



Modifying the Think Pair Share Technique based on the Metacognitive Reading Strategy to Enhance Students' Reading Comprehension

Suri Widhya Kesuma¹, Cucu Sutarsyah², Ari Nurweni³

¹Student of Master of English Education, University of Lampung, Indonesia

²Professor of English Education, University of Lampung, Indonesia

³Lecturer of English Education, University of Lampung, Indonesia

ABSTRACT: A more effective teaching approach often emerges when the limitations of one technique are addressed by integrating another. The Think-Pair-Share Technique, while valuable, has its limitations, which can be effectively mitigated by incorporating the Metacognitive Reading Strategy. This study aims to determine the significant difference in reading comprehension achievement between students taught using a modified Think-Pair-Share technique based on the Metacognitive Reading Strategy and those taught with the original Think-Pair-Share technique. Using a quasi-experimental research design and quantitative methods, the study involved two classes from SMA N 12 Bandar Lampung, each consisting of 30 students. Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 22. The results indicate that while both classes showed improvements in reading comprehension, the experimental group, which used the modified Think-Pair-Share technique based on the Metacognitive Reading Strategy, demonstrated a significantly greater improvement compared to the control group. The t-value is 4.625 with a significance level of 0.000, which is below the 0.05 threshold. Thus, it is concluded that the modified Think-Pair-Share technique based on the Metacognitive Reading Strategy significantly enhances students' reading comprehension.

KEYWORDS: Analytical Exposition Text, Group Discussion, Metacognitive Reading Strategy, Reading Comprehension, Think Pair Share Technique.

INTRODUCTION

Reading comprehension remains a significant challenge for students in Indonesia. Despite being taught reading from primary school, many students struggle with effective comprehension techniques (Kadevie et al., 2014). Hidayati (2018) demonstrates that students often fail to meet curriculum expectations and have difficulty understanding texts in real-world contexts. According to Prasetyono (2008), students' lack of interest in reading is influenced by both internal and external factors. Passive learners frequently depend on their teachers for support and guidance, requiring additional motivation and continuous instruction. These students often lack effective study habits and do not dedicate sufficient time to reading, which hampers their comprehension and understanding of the material. These challenges underscore the need for teachers to identify and implement effective teaching strategies to improve learning outcomes.

One technique that has shown promise for teaching reading is Think-Pair-Share (TPS). Developed by Lyman in 1981, TPS is a cooperative learning method that encourages student collaboration, enhances participation, and allows all students to engage actively. However, students encounter several challenges when using the TPS technique. These challenges include difficulties in understanding complex vocabulary during the thinking phase, problems with identifying central ideas during the pairing phase, and issues with maintaining focus and cooperation throughout the lesson. Additionally, the TPS method often lacks clear guidelines for students, leading to confusion and reduced interest in the text. As a result, students may spend time discussing irrelevant topics with their partners rather than engaging with the text effectively.

To address these issues, the researcher proposes modifying the Think-Pair-Share technique by integrating it with the Metacognitive Reading Strategy (MRS). MRS, developed by Flavell in 1979, involves regulating or monitoring cognitive strategies, including planning, monitoring, and evaluating. According to William and Atkins (2009), metacognition plays a crucial role in reading comprehension. Metacognitive instruction aims to enhance readers' awareness of their own thinking processes during reading. The researcher hypothesizes that incorporating MRS into the TPS technique will address its shortcomings. This study aims to determine



whether there is a significant difference in reading comprehension between students taught using the modified Think-Pair-Share technique based on MRS and those taught using the original TPS method.

LITERATURE REVIEW

Snow (2002) defines reading comprehension as the process of simultaneously extracting and constructing meaning through interaction with written language. According to Nuttall (1982), effective reading comprehension involves five key aspects: identifying the main idea, locating references, making inferences, understanding detailed information, and grasping vocabulary. Teaching reading comprehension involves guiding students to understand specific reading materials through targeted techniques. Sapsuha (2013) found that using the Think-Pair-Share (TPS) technique in teaching reading significantly improved students' comprehension and engagement. This suggests that the TPS technique is effective for enhancing students' reading skills and maintaining their interest in learning.

Paris and Winograd (1990) describe metacognitive knowledge in terms of declarative, procedural, and conditional knowledge. Declarative knowledge pertains to what one knows, procedural knowledge refers to how one thinks, and conditional knowledge addresses when and why to apply specific strategies.

In this research, the Think-Pair-Share technique is modified using the Metacognitive Reading Strategy (MRS) to provide clearer steps and improve the learning process. Integrating MRS with TPS aims to enhance both reading comprehension and metacognitive awareness. Metacognitive strategies involve reflecting on one's own thinking processes and understanding the cognitive steps involved in reading. The modified TPS technique includes stages such as planning-think, monitoring-pair, and evaluating-share. The table below outlines the differences between the original TPS and the modified version.

Table 1. Original Think Pair Share and Modified Think Pair Share based on Metacognitive Reading Strategy

Think Pair Share	Think Pair Share based on Metacognitive Reading Strategy
a. Think : After the topic or question is given, students are asked to think about their answer or opinion individually. They are given time to ponder questions, process information, and gather their own ideas.	a. Firstly, planning (mrs) and thinking (tps). The teacher need to prepare and select the text. The teacher chooses a text that aligns with the students' reading level and learning objectives. Before the activity, the teacher introduces the metacognitive reading strategies to the students to focus on, such as predicting, questioning, clarifying, summarizing, and making connections. Then the students have to preview the text. This could involve identifying specific information, understanding a concept, or connecting the text to students' prior knowledge. The teacher also encourages them to skim headings, subheadings, and any visual elements like images, graphs, or charts and ask them to make predictions about what the text might be about based on their preview.
b. Pair : After individually thinking, students are paired with one or two classmates. In their pairs, students share their ideas, listen to each other, and discuss their answers to a given question or topic. This process allows students to gain new perspectives, argue, or complement their understanding.	b. Secondly, monitoring (mrs) and pairing (tps). In this stage, the teacher pairs up the students and assigns them for two roles: Reader and Observer. The Reader reads a designated section of the text while the Observer monitors and takes notes on the reader's use of metacognitive strategies. Then, the reader uses specific metacognitive reading strategies while reading, such as asking questions, making connections, or summarizing key points to answer the questions of the text.
c. Share : After discussing in pair, students are then asked to share their ideas with the larger group. A representative from each pair can be asked to speak in front of the class, or they can discuss with the larger group. During sharing, students can convey their ideas, listen to thoughts from other students, and broaden their understanding of the topic discussed.	c. The last stage is evaluating (mrs) and sharing (tps). After the Reader finishes reading the assigned section, the pair should engage in a brief discussion to evaluate their point of view about the text. The Reader should share the metacognitive reading strategies they employed, the challenges they faced, and how the strategies affected their comprehension. After that they read once more the questions and the answers to make sure that they have right thoughts before they share them to the class. Then, one of the pair comes in front of the class to tell the other students about what they have discussed in their group.



An analytical exposition text was utilized during the learning process. According to Zuliani (2021), an analytical exposition is a type of text designed to argue that a particular case or point is valid. The social function of an analytical exposition text is to persuade the reader or listener of the validity of the argument presented (Gerot & Wignell, 1994). When students understand that a text is written with a specific purpose and recognize the features that support this purpose, they can more easily acquire new information from the text.

METHODS

This study employs a quasi-experimental design and uses a quantitative method. The aim is to determine whether there is a significant difference in students’ reading comprehension between those taught using the modified Think-Pair-Share (TPS) technique based on the Metacognitive Reading Strategy (MRS) and those taught using the original TPS technique. Data analysis was performed using an Independent Samples T-Test with the Statistical Package for the Social Sciences (SPSS) version 22. The subjects of the study were two classes from SMA N 12 Bandar Lampung, each consisting of 30 students, designated as the control and experimental groups. Data were collected using a reading test, which served as both the pre-test and post-test. The test, consisting of multiple-choice questions based on texts, assessed five types of reading skills: identifying the main idea, finding supporting details, locating references, making inferences, and understanding vocabulary (Nuttall, 1982). Following the pre-test, students in the experimental class received instruction using the modified TPS technique based on MRS, while students in the control class were taught using the original TPS technique. After the treatments, test scores were analyzed to determine the mean differences between pre-test and post-test scores within each class, as well as between post-test scores of the experimental and control groups.

FINDINGS AND DISCUSSIONS

The data were analyzed using an Independent Samples T-Test to determine whether there was a significant difference in reading comprehension between students taught with the modified Think-Pair-Share (TPS) technique based on the Metacognitive Reading Strategy (MRS) and those taught with the original TPS technique. The results are detailed below:

Table 2. Scores in The Experimental Class

Experimental Class	Mean	Maximum Score	Minimum Score
Pre-test	45.00	64	34
Post-test	62.93	80	54

Based on the table above, there was an increase in scores from the pre-test to the post-test in the experimental class. The mean score for the post-test was 62.93, which is higher than the mean score of 45.00 on the pre-test. To further clarify these findings, a t-test was conducted. The results are presented below:

Table 3. Independent Samples Test in The Experimental Class

		Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	(2- Mean Difference	Std. Error Difference	Lower	Upper
Result	Equal variances assumed	.213	.646	10.825	58	.000	17.933	1.657	14.617	21.250
	Equal variances not assumed			10.825	57.457	.000	17.933	1.657	14.616	21.250



From the table above, the mean difference between the pre-test and post-test is 17.933. The t-value is 10.825, with a significance level of 0.000, which is below the 0.05 threshold. These results indicate a significant difference in the students' reading achievement between the pre-test and post-test in the experimental class, where the modified Think-Pair-Share (TPS) technique based on the Metacognitive Reading Strategy (MRS) was applied.

Table 4. Scores in The Control Class

Control Class	Mean	Maximum Score	Minimum Score
Pre-test	45.20	60	34
Post-test	55.53	70	44

Looking at Table 4, it is evident that there is also an increase in the students' scores in the control class from the pre-test to the post-test. The mean score for the pre-test is 45.20, with a minimum score of 34 and a maximum score of 60. The mean score for the post-test is higher than that of the pre-test, indicating that the original Think-Pair-Share technique also improved students' scores. This improvement is supported by the t-test results shown below.

Table 5. Independent Samples Test in Control Class

		Levene's Test for Equality of Variances		t-test for Equality of Means		95% Confidence Interval of the Difference				
		F	Sig.	t	Df	Sig. (2-tailed)	(2-Mean Difference)	Std. Error Difference	Lower	Upper
Result	Equal variances assumed	.082	.776	6.198	58	.000	10.333	1.667	6.996	13.671
	Equal variances not assumed			6.198	57.859	.000	10.333	1.667	6.996	13.671

From the table above, it is evident that there are varying scores among the 30 students in both the pre-test and the post-test. The mean score for the post-test is 55.53, compared to 45.20 for the pre-test, resulting in a mean difference of 10.333. Additionally, the t-value is 6.198 with a significance level of 0.000, which is below the 0.05 threshold. Therefore, it can be concluded that there is a significant improvement in students' reading comprehension in the control class using the original Think-Pair-Share (TPS) technique.

Table 6. Scores of Post-tests in Experimental and Control Classes

Class	Post-test	Increase
Experimental	62.93	17.93
Control	55.53	10.33

Examining the table above, it is clear that the scores for the experimental class are higher than those for the control class. The increase in scores for the experimental class is 17.93, compared to 10.33 for the control class. This indicates that the modified Think-Pair-Share technique had a more significant impact on the students' scores in the experimental class than the original technique had on the control class. To further substantiate this finding, a t-test was conducted. The results are provided below.



Table 7. Independent Samples T-Test in Experimental and Control Class

		Levene's Test for Equality of Variances					t-test for Equality of Means		95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Result	Equal variances assumed	.079	.779	4.625	58	.000	7.400	1.600	4.197	10.603
	Equal variances not assumed			4.625	57.940	.000	7.400	1.600	4.197	10.603

In this study, the post-test scores of the experimental and control classes were compared. As shown, the mean score for the post-test in the experimental class was 62.93, whereas in the control class it was 55.53. The mean difference between the two classes was 7.40, indicating that the experimental class achieved a higher score than the control class. Furthermore, the t-value was 4.625 with a significance level of 0.000, which is below the 0.05 threshold. This suggests that the experimental class showed a significantly greater improvement compared to the control class. Thus, the hypothesis (H1) is accepted, demonstrating a significant difference in reading achievement between students taught using the modified Think-Pair-Share (TPS) technique based on the Metacognitive Reading Strategy (MRS) and those taught using the original TPS technique. This supports the conclusion that the modified TPS method yielded better results.

The research findings indicate that both classes improved their reading comprehension with their respective techniques. The control class, which used the original TPS, saw an increase of 10.33 points. This technique effectively engaged students, resulting in more correct answers and positive effects on reading comprehension. Observations revealed active participation, attentiveness, and increased interest in the control class, consistent with Sapsuha's (2013) findings on the effectiveness of TPS in enhancing reading skills and fostering interest.

While both classes benefited from the TPS technique, the experimental class using the modified technique showed a more significant improvement of 17.93 points. The incorporation of the metacognitive reading strategy addressed the limitations of the original TPS by enhancing students' awareness of their reading processes and strategies. This integrated approach provided more meaningful and relevant learning experiences, promoting deeper comprehension and improving reading skills.

Supporting this, Misa (2014) found that metacognitive strategies enhance students' comprehension of analytical exposition texts by improving their ability to identify topic sentences, main ideas, and supporting details. Additionally, Aebersold and Field (1997) emphasized the importance of developing metacognitive awareness for improving reading skills, as it enables students to monitor and adjust their comprehension strategies effectively. The modified TPS technique, incorporating metacognitive reading strategies, also encouraged critical thinking by prompting students to analyze and evaluate texts during discussions, leading to deeper understanding.

In summary, the modified Think-Pair-Share technique based on the metacognitive reading strategy outperformed the original TPS in enhancing students' reading comprehension. By optimizing group activities and engagement, the experimental class demonstrated increased interest and achieved significant improvements, as evidenced by their superior post-test performance compared to the control class. Therefore, it can be concluded that the modified TPS technique based on the metacognitive reading strategy is more effective than the original TPS in improving reading comprehension.

CONCLUSIONS AND SUGGESTIONS

The students in the experimental class engaged in learning with the modified Think-Pair-Share (TPS) technique, while those in the control class used the original TPS technique. The integration of these methods positively impacted students' reading comprehension, with the experimental class benefiting the most. The original TPS technique improved reading achievement in the



control class, but the modified TPS based on the Metacognitive Reading Strategy (MRS) significantly enhanced reading comprehension more than the original TPS.

Statistical analysis confirms a significant difference in reading comprehension between students taught with the modified TPS based on MRS and those taught with the original TPS. The modified TPS, integrating MRS, demonstrated superior effectiveness compared to the original TPS. The strength of the MRS addressed the weaknesses of the original TPS, proving that the combination of Think-Pair-Share and Metacognitive Reading Strategy is more effective in enhancing students' reading comprehension. This integration facilitates a better understanding of instructional materials, especially for analyzing analytical exposition texts, and promotes greater student engagement throughout the learning process. It encourages students to be aware of why and how they read texts and to apply this awareness in both learning activities and real-life situations.

Teachers play a crucial role as facilitators, helping students stay focused on the text and avoiding off-topic discussions. They should introduce a variety of real-world topics for analytical exposition texts to enrich the learning experience and promote meaningful engagement. Effective classroom management strategies are essential, particularly during group discussions, to ensure all students have the opportunity to participate actively.

Students are encouraged to embrace and utilize the modified TPS based on MRS to improve their reading comprehension skills. Active engagement in all stages of the learning technique is necessary to maximize learning outcomes and personal development. Given the specific context of this study at SMA N 12 Bandar Lampung, future research should replicate and expand upon these findings in diverse educational settings. Researchers could explore additional aspects of students' learning processes, such as motivation, for a more comprehensive understanding. Further investigation into integrating TPS and MRS with other pedagogical approaches may reveal additional synergies and optimize learning outcomes.

REFERENCES

1. Aebersold, J. and Field, M. 1997. *From Reader to Reading Teacher*. Cambridge: Cambridge University Press.
2. Gerot, L. and Wignell, P. 1994. *Making Sense of Functional Grammar: An Introductory*. Sydney: Antipodean Educational Enterprises.
3. Hidayati, D. 2018. *Students Difficulties in Reading Comprehension at The First Grade of SMAN 1 Darussalam*. Banda Aceh: Ar-Raniry State Islamic University.
4. Kadevie, S. S., Wijaya, B. and Novita, D. 2014. The Effectiveness of Teaching Reading Comprehension by Using Venn Diagrams Technique. *English Language Education Study Program of Teacher Training and Education Faculty of Tanjungpura University*, Pontianak.
5. Misa, M. 2014. The Use of Guided Metacognitive Strategy to Improve Students' Reading Comprehension. *Jurnal Pendidikan Humaniora*, Vol. 2 No. 4, Hal 304-310, Desember 2014.
6. Nuttall, C. 1982. *Teaching Reading Skill in a Foreign Language*. London: Heinemann Educational Books.
7. Paris, S. G., and Winograd, P. 1990. Promoting metacognition and motivation of exceptional children. *Rase*, Special Issue Article, 11(1), 7-15.
8. Prasetyono, D. S. 2008. *Rahasia Mengajarkan Gemar Membaca Pada Anak Sejak Dini*. Yogyakarta: Think Yogyakarta.
9. Sapsuha, S. and Bugis, R. 2013. Think Pair Share Technique to Improve Students' Reading Comprehension. *ICE-Ed conference. ELT Practices in Asia: Challenges and Opportunities*.
10. Snow, C. 2002. *Reading for Understanding (Towards an R&D Program in Reading Comprehension)*. Santa Monica: RAND.
11. Williams, J.P. and Atkins, J.G. 2009. The Role of Metacognition in Teaching Reading Comprehension to Primary Students. In D. J. Hacker, J. Dunlosky, & A. C. Graesser (Eds.), *Handbook of Metacognition In Education*. New York: Taylor & Francis.
12. Zuliani and Sakti, G. 2021. An analysis of students' ability in writing analytical exposition text. *Journal of English Language and Education*, 6(2), 1-12.

Cite this Article: Suri Widhya Kesuma, Cucu Sutarsyah, Ari Nurweni (2024). Modifying the Think Pair Share Technique based on the Metacognitive Reading Strategy to Enhance Students' Reading Comprehension. International Journal of Current Science Research and Review, 7(8), 6144-6149