The Effect of the Reading Aloud Strategy on Improving Reading Comprehension in Binjai State High School Students

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Abstract

Reading comprehension of high school students in 21st century learning is one of the key skills in education that affects students' overall academic ability. Effective learning strategies in improving reading comprehension are an important focus in educational research. One of the strategies that has been discussed a lot is "Reading Aloud" or reading the text aloud. This study aims to explore the effectiveness of the Reading Aloud strategy in improving students' reading comprehension in 3 Binjai State High Schools: SMA Negeri 1, SMA Negeri 5, and SMA Negeri 7. This study is a quantitative research using Posttest-Only Design with Nonequivalent Groups. The number of samples in this study is 120 students spread across 3 State High Schools in Binjai City. The sampling procedure in this study uses Systematic Random Sampling. Data collection in this study uses a reading comprehension improvement test. This study uses the Independent Sample T-Test analysis technique with an increase effectiveness test using N-Gain. The results of this study show that there is an influence of the Reading Aloud strategy can increase students' reading comprehension with a significance value of 0.013. Furthermore, the results of this study show that the Reading Aloud strategy is quite effective in improving students' reading comprehension in the medium category with a gain value of 0.56 in the experimental group.

Keywords: *Reading Aloud, Reading Comprehension Improvement, Reading Strategies Structured.*

Introduction

Reading ability has a significant contribution in achieving educational goals because the knowledge a person has is always closely related to reading activities (Hui et al., 2022; Ninsuwan, 2015). Thus, the habit of reading will strengthen students' knowledge foundation, open the door to deeper understanding, and prepare them to face the challenges of the ever-evolving times (Bakhshalinezhad, 2015; Frankel et al., 2016; Tarim, 2015).

Based on the results of PISA 2018, countries such as Beijing, Shanghai, Jiangsu, and Zhejiang (China) and Singapore recorded much higher reading scores than other countries/economies participating in the assessment (OECD, 2019). On the other hand, countries like Estonia, Canada, Finland, and Ireland show the best performance in reading among OECD countries (Crato, 2020). This achievement shows extraordinary achievements in the field of literacy in various parts of the world.

However, the situation is different for Indonesia. The results of a study from Central Connecticut State University in 2016 showed that Indonesia ranked the second lowest out of 61 countries in terms of literacy, only above Botswana, a country in South Africa. These findings are partly based on the results of the Indonesia National Evaluation Program (INAP) or AKSI (Indonesia Student Ability Assessment), which aims to evaluate students' abilities in reading, mathematics, and science. The results of INAP in 2016 show that the literacy ability of Indonesia students is still a serious concern, with the majority of students falling into the poor category, namely 77.13% for math, 76,31% for science, and 46.83% to read (Fatmawati, 2019).

From 34 provinces in Indonesia, 9 provinces (26%) have moderate literacy activities, 24 provinces (71%) have low literacy activities, and 1 province (3%) has very low literacy activities (Puslitjakdikbud, 2019). The majority of provinces have low levels of literacy activity, while none of the provinces have achieved high or very high levels of literacy activity. Based on the calculation of the provincial index released by the source,

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among the regions in Sumatra, North Sumatra shows the number 35,73, which means that North Sumatra has a low literacy level. This reflects the condition of literacy that needs to be considered in North Sumatra. Low literacy can have a significant impact on various aspects of people's lives, including educational, economic, and social (Kemendagri.go.id, 2021).

Based on these data, it can be concluded that the education system in Indonesia has not been fully able to realize the concept of schools as learning organizations that aim to produce students who are proficient in reading, as well as encourage them to become lifelong learners (Jiménez Pérez et al., 2024). This shows the need for changes in educational practices to increase their effectiveness in advancing students' literacy skills and encouraging the spirit of sustainable learning.

In dealing with this situation, the Ministry of Education and Culture has initiated the School Literacy Movement (GLS) as a forum to encourage reading activities, involving all relevant parties in the field of education. One of the State High Schools in Binjai City, North Sumatra, has carried out the North Sumatra Reading Movement. This activity was held in accordance with the Circular Letter of the Governor of North Sumatra No. 045/10267/2022, dated September 5, 2022 (Ismail et al., 2023).

The North Sumatra Reading Movement involves all students, teachers, and employees of the State High School to read books together. The purpose of this activity is to increase the love for books, so it is hoped that a new spirit will emerge in reading, known as the spirit of SaHaSaBu (One Day One Book). Through this effort, it is hoped that a more dynamic and open learning environment will be formed, as well as increase reading interest among students and educators.

Although GLS has been in effect since 2013 through the Ministerial Regulation, but students' reading interest has still not experienced a significant increase. Therefore, additional strategies are needed to increase students' interest in reading, especially in State High Schools. One of the recommended strategies is the use of the Reading Aloud method, which aims to strengthen students' reading habits (Bao et al., 2020).

Reading Aloud is a method of reading orally or aloud aloud. It involves the reader reading the text clearly and expressively to the listener, often in a teaching or performance context (Nurlaelawati & Dzulqodah, 2014). By applying the Reading Aloud method, it is hoped that it can make a positive contribution to achieving GLS's goals in improving the reading and writing culture, both in the school environment and outside of school. This step is a real effort to improve student literacy and strengthen the foundation of education in Indonesia (Marmoah & Poerwanti, Suharno, 2022).

Research conducted by Kaharuddin et.al revealed that the application of the Reading Aloud method effectively increases students' interest in reading (Kaharuddin et al., 2023). The enthusiasm of students is proof of the success of this method. However, to maximize its impact, it is necessary to implement strategies that are in accordance with the principles of Reading Aloud theory (Szterman & Friedmann, 2020). According to other research, the importance of using voice, intonation, and expression in reading aloud can increase students' reading comprehension and interest. By implementing these strategies, teachers can more effectively arouse students' interest in reading and improve their learning outcomes (Maqbulin, 2022).

A novelty in the application of the Reading Aloud strategy is its use in high schools, which is usually used in elementary schools. This move broadens the educational horizon and opens new doors to developing more inclusive and effective learning methods at higher levels of education. The use of this strategy at the high school level, particularly at Binjai City State High School, marks an important turning point in education, offering creative solutions to increase students' interest in reading and expand access to learning methods that have proven successful. By presenting the Reading Aloud strategy at a higher level, this research presents a positive change in the approach to education, indractinating the development of more innovative and inclusive learning models for the future.

To find out the level of reading motivation of State High School students in Binjai, a survey has been conducted through a questionnaire using a reading motivation scale (Komiyama, 2013) which is filled by

130 students from 3 State High Schools in Binjai. The survey results show that 71% of students agree, 37% disagree, and 17% strongly agree that they often don't realize the time that has passed while reading. However, 58% of students agree, 39% disagree, and 24% strongly agree that they feel bored when they have to read for a long time. In addition, 61% of students agree, 48% disagree, and 12% strongly agree that they rarely visit libraries and bookstores, so the opportunity to find interesting books becomes very limited.

Furthermore, there were 95% of students who agreed, 29% strongly agreed, and 5% disagreed that they were willing to read difficult material when the topic was interesting. However, 49% of students agreed, 42% disagreed, and 24% strongly agreed that they felt bored when reading a book that contained all the writing. 75% of students agreed, 37% strongly agreed, and 12% disagreed that they liked it when they received praise about their reading ability. However, 95% of students agreed, 10% disagreed, and 25% strongly agreed that they did not care whether they got praise or not after reading.

The conclusion of the preliminary survey showed that there was a mismatch between the statements of students who liked to read and the statements of those who were bored with reading and rarely went to the library or bookstore. This shows that although there is interest in reading, there are still obstacles that need to be overcome to increase overall interest in reading. The Reading Aloud strategy is expected to be an effective solution in increasing reading interest and increasing understanding of the reading read by students at Binjai State High School.

Research Methods

This study uses a quantitative type using a motode Quasi Experiment with Posttest-Only Design with Nonequivalent Groups. The number of samples in this study is 120 students spread across 3 State High Schools in Binjai City. The sampling procedure in this study uses Systematic Random Sampling. Data collection in this study uses a reading comprehension improvement test. This study uses analytical techniques Independent Sample t-test taking into account $\alpha = 0.05$, $\beta = 90$ % and proportion $= 0.65$ calculated using sofeware JASP to assess the significant difference between the control group and the experimental group. Furthermore, the increase effectiveness test is carried out by testing N-Gain with a criterion scale (Hake, 1998).

Result & Discusion

Research Results

Observation and data analysis conducted in this study show the results of this study that there is an influence of the Reading Aloud strategy can increase students' reading comprehension with a significance value of 0.013. The following are the results of statistical data analysts using an independent sample t-test as described as follows:

Table 1. Data Description

	Group	N	Mean	SD	ONE	Coefficient of variation	
Group Data	Experiments	60	59.833	19.441	2.510	0.325	
	Control	60	49.667	24.631	3.180	0.496	

Furthermore, the data obtained through the assumption test, namely the normality and homogeneity test as a prerequisite test, are described as follows:

Normality Test

Table 2. Normality Test Results

		W	p
Group Data	Experiments	0.967	0.101
	Control	0.968	0.120

Based on the table above, it can be seen that the distribution of data between the two groups in this study, namely the experiment and control groups is normally distributed using the Shapiro-Wilk test. Judging from the p values of 0.101 > 0.05 in the experimental group and p 0.120 > 0.05 in the control group.

Homogeneity Test

Table 3. Homogeneity Test Results

	F	df1	DF2	p
Group Data	2.718	1	118	0.102

The results of the Homogeneity Test using Levene's above showed a homogeneous distribution of data with a p value of 0.102 > 0.05. This means that data analysis can be continued because the distribution of data in the two groups has met the requirements, namely normal and homogeneous distribution.

After the assumption test was carried out and the data was declared to be normally distributed and homogeneous, then an independent sample t-test was carried out which was presented in the table below:

Table 4. Independent Sample T-Test Results

Independent Samples T-Test

t	Df	p
2.510	118	0.013

Note. Student's t-test.

The results of the Independent Sample T-Test showed a significance value (p value) of 0.013. This value is smaller than the commonly used significance level ($\alpha = 0.05$), suggesting that the difference between the two groups is statistically significant.

Furthermore, to see the effectiveness of improving the Reading Aloud strategy through the N-Gain test of the experimental and control group, the results can be seen in the table below:

Table 5. N-Gain Test Results

	Mean Pre-Test	Mean Post-Test	Value Gain
Experiments	10.00	59.833	0.566
Control	20.00	49.667	0.400

The results of the N-Gain analysis conducted on both groups, namely the experiment and the control, showed that 0.566 > 0.400 means that the gain value of the experimental group is greater than the gain value of the control group.

Discussion

Based on statistical tests and data analysis carried out, the significance value of the independent sample t-test of 0.013 obtained showed that the difference between the two groups was statistically significant. The results obtained are unlikely to happen by chance, this shows that there is a real effect of the reading aloud strategy on students' reading comprehension. These results are important to consider in the context of education, as they provide empirical evidence that the reading aloud strategy can be applied as an effective method to improve reading comprehension in schools. The implementation of this strategy in the curriculum can provide additional benefits in the development of students' reading skills.

Furthermore, the findings of this study show that the reading aloud strategy has a positive influence on improving students' reading comprehension. The higher gain score of the experimental group compared to the control group indicates that students who use the reading aloud strategy experience a greater increase in reading comprehension. This supports the hypothesis that the reading aloud technique can help students understand the text better than conventional learning methods.

The use of reading aloud strategies allows students to hear and repeat texts, which can reinforce their comprehension (Gkantia & Dinnas, 2020; Ktori et al., 2018; Ulicheva et al., 2022). Listening to readings aloud and regularly can help students internalize information, improve intonation, and improve their reading comprehension skills. In addition, these strategies also involve social and interactive elements, which can make learning more engaging and effective. A gain control score of 0.40 showed a moderate increase in reading comprehension among students who did not follow the reading aloud strategy. In contrast, the experimental gain score of 0.56 showed a more significant improvement in students who followed the reading aloud strategy. This difference reflects the effectiveness of the reading aloud strategy in improving reading comprehension compared to conventional methods. The higher gain value in the experimental group can also be associated with the cognitive and affective aspects of reading aloud learning. This technique not only improves text comprehension, but also builds speaking and listening skills that are an important part of the language learning process.

Practical Implications

Based on the results of the research, it is recommended that the reading aloud strategy be more widely integrated in the teaching method at Binjai State High School. Teachers can apply this technique in a variety of reading subjects and activities to help students develop a deeper understanding. In addition, training for teachers in reading aloud techniques can increase the effectiveness of this strategy in the classroom.

The use of reading aloud can also enrich students' learning experience and support the development of overall literacy skills. Teachers are expected to adapt these techniques to meet the individual needs of students and overcome challenges in reading comprehension.

Limitations of Research and Advice

Although this study shows significant results, there are some limitations that need to be noted. Limited sample sizes and short intervention durations may affect the generalization of outcomes. Further research with larger samples and longer periods may provide additional insights into the effectiveness of reading

aloud strategies. Additionally, further research may explore other factors that may affect reading comprehension, such as students' motivation, educational background, and variations in reading aloud techniques. More in-depth research can provide more comprehensive guidance for educators in designing effective learning strategies.

Conclusion

This study shows that the reading aloud strategy has a positive and significant influence on the improvement of students' reading comprehension at Binjai State High School. The data showed that students who followed the reading aloud strategy experienced a greater improvement in reading comprehension compared to the control group. These results provide evidence that this method can be applied effectively to improve students' literacy skills.

The reading aloud strategy has proven to be a useful tool in learning to read, and the results of this research can be used as a basis for the development of better learning methods in the future. Extensive implementation and teacher training in this technique can help optimize the potential of reading aloud strategies in improving students' reading comprehension.

Funding

References

Bakhshalinezhad, L. (2015). Using the Think-Aloud Technique for Determining Different Reading Strategies Used by Iranian EFL Learners. Advances in Language and Literary Studies, 6(3). https://doi.org/10.7575/aiac.alls.v.6n.3p.15

Bao, X., Qu, H., Zhang, R., & Hogan, T. P. (2020). Modeling Reading Ability Gain in Kindergarten Children During COVID-19 School Closures. International Journal of Environmental Research and Public Health, 17(17), 1–13. https://doi.org/10.3390/ijerph17176371

Crato, N. (2020). Improving A Country's Education: PISA 2018 Results in 10 Countries. In Improving a Country's Education: PISA 2018 Results in 10 Countries. https://doi.org/10.1007/9783030590314

Fatmawati. (2019). Determinants of Literacy Levels in Indonesia. Hasanuddin: Economics and Business Review, 5(19), 70–89. https://doi.org/10.26487/hebr.v6i1.xxxx

Frankel, K. K., Becker, B. L. C., Rowe, M. W., & Pearson, P. D. (2016). From"What is Reading?" to What is Literacy? Journal of Education, 196(3), 7–17 https://doi.org/10.1177/002205741619600303

Gkantia, E., & Dinnas, K. D. (2020). Toddler Engagement in Digital Aloud Reading: The Role of Variations in Designing and Presentation of Digital Stories. Multilingual Academic Journal of Education and Social Sciences, 8(1), 151–167. https://doi.org/10.46886/majess/v8-i1/7275

Hake, R. R. (1998). Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses. American Journal of Physics, 66(1), 64–74. https://doi.org/10.1119/1.18809

Hui, B., Wong, S. S. Y., & Au, R. K. C. (2022). Reading aloud listening test items to young learners: Attention, item understanding, and test performance. System, 108, 102831. https://doi.org/https://doi.org/10.1016/j.system.2022.102831

Ismail, I., Hasanuddin, H., & Chandra, A. (2023). The Influence of Thinking Styles and Learning Styles on Student Learning Achievement. AL-ISHLAH: Journal of Education, 15(1), 193–202. https://doi.org/10.35445/alishlah.v15i1.2896

Jiménez Pérez, E. del P., Vicente-Yagüe Jara, M. I. de, Gutiérrez-Fresneda, R., & Cuadros Muñoz, R. (2024). Self-Assessment in Reading Competence: Memory, Attention, and Inference. Education Sciences, 14(6). https://doi.org/10.3390/educsci14060562

Kaharuddin, Arafah, B., Nurpahmi, S., Sukmawaty, Rahman, I. F., & Juniardi, Y. (2023). Exploring How Reading Aloud and Vocabulary Enrichment Shape English Speaking Skills Among Indonesian Learners of English. World Journal of English Language, 13(8), 436–445 https://doi.org/10.5430/wjel.v13n8p436

kemendagri.go.id. (2021). Indonesia's Literacy Level in the World is Low, Ranked 62nd Out of 70 Countries. Kemendagri.Go.Id.

Komiyama, R. (2013). Factors Underlying Second Language Reading Motivation of Adult EAP Students. Reading in a Foreign Language, 25(2), 149–169.

Ktori, M., Mousikou, P., & Rastle, K. (2018). Cues to Stress Assignment in Reading Aloud. Journal of Experimental Psychology: General, 147(1), 36–61. https://doi.org/10.1037/xge0000380

Maqbulin, A. (2022). The Effectiveness of Reading Aloud to Improve Students Reading Ability in Secondary School. Innovation-Journal of Religious Education and Training, 16(2), 129–135. https://doi.org/10.52048/inovasi.v16i2.349

Marmoah, S., & Poerwanti, Suharno, J. I. S. (2022). Literacy Culture Management of Elementary School in Indonesia. Heliyon, 8(4), e09315. https://doi.org/10.1016/j.heliyon.2022.e09315

Ninsuwan, P. (2015). The Effectiveness of Teaching English by Using Reading Aloud Technique towards EFL Beginners. Procedia - Social and Behavioral Sciences, 197, 1835–1840. https://doi.org/https://doi.org/10.1016/j.sbspro.2015.07.243

Nurlaelawati, I., & Dzulqodah, S. (2014). Reading aloud strategies in reading english texts. Indonesian Journal of Applied Linguistics, 3(2), 89–99. https://doi.org/10.17509/ijal.v3i2.663

OECD. (2019). PISA 2018 Result (Volume I): What Students Know and Can Do. OECD. https://doi.org/https://doi.org/10.1787/5f07c754-en

Puslitjakdikbud. (2019). Reading Literacy Activity Index 34. In Center for Education and Cultural Policy Research, Research and Development Agency, Ministry of Education and Culture (Issue 2).

Szterman, R., & Friedmann, N. (2020). The effect of syntactic impairment on errors in reading aloud: Text reading and comprehension of deaf and hard of hearing children. Brain Sciences, 10(11), 1–34. https://doi.org/10.3390/brainsci10110896

Tarim, Ş. D. (2015). Examining Reading Alouds in Preschool Education Classrooms in Turkey. International Journal of Social Science Studies, 3(6), 79–86. https://doi.org/10.11114/ijsss.v3i6.1082

Ulicheva, A., Roon, K. D., Cherkasova, Z., & Mousikou, P. (2022). Effects of phonological features on reading-aloud latencies: A cross-linguistic comparison. In Journal of Experimental Psychology: Learning, Memory, and Cognition (Vol. 48, Issue 9, pp. 1348–1362). American Psychological Association. https://doi.org/10.1037/xlm0000893.