFERENCE IN MEAN SCORES OF ACADEMIC PERFORMANCE IN POST-TEST.

Groups	N	M	SD	t-value	df	p-value
Experimental Group	15	22.27	6.23	5.285	28	.037
Control Group	15	12.87	4.63			

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TABLE 4.7: RESULTS OF PAIRED SAMPLE T-TEST FOR MEAN DIFFERENCE IN PRE-TEST AND POST-TEST SCORES

Academic Performance	N	M	SD	t-value	Df	p-value
Pre Test	15	13.87	5.82	20.125	14	.000
Post Test	15	22.87	4.63			

TABLE 4.8: RESULTS OF INDEPENDENT SAMPLE T-TEST FOR THE DIFFERENCE IN MEAN SCORES OF ACADEMIC ACHIEVEMENT IN PRE-TEST.

Groups	N	M	SD	t-value	df	p-value
Experimental Group	15	49.93	4.52	1.092	28	.941
Control Group	15	48.13	4.50			

TABLE 4.9 RESULTS OF INDEPENDENT SAMPLE T-TEST FOR THE DIFFERENCE IN MEAN SCORES OF ACADEMIC ACHIEVEMENT IN POST-TEST.

Groups	N	M	SD	t-value	Df	p-value
Experimental Group	15	61.38	8.188	4.105	28	.001
Control Group	15	51.43	4.127			

TABLE 4.10: RESULTS OF PAIRED SAMPLE T-TEST FOR MEAN DIFFERENCE IN PRE-TEST AND POST-TEST SCORES

Academic Performance	N	M	SD	t-value	Df	p-value
Pre Test	15	49.93	4.52	5.098	14	.000
Post Test	15	60.73	8.04			

FINDINGS

1. Table 4.1 indicates that the selected sample is normal distribution because both tests performed to confirm the data normality are statistically significant (p>.05). Our pre-test findings are therefore approximately regularly distributed. The paired sample t-test was used to determine the mean difference between the pre-and post-test results for the experimental group. Thus, maintaining group normality is equally crucial.
2. The information in table 4.2 confirms the normal distribution of data in experimental groups. The pre- and post-tests for the experimental group provide as evidence of this, which provide in significant findings (p>.05. These results allowed us to evaluate the difference using the independent and pair sample t-tests.
3. Table 4.3 demonstrates that both tests used to verify the data normality are statistically significant (p>.05), suggesting that the selected sample has a normal distribution. As a result, the pre-test results are roughly normally distributed. The paired sample t-test was used to determine the mean difference between the pre-and post-test results for the experimental group. Table 4.3 shows the data is normally distributed.

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4. The distribution of experimental groups in the pre- and post-test is confirmed by the data shown in table 4.4. This is demonstrated by the two test, which show in significant results (p>.05), for experimental group is pre- and post-tests. We were able to assess the difference using the independent and pair sample t-test thanks to these findings.

H01. There is no significant difference between the academic achievement of the experimental and control groups in the pre-test of reading comprehension.

5. There is no statistically significant difference between the mean scores of the two groups (Control and Experimental), according to the data displayed in Table 4.5. The mean and standard deviation of the experimental group (M=13.9, SD=5.817) are quite similar to those of the control group (M=12.4, SD=6.150). p >.05, t (28) = 0.671. The null hypothesis (H1), which reads, "There is no significant difference between the academic achievement of experimental and control group in the pre-test of elementary level students," could thus not be rejected by the researcher. The investigator concluded that there was no discernible difference between the two groups' academic achievement.

H2. There is no significant difference between the academic achievement of the experimental and control group in the post-test of reading comprehension.

6. The findings presented in Table 4.6 demonstrated that the experimental group's mean post-test score (M=22.27, SD=6.23), which was obtained by scaffolding-assisted instruction, exceeded the control group's mean post-test score (M=12.87, SD=4.63). Additionally, the results demonstrated that the Experimental and Control groups' post-test mean differences were statistically significant (t (28) =5.285, p<.05. In light of this, the null hypothesis (H2), according to which "there is no significant difference between the academic performance of the experimental and Control group in the elementary level students' post-test," is rejected. Additionally, the study concluded that students who got scaffolding from their professors outperformed students who received teaching through conventional techniques on average**.H3**. There is no significant mean difference between the performance of the pre-test and post-test of the experimental group in reading comprehension.

7. The results shown in Table 4.7 indicate that the experimental group, which had instruction with scaffolding, had a mean pre-test score (M=13.87, SD=5.82) that was lower than the mean post-test score (M=22.87, SD=4.63) for the same group. Furthermore, the investigation revealed a statistically significant difference (t (14) = 20.125, p <.05.) between the pre-and post-test scores. The null hypothesis (H3) is thus rejected: "There is no significant mean difference between the performance of the pre-test and post-test of the experimental group of elementary school students. The study found that the scaffolding strategy significantly improved the academic performance of primary school students.

H04. There is no significant difference between the academic achievement of the experimental and control groups in the pre-test of reading motivation.

8. The results are shown in Table 4.8 and show that there is no discernible difference between the two groups' average mean scores (Control and Experimental). The mean and standard deviation of the experimental group (M=49.93, SD=4.52) are quite similar to those of

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the control group (M=48.13, SD=4.50). Considering t (28) = 1.092, p >.05. The null hypothesis (H4), which reads, "There is no significant difference between the academic achievement of experimental and control group in the pre-test of elementary level students," could thus not be rejected by the researcher. The researcher concluded that there was no appreciable difference in the academic performance of the two groups.**H5.** There is no significant difference between the academic achievement of experimental and control groups in a post-test of reading motivation.

H5 There is no significant difference between the academic achievement of experimental and control groups in the post-test of reading motivation.

9. The results of Table 4.9 show that the experimental group's mean post-test score (M=61.38, SD=8.188), attained by scaffolding instruction, was greater than the mean post-test score (M=51.38, SD=4.127) of the control group. Additionally, the results demonstrated that the Experimental and Control groups' post-test mean differences were statistically significant (t (28)=4.105, p<.05. As a result, the null hypothesis (H5), according to which "the academic performance of the experimental and Control group in the elementary level students' post-test is not significantly different," is debunked. The study also concluded that students who got scaffolding from their professors generally outperformed those who received teaching through conventional approaches.

H6. There is no significant mean difference between the performance of the pre-test and post-test of the experimental group in reading motivation.

10. The findings shown in Table 4.10 indicate that the experimental group, which had instruction with scaffolding, had a mean pre-test score (M=49.93, SD=4.52) that was lower than the mean post-test score (M=60.73, SD=8.04) for the same group. Furthermore, the research demonstrated a statistically significant difference (t (14) = 5.098, p <.05.) between the pre-and post-test scores. As a result, the null hypothesis (H6), which claims that there is no significant mean difference between the experimental group's performance on the pre-and post-tests for primary school pupils, is rejected. The study found that the scaffolding strategy significantly improved the academic performance of primary school students.

CONCLUSION

In summary, there is a significant and complex impact that instructional scaffolding has on the motivation and reading comprehension of primary school pupils. By combining individualized teaching, progressive responsibility release, and the encouragement of metacognitive skills, teachers may create learning experiences that are both intrinsically motivating for children to read and successfully scaffold learning to meet their various needs. Teachers may provide a nurturing atmosphere that supports students' development into competent and self-assured readers by using technology, fostering a pleasant learning environment, and involving families and communities. It's important to understand, nevertheless, that effective implementation necessitates continual professional development for teachers and a dedication to modifying teaching strategies in response to changing student requirements. In the end, teachers may enable primary students to become lifelong learners who find joy and fulfillment in the study of

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literature and other subjects by utilizing the power of instructional scaffolding. Moreover, the more we learn about instructional scaffolding, the more obvious it is that its benefits go well beyond short-term academic improvements. Through the provision of skills and methods that enable students to traverse complicated texts on their own, instructional scaffolding cultivates a feeling of self-efficacy and confidence in their talents. Their reading comprehension improves as a result of this confidence, which also spreads to other aspects of their academic and personal lives and fosters a lifetime love of learning.

The importance of instructional scaffolding in the dynamic field of education cannot be overstated in guaranteeing that every student has fair access to high-quality literacy teaching. It is critical that educators adopt the scaffolding concepts and continuously explore novel methods to modify and improve their approaches as we look to the future. By doing this, we can raise a generation of readers who are capable of thriving in a world that is becoming more and more complicated and who possess the knowledge, drive, and fortitude necessary to do so. Therefore, investigating how instructional scaffolding affects primary school kids' reading comprehension and motivation is not just a search for academic success but also a keystone in the success and learning of a lifetime.

DISCUSSION

In the subject of education, there is a lot of interest and study on the impact that instructional scaffolding has on primary school children's reading comprehension and motivation. As a pedagogical strategy, instructional scaffolding attempts to offer students customized help as they interact with novel ideas or assignments, progressively reducing that support as students gain more autonomy and mastery. Scaffolding tactics like think-aloud, visual organizers and guided reading can help students navigate difficult texts, expand their vocabulary, and improve comprehension strategies when it comes to reading comprehension.

Research indicates that instructional scaffolding, by providing students with the necessary tools to comprehend challenging texts, might enhance their reading comprehension. Scaffolding helps pupils increase their comprehension and self-assurance in handling difficult reading materials by breaking down activities into manageable steps. Furthermore, scaffolding may offer a secure and supportive learning environment where kids are inspired to take risks and investigate innovative ideas, which will boost their interest in taking part in reading exercises.

Instructional scaffolding is essential for supporting literacy development and cultivating a love of reading among elementary school pupils, who are still acquiring the fundamentals of reading. Teachers can address particular areas of difficulty and assist students in making meaningful connections between new information and their past knowledge by offering focused guidance that is customized to meet each student's requirements. Moreover, by showing children that they can overcome reading difficulties with hard work and persistence, scaffolding strategies might improve their self-efficacy views.

It is crucial to understand, nevertheless, that a variety of factors, including students' prior knowledge, learning preferences, and sociocultural backgrounds, may affect how successful

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instructional scaffolding is. It also takes careful planning, teaching experience, and continuous evaluation to put scaffolding ideas into practice so that help is adequately scaffolded and progressively fades as students gain mastery. Despite these difficulties, the research points to instructional scaffolding as a potentially useful strategy for raising primary students' motivation and reading comprehension. For scaffolding techniques in primary education to be further improved and optimized, more research and professional development initiatives are required.

The results displayed in verify the distribution of experimental groups in the both the pre- and post-test. This is demonstration by the two tests, which show significant results ($p>.05$), for experimental group is pre- and post-tests. We were able to assess the difference using the independent and pair sample t-test thanks to these findings.

Demonstrates that both tests used to verify the data normality are statistically significant ($p>.05$), suggesting that the selected sample has a normal distribution. As a result, the pre-test results are roughly normally distributed.

The study's findings validated the early hypotheses that scaffolding improves students' reading comprehension test scores. According to Walqui (2006), Mehdian (2009), Pishghadam and Ghardiri (2011), and other earlier research, these results support the idea that scaffolding can enhance internal learner characteristics like motivation, which can result in complete involvement from students.

The study found that implementing a scaffolded cooperative classroom setting improved students' reading comprehension scores. Previous studies on second-language reading have found that scaffolding reading comprehension improves student comprehension (Cubukcu, 2008; Fung et al., 2003).

RECOMMENDATIONS

Based on the conclusions the following recommendations are made by the researcher.

1. Adopt the Gradual Release of Responsibility paradigm, which calls for teachers to provide a high degree of assistance initially, then reducing it as pupils demonstrate an understanding of the subject. This method helps students become more independent and confident in their ability to comprehend what they read.
2. Use a variety of scaffolding strategies, such as questioning, summarizing, predicting, and elaborating. These tactics can ensure that reading comprehension is approached in a way that is more inclusive by catering to different learning requirements and styles.
3. To assist students in understanding texts, use interactive digital tools, graphic organizers, and visual aids. These materials can help increase knowledge by making complex subject more approachable and simpler.
4. Create a risk-taking and effort-rewarding environment in the classroom that is safe and exciting. Praising constructive criticism and recognizing individual successes may make pupils more eager to engage with the reading materials.
5. Regularly train instructors on effective scaffolding techniques and how they impact reading comprehension and motivation. Giving instructors access to the newest methods can improve student outcomes and the standard of instruction.

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6. Use strategies for ongoing assessment to monitor students' motivation and reading comprehension. Make advantage of the knowledge to adjust your instructional scaffolding tactics and provide targeted interventions to students who need additional support.

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