

THE EFFECTIVENESS OF USING TWO STAY TO STRAY TECHNIQUES IN TEACHING READING COMPREHENSION FOR STUDENTS OF SMP IT IBNU SINA MERAUKE

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Abstract

This research examined the effectiveness of the Two Stay Two Stray (TSTS) technique in enhancing reading comprehension among students at SMP IT Ibnu Sina Merauke in the 2024/2025 academic year. This research employed pre-experimental research with one-group pretest-posttest. The sample was 28 students. Data were analyzed using descriptive statistics. In collecting the data, the researchers used a reading comprehension test in the form of multiple choice. Creating a multiple-choice question (MCQ) test with pre-test and post-test for assessing reading comprehension of narrative texts. The results demonstrated a statistically significant difference in students' reading comprehension between the pre-test with the result of mean score was 74.43 and post-test with the result of the mean score was 89.21. Furthermore, the research accepted the alternative hypothesis (H_1): the implementation of the Two Stay Two Stray technique significantly enhances students' reading comprehension skills. This implies that English teachers should use this technique to enhance the students' reading comprehension. However, the absence of a control group is a limitation of this research, and future research should address this limitation.

Keywords: *two stay two stray, reading comprehension, cooperative learning*

Introduction

English stands as a prominent language globally, and achieving proficiency in it paves the way for countless avenues in communication, learning, and professional growth (Gupta, 2019). For students learning English as a foreign language, the journey encompasses not just grasping the grammar and vocabulary, but also immersing themselves in the cultural subtleties and contexts that shape the language's use. This comprehensive approach empowers students to utilize English proficiently in everyday contexts, whether for academic endeavors, travel experiences, or social engagements (Hossain, 2024). In Indonesia, English is mainly taught as a foreign language instead of being considered a second language. This indicates that English is primarily acquired in

educational environments and is not frequently utilized in everyday interactions (Zein et al., 2020).

One of the fundamental elements of acquiring English is reading comprehension. Reading comprehension is an essential ability that significantly contributes to a student's academic achievements and ongoing personal growth (Elleman & Oslund, 2019). It involves the ability to decode text and understand, interpret, and critically analyze the information presented (Amrullah et al., 2024). Despite its importance, many students struggle with reading comprehension, which can hinder their overall academic performance (Idulog et al., 2023). This challenge is particularly evident in English as a Foreign Language (EFL) contexts, where students must navigate the complexities of a new language while developing their reading skills (Habok & Magyar, 2019).

Many efforts have been made in teaching reading to the students and in recent years, educators have explored various instructional strategies to enhance reading comprehension (Koch & Sporer, 2017). One such strategy is the Two Stay Two Stray (TSTS) technique, a cooperative learning method designed to promote active engagement, peer interaction, and collaborative learning (Yusri et al., 2018). The TSTS technique involves students working in small groups, where two members stay to share information while the other two stray to gather information from other groups (Saputra, 2016a). This way can foster a deeper understanding for students and they can take an active role in their learning process Two Stay Two Stray (TSTS) is a cooperative learning model where students work in small groups, typically of four members (Apriakanti et al., 2020). In this model, two members of each group stay at their station to explain their group's work, while the other two members stray to other groups to gather information and insights. After a set period, the straying members return to their original group and share what they have learned (Puspita et al., 2021).

Previous research has demonstrated the effectiveness of TSTS in various educational settings. For example, a study conducted at MTs Hidayatussibyan NW Sengkerang found that students taught using the TSTS technique significantly improved their reading comprehension scores (Imran, 2020). Similarly, another research at SMPN Beutong Ateuh reported higher scores for students taught with TSTS compared to those taught using traditional methods (Nurwahidah, 2023). This research also has demonstrated the effectiveness of the TSTS technique in enhancing reading comprehension. By focusing on a different demographic, this research offered valuable insights into how the TSTS technique works with various groups of students. Conducting this research in a different educational environment or region can reveal how the TSTS technique adapts to diverse educational settings and cultural contexts.

At SMP IT Ibnu Sina Merauke, students have shown varying levels of proficiency in reading comprehension. Traditional teaching methods, which often emphasize individual work and teacher-centered instruction, may not fully address the diverse needs of students. There is a need to explore innovative teaching strategies that can enhance students' reading comprehension skills and make learning more engaging and effective. For SMP IT Ibnu Sina Merauke, implementing the TSTS technique is potentially lead to similar positive outcomes. By fostering a more interactive and engaging learning environment, students are likely to develop better reading comprehension skills and enjoy the learning process more. As further explanation, the Two Stay Two Stray is a good way to help students discuss, argue with one another, and fill in gaps in their understanding.

Method

This research employed pre-experimental research with a One-Group Pretest-Posttest Design. It involved a single group of students whose reading comprehension abilities were assessed before (pretest) and after (post-test) receiving the Two Stay Two Stray treatment. This research adopted Single-Stage Cluster Sampling, with a sample size of 28 students, chosen from a cohesive group, reflecting the research's small-scale and homogeneous population focus. The research focused on IX-grade students in one class for the academic year 2024/2025. All the samples

chosen can generalize the entire result of the research. For the place in conducting the research, it took place at SMP IT Ibnu Sina Merauke from October to November 2024.

The researchers conducted the data using a reading comprehension test with 15 multiple-choice questions (MCQ). Creating a multiple-choice question (MCQ) test with pre-test and post-test for assessing reading comprehension of narrative texts involves several steps such as; Identify Learning Objectives (specific aspects of reading comprehension want to assess (e.g., understanding main ideas, details, vocabulary, inferences, literary elements), select the narrative text (choose a narrative text that is appropriate for the students' reading level and aligns with the learning objectives), and develop questions.

As the data collection technique, the TSTS technique was implemented over four sessions, conducted once a week for one month, with each session lasting 60 minutes. During each session, students were divided into small groups of four members.

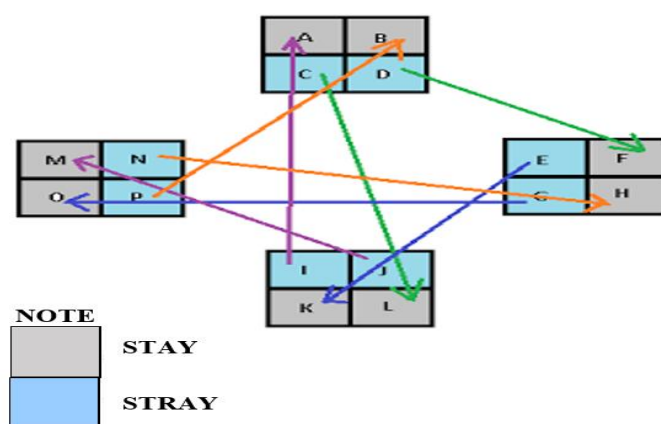


Figure 3. 1 TSTS Technique, (Rofiqoh, 2020)

The analysis of the data involved statistical methods to compare the pre-test and post-test scores. This approach helped determine the effectiveness of the intervention by highlighting any significant differences in performance. In this research, the researcher utilized IBM SPSS Statistics software to analyze the data collected from pre-test and post-test scores.

Result and Discussion

A. Result

The experimental class in this research underwent a unique instructional approach designed to enhance their reading comprehension skills. The Two Stay Two Stray technique involved students working in small groups where two members stayed to share information while the other two strayed to gather information from other groups. This cooperative learning strategy aimed to promote active engagement, critical thinking, and collaborative learning among students.

By comparing the pre-test and post-test scores of the experimental class, the researchers aim to determine the effectiveness of the TSTS technique. The experimental class's performance provided valuable insights into how this innovative technique influences students' reading comprehension. The findings from this research contributed to the broader understanding of effective teaching strategies and offer

practical recommendations for educators seeking to improve reading comprehension in their classrooms.

Table 1. Pretest and Posttest Summary

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Pretest	28	100.0%	0	0.0%	28	100.0%
Posttest	28	100.0%	0	0.0%	28	100.0%

The Case Processing Summary indicates that the data is complete with no missing values. This completeness ensures that the analysis will be accurate and reliable, as there are no gaps in the data. With all 28 students having valid pre-test and post-test scores, we can proceed with further statistical analysis to evaluate the effectiveness of the teaching method being studied.

Table 2. Descriptive Data of Pretest and Posttest

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	28	33.00	90.00	74.4286	15.25688
Posttest	28	60.00	100.00	89.2143	11.78938
Valid N (listwise)	28				

The descriptive statistics reveal that the mean post-test score is significantly higher than the mean pre-test score, indicating a substantial improvement in reading comprehension performance. The reduced standard deviation in the post-test scores suggests that the intervention helped to bring students' performance closer to the mean, reducing variability. This improvement indicates that the Two Stay Two Stray technique was effective in enhancing the students' reading comprehension.

Table 3. Normality Test of Pretest and Posttest

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.250	28	<.001	.833	28	<.001
Posttest	.201	28	.005	.834	28	<.001

a. Lilliefors Significance Correction

Both the Kolmogorov-Smirnov and Shapiro-Wilk tests indicate that the pre-test and post-test scores do not follow a normal distribution. This is evident from the significance values, which are all less than 0.05. As a result, we reject the null hypothesis that the data is normally distributed. Given that the data does not follow a normal distribution, non-parametric tests such as the Wilcoxon Signed-Rank test should be used for further

analysis instead of parametric tests like the paired t-test. This will ensure that the analysis is appropriate for the data's distribution characteristics.

Table 4. Paired T-test Result of Pretest and Posttest

Paired Test Result							
Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference	T-Value	df	P-Value
Pretest - Posttest	-14.7857	7.1704	1.3554	[-17.5609, -12.0105]	-11.7716	27	3.847e-12

The paired t-test results indicate that, on average, the posttest scores were higher than the pretest scores, with a mean difference of -14.7857. The extremely small p-value of 3.847e-12 further supports this finding, as it suggests that the observed difference is highly statistically significant. In other words, the likelihood that this difference occurred due to random variation is extremely low, providing strong evidence against the null hypothesis, which posits no significant difference between the two sets of scores.

The standard deviation of 7.1704 reflects the variability of the score differences, while the standard error of 1.3554 estimates the precision of the sample mean difference. Additionally, the 95% confidence interval of [-17.5609, -12.0105] suggests that we are 95% confident the true population mean difference lies within this range. This interval, which is entirely negative, further confirms that the posttest scores are generally lower than the pretest scores.

In summary, the mean difference and p-value provide distinct but complementary information. The mean difference quantifies the direction and magnitude of change between the pretest and posttest scores, while the p-value assesses the statistical significance of that change. Together, these results demonstrate that the observed difference is both substantial and statistically reliable.

B. Discussion

The purpose of this research was to assess the effectiveness of the Two Stay Two Stray (TSTS) technique in teaching reading comprehension for students of SMP IT Ibnu Sina Merauke during the academic year of 2024/2025. The findings from the pre-test and post-test scores, as well as the statistical analyses, provide valuable insights into the impact of this instructional technique.

The descriptive statistics revealed a significant improvement in students' reading comprehension scores from pre-test to post-test. The mean pre-test score was 74.43, while the mean post-test score increased to 89.21. This indicates a substantial enhancement in reading comprehension following the implementation of the TSTS technique.

The significant increase in post-test scores suggests that the TSTS technique is an effective instructional method for improving reading comprehension among students. The technique's cooperative nature likely contributed to this improvement, as it encourages active participation, peer learning, and critical thinking. By working in

groups, students were able to discuss and clarify their understanding of the reading material, leading to a deeper comprehension.

Previous studies have also highlighted the effectiveness of the TSTS technique in various educational settings. For instance, a research (Johnson & Johnson, 2018) found that cooperative learning strategies, including TSTS, significantly improved students' academic performance and social skills. Similarly, (Slavin, 2018) reported that students who participated in cooperative learning activities demonstrated higher levels of engagement and achievement compared to those in traditional classroom settings.

Another research (Kagan et al., 2019) emphasized the benefits of the TSTS technique in promoting critical thinking and problem-solving skills. His research concluded that students who engaged in TSTS activities were better able to analyze and synthesize information, leading to improved academic outcomes.

The results of this research have important implications for teaching practice at SMP IT Ibnu Sina Merauke and potentially other educational institutions. The TSTS technique can be considered a valuable addition to the repertoire of teaching strategies for reading comprehension. Teachers may find it beneficial to incorporate this technique into their lesson plans to foster a more interactive and engaging learning environment.

Moreover, the success of the TSTS technique highlights the importance of cooperative learning in enhancing students' academic performance. Educators should consider integrating more group-based activities and peer learning opportunities into their teaching methods to promote active engagement and deeper understanding of the subject matter.

The TSTS technique had several limitations that needed to be considered in its implementation in the classroom. One of the main drawbacks was that it required more time, especially if there were many groups and students needed additional time to fully understand the material. Moreover, student participation was often uneven, as some students relied on more active or knowledgeable group members, leading to an unequal distribution of understanding. This technique also presented challenges in classroom management, particularly with the movement of students between groups, which caused confusion or noise if not handled properly. In larger classes, implementing TSTS became more difficult because the teacher's control over discussions and student movement was limited. The success of this technique heavily depended on the teacher's ability to facilitate discussions, provide clear instructions, and ensure all students were actively engaged. There was also a risk of students losing focus during discussions or movements, resulting in a lack of in-depth exploration of the main topic. Additionally, this technique was not suitable for all types of material, as it was more effective for topics involving discussion or exploration and less effective for content that required direct explanation. Evaluating individual student understanding also became a challenge since the group-based nature of the technique made it harder to assess each student's comprehension accurately. These limitations required careful planning and adaptation to suit the needs of the students and the classroom context.

Conclusion

Two Stay Two Stray is one effective technique used in teaching reading comprehension. The cooperative nature of the TSTS technique encourages active participation, peer learning, and critical thinking, which are essential components for improving reading comprehension. The statistical analyses, including the Wilcoxon

Signed-Rank Test, provided strong evidence of the effectiveness of the TSTS technique. As the result, it demonstrated a statistically significant difference in students' reading comprehension between the pre-test for mean score was 74.43 and post-test for mean score was 89.21. The significant p-values and the absence of negative ranks and ties further support the conclusion that the TSTS technique is beneficial for students' reading comprehension.

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