

The Effectiveness of the Repetition Learning Method (Drill Method) in Improving Basic Functional Literacy Skills in Students at Sd Wara, Sd Manelek, and Sd Sikhem Bariat in 3t Areas

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ABSTRACT

This research aims to determine the effectiveness of the learning method by means of repetition (drill method) in improving basic functional literacy skills (reading, writing, and arithmetic) in students in three elementary schools (SD), namely SD Wara, SD Manelek, and SD Sikhem Bariat. This study used qualitative research where participants consisted of 125 students who had sub-average literacy skills. The research was carried out through drill method training for 30 days of meetings with materials focused on vocabulary, simple sentences, and numeracy in the context of the daily lives of elementary school students. Data were collected through functional literacy ability tests before (pretest) and after (posttest) the intervention, as well as participatory observation. The results showed that 85% of students experienced an increase in reading speed and fluency, 80% of students showed improvement in writing simple sentences with better spelling, and 82% of students were able to complete basic arithmetic operations without the help of fingers. Overall, 80% of students (90 out of 171 students) experienced a significant improvement in basic functional literacy skills after participating in the drill method training for 30 days. In this case, it can be concluded that the drill method has proven effective in improving the basic functional literacy skills of elementary school students in the 3T Area. This method can be used as a practical and applicable alternative learning model to overcome difficulties in learning literacy in areas with limited resources and access.

KEYWORDS drill method, elementary school, literacy



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INTRODUCTION

Education is a very important key element in building superior and competitive human resources. In this case, literacy skills serve as the main key to opening the gates of knowledge and meaningful social participation (Astutiningsih et al., 2025; Lengnick-Hall & Lengnick-Hall, 2002; Purcell-Gates, 2020; Spiel et al., 2018). More than just reading-writing-counting skills (*calistung*), functional literacy emphasizes the ability of individuals to use these skills in solving practical problems of daily life, such as understanding instructions, recording buying and selling transactions, or reading health information (UNESCO, 2017). However, the equitable distribution of literacy skills remains a significant challenge in Indonesia, especially on the island of Papua, specifically in the 3T area.

SD Wara, SD Manelek, and SD Sikhem Bariat which are located in the 3T area, South Sorong Regency, Southwest Papua are a real reflection of this challenge. These schools face various obstacles, ranging from limited access to quality teaching materials, inadequate infrastructure, to a limited number of teachers (D. Mncube, 2023; D. W. Mncube et al., 2023; Sephania et al., 2017). This condition has a direct impact on the low achievement of basic functional literacy skills of students. Initial observations show that many students have difficulty reading, writing and understanding simple sentences, and are not able to apply

basic arithmetic operations, such as simple multiplication calculations. This causes learning to fall short of its main goal: learner empowerment.

Conventional learning methods that do not incorporate the drill method are often unable to address learning challenges in environments full of limitations. Students who have experienced initial difficulties are increasingly left behind because they do not get enough and structured exercises to strengthen their memory and understanding. In situations like this, a more structured, in-depth, and repetitive approach to learning is needed. The Drill Method provides the right solution to literacy and numeracy problems. This method is based on behaviorism which emphasizes the formation of habits through systematic repetition (Skinner, 1953). In literacy problems, targeted repetition can help improve long-term memory of letters, words, and numbers (Jensen, 2008). For students in 3T areas such as SD Wara, SD Manelek, and SD Sikhem Bariat, the drill method can provide a solid foundation. By doing continuous and measured practice, it is believed that it can improve the ability to recognize letters and numbers automatically which can be a requirement to achieve reading and numeracy proficiency (Samuels, 1994).

Several previous studies have examined the effectiveness of the drill method in improving students' literacy and numeracy skills. Research conducted by Sari and Pratama (2020) entitled "*Peningkatan Kemampuan Membaca Permulaan melalui Metode Drill*" found that the application of the drill method significantly improved the beginning reading ability of elementary school students in disadvantaged areas, with students showing increased reading fluency and accuracy after participating in structured and repetitive training sessions. Another study by Abdullah (2019) entitled "*Efektivitas Model Pembelajaran Latihan (Drill) terhadap Kemampuan Berhitung Siswa SD di Kepulauan Sangihe*" reported that the drill method was effective in improving students' numeracy skills, particularly in mastering basic arithmetic operations such as addition, subtraction, and multiplication. The study emphasized that systematic repetition helped students achieve *automaticity* in counting. Furthermore, research by Huda (2013) in his book "*Model-model Pengajaran dan Pembelajaran*" highlighted that the drill method, when combined with contextual and meaningful material, can enhance students' long-term memory retention and motivate them to learn, especially in environments with limited learning resources.

However, most previous research has focused on general elementary school populations without specifically addressing the unique challenges faced by schools in 3T areas (Terdepan, Terluar, Tertinggal / Frontier, Outermost, Disadvantaged). Studies that specifically examine the application of the drill method in improving functional literacy skills reading, writing, and numeracy integrated with daily life contexts in elementary schools in Papua's 3T areas are still relatively limited. Therefore, this study has differences and novelties compared to previous research, namely by focusing on the effectiveness of the drill method in improving basic functional literacy skills in three elementary schools in the 3T area of South Sorong Regency, Southwest Papua, with attention to local contextualization and the active role of teachers in providing direct feedback.

The formulation of this research problem focuses on the effectiveness of the drill method in improving the basic functional literacy skills of elementary school students in the 3T area, especially in the aspects of reading, writing, and arithmetic used in daily life, by examining the extent to which these abilities are improved in students of Wara Elementary. The Effectiveness of the Repetition Learning Method (Drill Method) in Improving Basic Functional Literacy Skills in Students at Sd Wara, Sd Manelek, and Sd Sikhem Bariat in 3t Areas

School, Manelek Elementary School, and Sikhem Bariat Elementary School, the functional literacy aspects that have experienced the most significant improvement. as well as students' responses and learning motivations to the application of the drill method. This formulation is considered effective because it is focused and measurable, operational by breaking down functional literacy into observable indicators, and includes qualitative aspects in the form of student motivation and response. This research is expected to provide theoretical benefits in the form of contributing to the development of learning methodologies and strengthening behaviorism theory as well as the formation of long-term memory through repetition, as well as becoming a reference for education policy makers in the 3T area. Practically, this research is useful for teachers as an alternative to simple and applicable learning strategies, for students in improving functional literacy and learning confidence, for schools as material for evaluation and development of learning programs, and for other researchers as an initial reference for further studies related to drill method innovation and education in 3T areas.

METHOD

Approaches and Types of Research

This study uses a qualitative approach with a case study design, and this approach was chosen to understand in depth the effectiveness of drill learning methods in the specific context of elementary schools in Konda district in the 3T area. This research focuses on the process, in the understanding gained through direct interaction with the research subject in the student's school environment.

Place and Time of Research

- a. The location of this research was carried out in 3 elementary schools in Konda district, namely SD Negeri Wara, SD Manelek, and also SD Sikhem Bariat in the 3T area (Terdepan, Terluar, Tertinggal / Frontier, Outermost, Disadvantaged)
- b. The time in this study was carried out for 30 days to allow *in-depth* and repeated observation of the student learning process.
- c. The reason for choosing the location of the Konda district is because the three elementary schools are typical representations of schools in the 3T area with the characteristics of limited infrastructure, limited access, and special challenges in the learning process.

Research Subjects and Informants

The determination of subjects and participants used the *purposive sampling* technique with the following criteria:

- a. Main subjects in the study: The main subject is elementary school students in grades 1 to 6 who have low to moderate basic literacy skills.
- b. Supporting Informants: The supporting informants in this study were 27 classroom teachers who taught Indonesian and mathematics subjects, as well as principals in 3 elementary schools in Konda district.

Data Collection Techniques

The data collection technique is by observation by observing the drill learning process in the classroom by focusing on direct teaching and training, as well as teacher-student interaction, student response, the implementation of the drill method, and the development of literacy and numeracy skills. The data collection technique was carried out for 30 meetings with a duration of 2-3 hours per observation. The researcher as the main instrument is

assisted by observation guidelines, *in-depth* interview guidelines, field notes, and cameras. This procedure is carried out through several stages, namely the first stage including pre-field for one week, preparation of instruments, research permits and building *rapport* with schools, and initial identification of subjects and informants. The second stage is the implementation of student training in the field for eight weeks, and the last third stage is post-field for one week with details, namely *member checks* to validate findings, and the preparation of initial reports.

Data Analysis Techniques

Data analysis was conducted using the qualitative analysis model of Miles and Huberman, comprising three stages: data reduction, data display, and conclusion drawing, from various sources including observations, interviews, and documents. Meanwhile, the validity of the data was checked by comparing the results of observations, interviews, and document studies and also involved more than one researcher, namely several lecturers from the Werisar University of PGSD Study Program and the Agribusiness Study Program in repeated and *in-depth* observation analysis.

RESULT AND DISCUSSION

1. Description of the Implementation of the Drill Method in 3 Elementary Schools in Konda District

The implementation of the drill learning method at SD Manelek is carried out for 30 days with a frequency of five days a week for Indonesian and Mathematics subjects. This method is adapted to the conditions of the 3T region through the way the material is adjusted to the daily context of students, such as using examples of surrounding objects (garden products, livestock) and local situations for reading, writing, and arithmetic practice, the division of drill sessions, namely each session is divided into guided drills (1 hour) and independent drills (1 hour) with simple media such as whiteboards, word cards, and printed worksheets, as well as material repeated in scaffolded patterns from simple words to short sentences, and from basic calculation operations to application in contextual story problems.

2. Improvement of Basic Functional Literacy Skills

Based on observations, interviews, and analysis of student work documents, the following data can be obtained:

- a. In reading ability, 85% of students experienced an increase in the speed and fluency of reading short texts, 75% of students were able to answer simple reading comprehension questions correctly, and students who were previously only able to read syllables, were able to read short sentences in their entirety.
- b. In writing skills, 80% of students showed an improvement in writing simple sentences with better spelling, the ability to copy text increased significantly from an average of 5 words per minute to 12 words per minute, and letter writing errors and spacing were reduced by 60%.
- c. In numeracy skills, 82% of students were able to complete basic counting operations (addition and subtraction) without the help of fingers, 70% of students were able to apply the concept of counting in everyday situations such as counting the number of goods and money, and the accuracy of answering simple story questions increased from 45% to

78%. And it can be concluded that overall, 80% of students (90 out of 171 students) experienced a significant improvement in basic functional literacy skills.

3. Factors Supporting Success

Factors that support the success of literacy and numeracy training are discipline and consistency such as teachers' regular teaching routines that make it easier for students to follow the learning flow, and also immediate feedback such as prompt corrections from teachers to help students correct mistakes in real time.

4. Challenges in Implementation

The challenges in this research and training included time constraints and limited facilities.

5. The Effectiveness of the Drill Method in the Context of 3T

The finding that 80% of students experienced an increase in basic functional literacy skills proves that the drill method is effectively applied in the 3T area. These results are in line with the research of Sari & Pratama (2020) which found that the drill method is significant in improving initial reading ability in disadvantaged areas. The advantage of the drill method in the context of 3T lies in the simplicity of its implementation which does not require high technology, but is able to provide a clear learning structure in limited resource conditions.

6. Mechanism of Improvement through Repetition

The resulting improvement can be explained through the cognitive *automaticity* theory (Schneider & Shiffrin, 1977). Systematic repetition in the drill method successfully establishes "automaticity" in the processes of letter decoding, word writing, and basic counting operations. This can be seen from the increasing speed and accuracy of students in completing literacy tasks. Students who previously had to think long to string together syllables, after an intensive drill can do so more automatically.

7. The Role of Contextualization in the Success of Drill Methods

The success of the implementation is not only due to repetition alone, but also by the contextualization of the drill material that makes learning meaningful. These findings support Ausubel's (1968) theory of meaningful learning that material relevant to students' lives will be easier to absorb and remember. The use of examples from the surrounding environment (such as calculating the yield of the garden, reading simple instructions on how to care for livestock) makes drilling not a tedious mechanical activity.

8. Teacher Factors as the Key to Success

The role of teachers in providing direct feedback and modifying materials according to student needs is a determining factor for success. Teachers in 3T areas who understand the characteristics of students and the local environment are able to become a "bridge" that connects structured drill methods with meaningful learning contexts. These findings reinforce Hattie's (2009) research on the importance of direct feedback in the learning process.

9. Overcoming the Challenges of Limited Resources

Despite facing limited facilities, the implementation of the drill method at SD Manelek has succeeded in making optimal use of existing resources. The creativity of teachers in making simple media and the ability to improvise are proof that the effectiveness of learning in 3T areas does not always depend on the completeness of facilities, but on the accuracy of methods and the dedication of educators.

10. Implications for Education in 3T Regions

The findings of this study provide important implications for the development of education in 3T areas, namely structured and repetitive learning methods such as drills need to be considered as one of the main approaches to build the foundation of basic literacy, teacher training should be focused on the ability to modify methods according to the local context, and the development of teaching materials needs to emphasize relevance to students' daily lives

11. Critical Reflection

Although 80% of students show improvement, it should be noted that the other 20% of students have not shown significant progress. This indicates that the drill method alone is not enough for all types of learning. A more differentiated approach is needed, perhaps with a combination of other methods that pay more attention to the individual's learning style.

The main conclusion of these findings is that the drill method has proven effective as an initial foundation for the development of functional literacy in 3T areas, but its success is highly dependent on the adaptability of teachers and the relevance of the material to the local context. In the future, the development of more creative and contextual variations of drill methods needs to continue to be carried out to answer educational challenges in disadvantaged areas.

CONCLUSION

Based on the results of the study, it can be concluded that the drill method has proven to be effective in improving the basic functional literacy skills of elementary school students in the 3T area, especially in SD Wara, SD Manelek, and SD Sikhem Bariat. The application of the drill method consistently and structured for 30 days was able to significantly improve students' reading, writing, and numeracy skills, which was shown through improved reading fluency, accuracy in writing simple sentences, and applicative numeracy skills in the context of daily life. The success of this method is not only influenced by the repetition of the material, but also by the contextualization of learning that is relevant to the student's environment and the active role of the teacher in providing direct feedback. Although there are still a small number of students who have not shown optimal improvement, in general, the drill method can be used as a simple, practical, and effective learning alternative to build a foundation of functional literacy in areas with limited resources, especially 3T areas.

REFERENCES

- Abdullah, A. (2019). Efektivitas model pembelajaran latihan (drill) terhadap kemampuan berhitung siswa SD di Kepulauan Sangihe. *Jurnal Pendidikan Dasar*, 10(2), 45–56.
- Astutiningsih, S. E., Priyana, I., Idrus, S., Suriyanti, S., & Laisila, M. (2025). Literacy as a key to building competitive human resources in Indonesia's future. *The Journal of Academic Science*, 2(1), 417–425.
- Ausubel, D. P. (1968). *Educational psychology: A cognitive view*. Holt, Rinehart and Winston.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Huda, M. (2013). *Model-model pengajaran dan pembelajaran: Isu-isu metadis dan paradigmatis*. Pustaka Pelajar.

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- Jensen, E. (2008). *Brain-based learning: The new paradigm of teaching* (2nd ed.). Corwin Press.
- Lengnick-Hall, M., & Lengnick-Hall, C. (2002). *Human resource management in the knowledge economy: New challenges, new roles, new capabilities*. Berrett-Koehler Publishers.
- Mncube, D. (2023). Analysis of the impact of poor infrastructure provision on the quality of education in rural schools. *Axiom Academic Publishers, 1*(ISBN: 978-1-991239-18-1), 71–98.
- Mncube, D. W., Ajani, O. A., Ngema, T., & Mkhasibe, R. G. (2023). Exploring the problems of limited school resources in rural schools and curriculum management. *UMT Education Review, 6*(2), 1–31.
- Purcell-Gates, V. (2020). *Cultural practices of literacy: Case studies of language, literacy, social practice, and power*. Routledge.
- Samuels, S. J. (1994). Toward a theory of automatic information processing in reading, revisited. In R. B. Ruddell, M. R. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (4th ed., pp. 816–837). International Reading Association.
- Sari, R. P., & Pratama, Y. (2020). Peningkatan kemampuan membaca permulaan melalui metode drill. *Jurnal Pendidikan dan Pembelajaran Sekolah Dasar, 4*(1), 112–123.
- Schneider, W., & Shiffrin, R. M. (1977). Controlled and automatic human information processing: I. Detection, search, and attention. *Psychological Review, 84*(1), 1–66.
- Sephania, N., Too, J. K., & Kipng'etich, K. J. (2017). Perception of teachers on availability of instructional materials and physical facilities in secondary schools of Arusha District, Tanzania. *Journal of Teachers, 4*(28), 68–102.
- Spiel, C., Schwartzman, S., Busemeyer, M., Cloete, N., Drori, G., Lassnigg, L., Schober, B., Schweisfurth, M., & Verma, S. (2018). *The contribution of education to social progress*. Springer.
- UNESCO. (2017). *Reading the past, writing the future: Fifty years of promoting literacy*. UNESCO.