

## **THE IMPACT OF THE PQRST METHOD ON ENHANCING THE READING COMPREHENSION SKILLS OF DEAF STUDENTS IN THE SEVENTH GRADE AT SLB B YRTRW SURAKARTA**

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### **Abstract**

Education plays a pivotal role in shaping the future of students, particularly those with special needs. Deaf students encounter challenges in language acquisition and reading comprehension due to hearing impairments that impede their ability to process verbal information. This study investigates the impact of the Preview, Question, Read, Summary, and Test (PQRST) method on enhancing the reading comprehension skills of deaf students in the seventh grade at the Special School for Deaf Children Yayasan Rehabilitasi Tuna Rungu Wicara (SLB B YRTRW) in Surakarta. A pre-experimental research design employing a one-group pretest-posttest approach was employed. Nine deaf students participated in the study, engaging in a series of reading comprehension activities utilising the PQRST method. Data collection was conducted through written and oral comprehension tests before and after the intervention. Statistical analysis employing the Wilcoxon Signed Rank Test was conducted to assess the method's effectiveness. The findings revealed a substantial improvement in students' reading comprehension scores following the implementation of the PQRST method. Students demonstrated enhanced capabilities in identifying main ideas, summarising texts, and answering comprehension questions. The structured approach of the PQRST method provided a systematic learning framework that supported students' cognitive processing and memory retention. This research underscores the significance of employing structured and interactive teaching methods to optimise the learning potential of deaf students.

**Keywords:** deaf students; PQRST method; reading comprehension

### **Abstrak**

Pendidikan berperan penting dalam membentuk masa depan siswa, termasuk mereka yang memiliki kebutuhan khusus. Siswa tunarungu mengalami kesulitan dalam pemerolehan bahasa dan membaca pemahaman akibat hambatan pendengaran yang menghalangi kemampuan mereka dalam memproses informasi secara verbal. Penelitian ini mengkaji pengaruh metode Preview, Question, Read, Summary, and Test (PQRST) dalam meningkatkan kemampuan membaca pemahaman siswa tunarungu kelas VII di Sekolah Luar Biasa Tunarungu Yayasan Rehabilitasi Tuna Rungu Wicara (SLB B YRTRW) Surakarta. Penelitian ini menggunakan desain pre-eksperimental dengan pendekatan one-group pretest-posttest. Sebanyak sembilan siswa tunarungu berpartisipasi dalam penelitian ini dan mengikuti serangkaian kegiatan membaca pemahaman menggunakan metode PQRST. Data dikumpulkan melalui tes pemahaman tertulis dan lisan sebelum dan sesudah intervensi. Analisis statistik menggunakan Wilcoxon Signed Rank Test dilakukan untuk menentukan efektivitas metode ini. Hasil penelitian menunjukkan adanya peningkatan signifikan dalam skor membaca pemahaman siswa setelah penerapan metode PQRST. Siswa menunjukkan peningkatan kemampuan dalam mengidentifikasi ide pokok, merangkum teks, dan menjawab pertanyaan pemahaman. Pendekatan terstruktur dari metode PQRST memberikan kerangka pembelajaran yang sistematis, mendukung proses kognitif serta daya ingat siswa. Penelitian ini menekankan pentingnya penggunaan metode pengajaran yang terstruktur dan interaktif untuk mengoptimalkan potensi belajar siswa tunarungu.

**Kata kunci:** metode PQRST; pemahaman bacaan; siswa tunarungu

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## INTRODUCTION

Education plays a pivotal role in enhancing the quality of human resources. Inclusive education provides equitable opportunities for all students, including those with special needs (ABK), enabling them to attain optimal learning outcomes. One group of ABK that necessitates specialised attention in learning is deaf students. Deaf students encounter challenges in comprehending language and communication due to hearing impairments, which directly impact their ability to comprehend written texts (Gaggioli & Sannipoli, 2022). Consequently, reading comprehension education presents a distinct obstacle for deaf students within the context of special education.

Reading comprehension is an essential educational skill that significantly influences students' capacity to acquire information and comprehend the content of texts. It serves as a crucial assessment of academic success and forms the foundation of learning across all subject domains. (Musti et al., 2023). However, deaf students frequently encounter substantial difficulties in comprehending intricate sentence structures, identifying the primary ideas, and effectively summarising reading content. These challenges are multifaceted and originate from a diverse interplay of linguistic and cognitive factors (Dianastiti et al., 2024). Consequently, students with hearing impairments require more structured and visually-based learning methodologies (Wei & Bhattacharya, 2023).

One proven method for enhancing reading comprehension skills is the Preview, Question, Read, Summary, and Test (PQRST) approach. This method instructs students to engage in text previewing, formulate inquiries, read comprehensively, summarise the reading's contents, and assess their understanding of the text (Ismail et al., 2024). The PQRST method has been extensively applied in various research studies and has demonstrated substantial benefits in improving students' memory and reading comprehension abilities. (Halik et al., 2022). By employing this method, deaf students can enhance their focus on comprehending the reading's content through a systematic approach that incorporates various cognitive and linguistic aspects.

This study investigates the efficacy of the PQRST method in enhancing the reading comprehension abilities of deaf students enrolled in the seventh grade at SLB B YRTRW Surakarta. Initial observations indicate that deaf students possess the capacity to recognise letters and sound words, yet they encounter challenges in comprehending the content of the reading material. The current teaching methods employed by educators predominantly rely on lecture-based approaches, which fail to adequately address the visual communication requirements of deaf students. Consequently, a more interactive and cognitive strategy-based approach is imperative to enhance learning outcomes. Therefore, the primary objective of this study is to contribute to the field of special education by providing alternative learning methods that demonstrate enhanced effectiveness in improving the reading comprehension skills of deaf students.

Addressing this gap, the present study positions the PQRST method as a structured cognitive framework that systematically supports meaning construction through staged comprehension processes

aligned with the visual learning characteristics of deaf students. By empirically evaluating the implementation of PQRST within a visually supported instructional environment, this study extends prior research beyond vocabulary and decoding-focused interventions toward higher-order comprehension development. Accordingly, the novelty of this research lies in its focus on strategy-based comprehension training for deaf learners, the integration of metacognitive reading processes with visual instructional supports, and the provision of context-specific empirical evidence from a special education setting in Indonesia. Through this approach, the study contributes to a more comprehensive understanding of how structured cognitive strategies can address persistent reading comprehension challenges among deaf students. This study evaluates the impact of implementing the PQRST method on the reading comprehension abilities of deaf students. The findings of this study are anticipated to serve as a valuable resource for educators, researchers, and special education practitioners in developing more adaptable and effective learning strategies tailored to the needs of students with hearing impairments.

## **METHOD**

The methodology employed in this study adheres to a quantitative approach with a pre-experimental design employing a one-group pretest-posttest design. The initial phase of this study involves the administration of a pretest to assess the subject's initial reading comprehension proficiency. Subsequently, the PQRST method is implemented as a treatment intervention to enhance reading comprehension skills. Finally, a posttest is conducted to evaluate the impact of the PQRST method on the subject's reading comprehension abilities. The sample for this study comprises nine (9) class VII students enrolled in SLB B YRTRW Surakarta during the 2023/2024 academic year. The students were identified as follows:

Table 1. Student Identity

<b>No</b>	<b>Student initials</b>	<b>Gender</b>
1	NU	M
2	DZ	M
3	TA	M
4	CA	F
5	RA	M
6	SA	M
7	RE	M
8	AZ	F
9	DA	F

The research data were collected during the pretest and posttest using the same questions, totalling 11 items. These items consist of 10 written questions of the short-fill-in type and one oral

question taken from a folklore text entitled “Terjadinya Telaga Warna.” Short-fill-in type questions are questions in the form of incomplete statements that must be completed with one or two words (Azwar, 2016). This type of question can minimise the possibility of students answering correctly solely due to “luck.” The questions are arranged based on the grid created while still adhering to the curriculum, as follows:

Table 2. Grid of Reading Comprehension Material Questions

Competencies Core	Basic competencies	Question Indicator	Item Number	Test Types
Extracting information from simple story texts, paying attention to appropriate word choices	Presenting simple story texts, paying attention to the right choice of words	Answer questions based on the content of the reading	1, 2, 3, 4, 5, 6, 7, 8, 10	Written Test
		Determine the main sentence	9	
		Restate the contents of the reading in your own words	11	Oral test

The written questions are meticulously crafted and assessed for a duration of 30 minutes, employing the following scoring system:

Table 3. Written Question Scoring System

Question Items	Score	Information
1-10	2	Answer correctly according to the entire content of the reading
	1	Answering part of the text according to the overall content of the reading
	0	Cannot answer questions according to the content of the reading at all
<b>Total Writing Score</b>		<b>20</b>

Table 4. Scoring System for Oral Exams

Question Items	Score	Information
11	3	Answer according to the entire content of the reading according to the correct flow
	2	Answering according to the entire contents of the reading with an incorrect flow Answering with the correct flow but the details of the reading are not quite right
	1	Answer some of the questions in the reading
	0	Can't answer questions properly at all
<b>Total Oral Score</b>		<b>3</b>
<b>Total Written and Oral Score</b>		<b>23</b>

The total score is subsequently converted into a numerical value using the formula

$$\text{Score} = \frac{\text{Total Score}}{\text{Total Question}} \times 100$$

Based on this formula, calculations are performed to determine the range of values that students can achieve. The range of values is as follows:

$$\text{Lower Score} = \frac{0}{23} \times 100 = 0$$

$$\text{Higher Score} = \frac{23}{23} \times 100 = 100$$

The final test scores are then categorised into distinct groups to rank individuals based on their performance, with the following ranges:

Table 5. Assessment Categories

<b>Value Range</b>	<b>Predicate Range</b>	<b>Category</b>
$88 \leq X \leq 100$	A	Very high
$76 \leq X < 88$	B	High
$64 \leq X < 76$	C	Enough
$52 \leq X < 64$	D	Low
$X < 52$	E	Very Low

Data analysis was performed using descriptive statistics to ascertain the distribution of pretest and posttest scores. Furthermore, the Wilcoxon Signed Rank Test was employed to ascertain the statistical significance of the difference in outcomes prior to and post-treatment.

## RESULTS AND DISCUSSION

The statistical data pertaining to the comparison of pretest and posttest scores in reading comprehension skills among Class VII deaf students enrolled at SLB B YRTRW Surakarta is presented in Table 6.

Table 6. Statistical Data of Pretest and Posttest Values

	<b>Pretest Results</b>	<b>Posttest Results</b>
Mean	48.00	85.00
Minimum	39.00	70.00
Maximum	57.00	100.00
Range	18.00	30.00
Sum	429.00	765.00

Based on the statistical data presented in Table 6, it is evident that there is a significant difference between the pretest and posttest scores. The average score before treatment was 48, while the average score after treatment was 85. Furthermore, the lowest score before treatment was 39, which

increased to 70 after treatment. Similarly, the highest score before treatment was 57, which increased to 100 after treatment. As per Table 6, it is evident that there has been an increase in the average score of both the pretest and posttest. The individual differences between the pretest, posttest, and average scores are presented in Table 7.

Table 7. Differences in Pretest, Posttest, and Average Values

No	Student Initials	Pretest Score	Posttest Value	Difference in Value
1	NU	52	100	48
2	DZ	43	91	48
3	TA	57	96	39
4	CA	43	78	35
5	RA	52	91	39
6	SA	52	70	18
7	RE	52	87	35
8	AZ	39	74	35
9	DA	39	78	39
<b>Average</b>		48	85	37

The aforementioned data is subsequently presented in the form of a graph to facilitate the visualisation of the augmentation in the value attained by students. The aforementioned graph depicts the pretest, posttest, and average student scores.

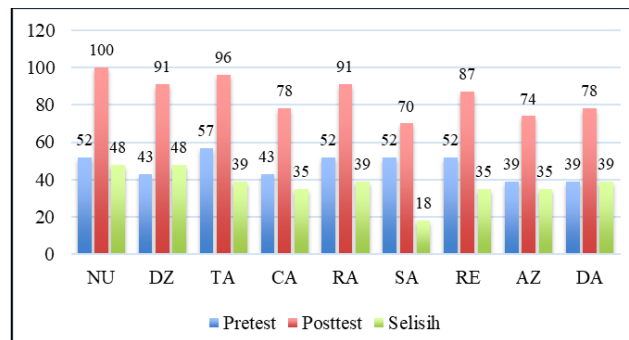


Figure 1. Graphical representation of Pretest, Posttest, and Average Value Data

Data analysis revealed a substantial enhancement in the reading comprehension proficiency of deaf students following the implementation of the PQRST method. The pretest score of 55.4 was significantly elevated to 78.9 in the posttest.

Table 8. Calculation of Data Analysis of the Wilcoxon Signed Rank Test

		<i>Ranks</i>		
		<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
<i>Posttest</i>	<i>Negative Ranks</i>	0 <sup>a</sup>	0.00	0.00
<i>- Pretest</i>	<i>Positive Ranks</i>	9 <sup>b</sup>	5.00	45.00
		0 <sup>c</sup>		
<b>Total</b>		9		

Based on the data presented in Table 8, it is evident that no students experienced a decline in their scores from the pretest to the posttest (Negative rank). Furthermore, no students achieved the same pretest and posttest scores (Ties). Notably, all nine students demonstrated an improvement in their scores from the pretest to the posttest (Positive rank).

Table 9. Results of the Wilcoxon Signed Rank Test

<i>Test Statistics</i>	
<i>Posttest – Pretest</i>	
Z	-2.687 <sup>b</sup>
Asymp. Sig. (2-tailed)	0.007

Based on the Wilcoxon Signed Rank Test analysis of the pretest and posttest values presented in table 10, an Asymp.Sig (2-tailed) value of 0.027 was obtained. This value was subsequently compared against the following significance levels:

Table 10. Conclusion of Research Hypothesis Test Results

<b>Hypothesis</b>	<b>Asymp.Sig (2-tailed)</b>	<b>Significance level</b>	<b>Conclusion</b>
Null Hypothesis (H <sub>0</sub> ): The use of the PQRST method does not affect the reading comprehension ability of deaf students in grade VII at SLB B YRTRW Surakarta.	0.007	0.05	H <sub>0</sub> was rejected
Alternative Hypothesis (H <sub>A</sub> ): The use of the PQRST method has an influence on the reading comprehension ability of deaf students in grade VII at SLB B YRTRW Surakarta.	0.007	0.05	H <sub>A</sub> accepted

Based on the data in Table 6, the average pretest score is 48, and the average posttest score is 85. Consequently, it can be concluded that the average posttest score is significantly higher than the average pretest score. Subsequently, a hypothesis test was conducted, as outlined in Table 9. The Asymp.Sig (2-Tailed) value obtained was 0.007, which falls below the predetermined significance level ( $\alpha$ ) of 0.05. Therefore, it can be asserted that there exists a substantial difference between the pretest and posttest scores. The findings of the hypothesis test subsequently served as the foundation for formulating the hypothesis of the study, which states: “The utilization of the PQRST method has a discernible impact on the reading comprehension abilities of deaf students enrolled in grade VII at SLB B YRTRW Surakarta.” This hypothesis can be accepted.

This study contributes to advancing cognitive strategy-based learning methodologies in the special education domain. Furthermore, it enriches the existing literature on the efficacy of the PQRST method in improving reading comprehension. From an inclusive education perspective, this study contributes to the science of adaptive pedagogy by demonstrating that structured cognitive reading strategies can be effectively implemented in special education settings to address persistent literacy challenges among deaf learners. Unlike many interventions that primarily target vocabulary or decoding skills, this research provides evidence that metacognitive comprehension training can significantly enhance meaning-making abilities in written language. Additionally, the study offers context-specific empirical evidence from an Indonesian special education setting, addressing the limited availability of regional data on evidence-based literacy interventions for deaf students. These findings support integrating structured cognitive strategies into inclusive and special education curricula to promote equitable learning outcomes.

Overall, this study contributes theoretically by strengthening the evidence base for strategy-based comprehension instruction in deaf education and contributes practically by providing an implementable instructional model that aligns with the visual and cognitive learning characteristics of deaf students. The results highlight the importance of shifting from teacher-centered instruction toward structured, strategy-oriented learning environments to support literacy development in inclusive education settings.

## **CONCLUSION**

The empirical findings of this study demonstrate the efficacy of the PQRST method in enhancing deaf students' reading comprehension. The substantial increase in posttest scores underscores the potential of this approach to help students comprehend texts more deeply through a systematic sequence of stages. Future research is recommended to expand the scope and methodological rigor of investigations on strategy-based reading interventions for deaf learners. Longitudinal studies are needed to examine the sustainability of PQRST effects on reading comprehension and broader academic outcomes over time. Experimental studies with larger and more diverse samples across different educational levels would strengthen generalizability and allow comparative analysis with other

evidence-based literacy interventions. Additionally, future studies should explore integrating PQRST into multimodal, technology-assisted learning environments, such as visual digital texts or interactive learning platforms, to optimize accessibility for deaf students. Investigating mediating variables—including vocabulary knowledge, metacognitive awareness, and visual processing skills—would also provide deeper insight into the mechanisms through which structured cognitive strategies influence comprehension. Finally, research conducted across varied inclusive education settings in Indonesia would contribute to the development of context-responsive instructional models that support equitable literacy outcomes for students with hearing impairments.

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