The Effect of the Teaching at the Right Level (TaRL) Approach on Students' Critical Thinking Skills in Learning Fractions in Grade IV of Elementary School in Bogor, Indonesia

Lilis Supratman¹, Wandi Saputra², Reni Winarsih³

1,2,3 Teacher Profesional Education Programme, Univesitas Pakuan, Bogor, Indonesia

Article Info

Article history:

Received 2025-06-06 Revised 2025-06-30 Accepted 2025-07-02

Keywords:

Critical Thinking Fractions TaRL

ABSTRACT

This research examines the effect of the Teaching at the Right Level (TaRL) approach on the critical thinking skills of Grade IV elementary students while they are studying fractions. The study aims to enhance students' critical thinking abilities by implementing TaRL. Employing a quasi-experimental method with a pretestposttest control group design, the study involved 41 SDN Polisi 2 Bogor fourth-grade students. Two classes, IVA and IVB, were selected through saturation sampling. Data collection tools included a 10-item critical thinking test and an observation sheet to assess critical thinking skills. Results indicate a significant enhancement in students' critical thinking skills with the TaRL approach, supported by hypothesis testing that yields a significance value of 0.000 (p < 0.05), leading to the rejection of the null hypothesis (H0) and the acceptance of the alternative hypothesis (H1). N-Gain test outcomes further illustrate the effectiveness of TaRL in improving critical thinking abilities, particularly in IVB class mathematics lessons on fractions, while fostering increased engagement and deeper conceptual understanding among students. These findings suggest that the TaRL approach can be incorporated into mathematics learning to enhance students' critical thinking and conceptual grasp.

This is an open-access article under the CC BY-SA license.



Corresponding Author:

Wandi Saputra

Teacher Professional Education Programme, Universitas Pakuan, Bogor, Indonesia

Email: wandisaputra2807@gmail.com

1. INTRODUCTION

Education is a crucial aspect of sustainable development and has become a primary focus in the Sustainable Development Goals (SDGs), particularly Goal 4: Quality Education. This objective highlights the importance of providing equitable and inclusive access to high-quality education while promoting lifelong learning. In this context, the education sector is expected to produce learners who can adapt to the challenges of the 21st century, one of which is the development of critical thinking skills [1]. Ki Hajar Dewantara has stated that education aims to develop all the advantages in students, so that they can benefit and live comfortably as human beings, and positively impact their environment [2]. In the 21st century, people must master various competencies, including critical thinking.

Critical thinking can be defined as the ability individuals possess to analyse ideas or concepts in a more specific direction, aiming to pursue relevant knowledge supported by evidence [3]. Essentially, critical thinking skills are strongly connected to the educational process. One of the benefits of critical thinking in learning is that it enables students to make informed decisions and solve problems during the learning process. Applying TaRL improves students' critical thinking skills when facing math problems [4]. Critical thinking skills are a means to solve both contextual and non-contextual problems [5]. Critical thinking is essential for students, as those who possess this skill are better equipped to solve problems and reason in the face of challenges [6]. Critical thinking skills serve to facilitate the current learning paradigm. As a prerequisite for students' knowledge construction, critical thinking stimulates cognitive processes in the acquisition of knowledge. One approach that has recently garnered attention in research and practice is TaRL.

The TaRL approach, an evidence-based educational framework, focuses on assessing and addressing students' learning gaps by tailoring instruction to their current knowledge and skills [7]. TaRL is a student-centred instructional approach that prioritises individualised learning by organising learners into groups according to their proficiency levels: low, medium, and high [8]. Learning is conducted by providing varied materials tailored to the understanding levels of each student [9], [10]. TaRL emphasises initial assessment to determine students' level of understanding and group them based on their abilities, not their class level [11], [12]. In the context of mathematics instruction at the elementary level, TaRL holds significant potential for enhancing students' critical thinking skills, as it provides a more adaptive and contextualized learning environment, allowing each student to progress at their own pace.

A preliminary study conducted at SDN Polisi 2 in Bogor City revealed several issues in the learning process, including the continued dominance of teacher-centred instruction in classroom activities. Interviews with classroom teachers indicated that fractions are among the most challenging topics for students to grasp. In the pre-study, a critical thinking assessment related to fractions was given to students in IVA and IVB classes, involving 41 participants. The average scores were 42.70 and 35.90, respectively, indicating a generally low level of critical thinking skills. Previous research has shown that the TaRL approach shows promising results for improving primary school students' academic achievement in mathematics, including improving critical thinking skills in HOTS problems and improving learning outcomes in general when integrated with Problem-Based Learning (PBL) [4], [13]. This research aims to fill this crucial gap by comprehensively exploring this integrated approach, uniquely contributing to the pedagogical framework for promoting more meaningful cognitive engagement. Therefore, by investigating the effectiveness of the TaRL approach, this research seeks to examine the impact of the approach on enhancing critical thinking skills among fourth-grade students at SDN Polisi 2 Bogor, specifically in the context of learning fractions.

However, limited research has specifically investigated the impact of TaRL on critical thinking in fraction learning among Indonesian elementary students. This area remains underexplored, particularly within public schools, where traditional instructional methods are still prevalent. The novelty of this research lies in its focus on applying the TaRL approach to fractions at the elementary level in Indonesia, with a specific emphasis on improving students' critical thinking skills, which remains a rarely explored area. Therefore, this research aims to examine the impact of the TaRL approach on enhancing critical thinking skills among fourth-grade students at SDN Polisi 2 Bogor, specifically in the context of learning fractions.

2. METHOD

This research utilised a quasi-experimental design approach. The quasi-experimental design allows researchers to use existing classes as study groups. The research was conducted during the 2024/2025 academic year at SDN Polisi 2, Central Bogor District, Bogor City, West Java. In this design, the experimental and control classes were selected non-randomly. Prior to data collection, permission was obtained from the school authorities for research purposes. A pretest was given to both the experimental and control groups to evaluate their baseline competency levels. After administering the pretest, the experimental group received instruction that combined the TaRL approach with a Problem-Based Learning (PBL) model for the intervention.

In contrast, the control group received instruction on the same topic through conventional teaching methods incorporating the PBL model. After the intervention, a posttest was conducted for both groups to evaluate and compare the results. This study adopted the Pretest–Posttest Control Group Design, as outlined in Table 1.

Table 1	Duntant Danten	C_{α}	Cassa Das	•
Table L.	Pretest-Posttest	Control	Ciroup Des	ายก

Group	Pretest	Treatment	Prosttest
Experimental	O_1	X_1	O_1
Control	O_2	X_2	O_2

2.1 Participants

The participants in this study were drawn from two classes: Class IVA, comprising 21 students, served as the control group, while Class IVB, with 22 students, functioned as the experimental group. The sampling technique employed was cluster random sampling.

2.2 Instruments

This research utilised both test and non-test instruments. The assessment tool evaluated students' critical thinking abilities by administering pretests and posttests. Two questions were used: 10 LOTS (Lower-Order Thinking Skills) items for the developing group and 10 HOTS (Higher-Order Thinking Skills) items for the proficient group. Before being used in the study, the researcher had previously tested these items for validity, reliability, difficulty index, and discriminating power. The non-test instruments included teacher and student response questionnaires and observation sheets for monitoring the study's implementation.

2.3 Data Analysis

The data were analysed using a hypothesis test with an independent samples t-test, conducted in SPSS version 25, with a 5% significance level. Before hypothesis testing, assumption tests were conducted, including normality and homogeneity tests, followed by parametric testing using the Independent Samples T-Test.

3. RESULTS AND DISCUSSION

3.1. Results

This study aimed to analyse the influence and effectiveness of the Teaching at the Right Level (TaRL) approach on elementary school students' critical thinking skills in learning fractions in mathematics. Class IVB served as the experimental group in this research and received instruction using the TaRL approach integrated with the Problem-Based Learning (PBL) model. In contrast, Class IVA was the control group taught using the Problem-Based Learning (PBL) model. The data obtained from the pretest and posttest in both classes were analysed using descriptive statistical analysis, as presented in Table 2 below.

Table 2. Descriptive Analysis of Pretest–Posttest Scores in the Experimental and Control Classes

Descriptive Statistics							
	N	Range	Minimum	Maximum	Mean	Std. Deviation	
Pretest Experimental	20	60.0	8.0	68.0	42.700	14.1090	
Posttest Experimental		25.0	75.0	100.0	84.530	7.9510	
Pretest Control	21	25.0	25.0	50.0	35.905	7.4492	
Posttest Control	21	35.0	40.0	75.0	59.333	9.6868	
Valid N (listwise)	20						

The descriptive analysis in Table 2 above shows a general comparison of both groups' pretest and posttest scores. The experimental group had an average pretest score of 42.7, while the control group averaged 35.9. Following the intervention, the experimental group's mean posttest score rose significantly to 84.5, in contrast to the control group, which achieved an average of 59.3. This improvement indicates a positive influence of the TaRL approach on enhancing students' critical thinking skills across all indicator aspects, particularly in understanding the concept of fractions.

These results also suggest that the TaRL approach can effectively address learning gaps in the classroom by structuring instruction based on students' learning levels rather than their age [14].

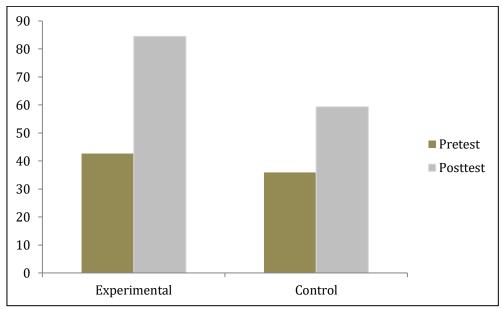


Figure 1. Comparison of Descriptive Analysis Between Control and Experimental Classes

The calculation of the N-Gain conducted by the researcher showed that the experimental class (using the TaRL approach) achieved an average N-Gain score of 73.43%, which falls into the "effective" category. In contrast, the control class (using the conventional approach) obtained an average N-Gain score of 35.93%, which is categorised as "ineffective." The difference in the average N-Gain scores between the experimental and control classes was 37.5%, with the experimental class performing better.

These findings demonstrate that the TaRL approach effectively enhances the critical thinking abilities of fourth-grade students in mathematics, particularly in learning fractions.

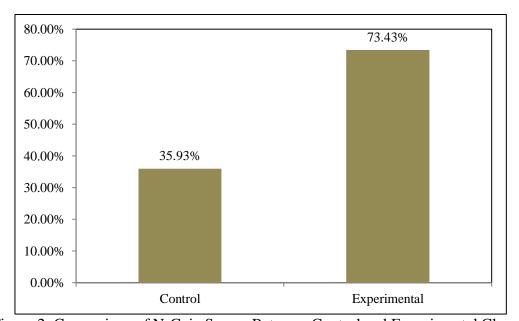


Figure 2. Comparison of N-Gain Scores Between Control and Experimental Classes

In addition to descriptive analysis, the researcher also conducted a normality test on the critical thinking skills test data. The test was performed using SPSS version 25 for Windows, and the results are presented as follows:

Table 3. Normality Test Results

Tests of Normality					
Skill	Class	Kolmogorov-Smirnov			
JKIII	Class	Statistic	df	Sig.	
Critical	Pretest (Experimental Class)	.174	20	.114	
Thinking	Posttest (Experimental Class)	.185	20	.072	
Ability	Pretest (Control Class)	.135	21	$.200^{*}$	
	Posttest (Control Class)	.137	21	.200*	

Based on the normality test results, the data were examined using the Kolmogorov-Smirnov normality test. The significance value for the experimental group's pretest was 0.114, and 0.072 for the posttest. Meanwhile, the control group showed a significance value of 0.200 for both the pretest and posttest.

According to the criteria for the normality test, where a significance value greater than 0.05 indicates that the data follow a normal distribution, it can be concluded that all students' critical thinking test scores were normally distributed. Subsequently, a homogeneity test was carried out and produced the following results:

Table 4. Homogeneity Test Results

	Test of Homogeneity of Variance						
Description							
Critical	39	.577					
Thinking	39	.626					
Ability	34.673	.626					
	39	.592					
Ability							

Table 4 above presents the homogeneity test results for both the control and experimental groups. The output indicates a significance value of 0.577 (Based on Mean), which exceeds 0.05. This suggests that the critical thinking test data are homogeneously distributed.

Based on the results of the assumption tests, it was determined that the data met the normality and homogeneity of variance criteria. Therefore, hypothesis testing was carried out using a parametric test, specifically the Independent Samples T-Test, with the following results:

	Table 5.	. Hypothes	sis Test I	Results			
	Inc	dependent S	amples Te	st			
		Levene's	Test for				
		Equal	ity of	T-Test fo	r Equ	ality of	
		Varia	Variances		Means		
		F	Sig.	Т	df	Sig. (2-tailed)	
Critical Thinking	Equal Variances	.316	.577	9.078	39	.000	
Ability	Assumed						

According to Table 5 above, the hypothesis test performed on the students' critical thinking assessment produced a significance value (2-tailed) of 0.000. Based on the criteria for hypothesis testing, this result (0.000 < 0.05) indicates that the TaRL approach has a statistically significant impact on the critical thinking skills of fourth-grade students at SD Negeri Polisi 2 Bogor in learning fraction concepts.

3.2 Discussion

The research findings indicate that applying the TaRL approach in mathematics instruction has proven effective in enhancing students' critical thinking skills. This conclusion is supported by comparing pretest and posttest results, which show that the experimental group performed significantly better than the control group. The superior average scores achieved by the experimental class are attributed to the TaRL method, which focuses on adapting instruction to students' learning levels rather than strictly following grade-level standards. At the beginning of the research, the researcher conducted an initial assessment to identify students' existing abilities. Based on these results, students were grouped into developing and proficient categories. The researcher then designed learning strategies aligned with the students' levels and the characteristics of the subject matter.

The TaRL approach was integrated with the Problem-Based Learning (PBL) model, wherein differentiated instruction was applied to both content and process to achieve the same learning objectives. Differentiation in content involved two methods for solving problems related to the addition and subtraction of fractions, adapted to the needs of each group. Differentiation in the process was reflected through different levels of challenge in the worksheets (LKPD), designed to match each group's capabilities. This instructional process catered to students' developmental needs and fostered deeper cognitive engagement. When students receive tasks and materials tailored to their learning level, they are more likely to critically explore, analyse, and evaluate information.

The effectiveness of this approach was validated through an observation sheet, which showed 100% compliance with the planned instructional activities, indicating that the lessons were implemented entirely as designed. Positive feedback from teachers and students further supports the success of the TaRL approach. The teacher response questionnaire, completed by two homeroom teachers and one mentor teacher, yielded an average percentage score of 88.4% in the excellent category. Similarly, the student

response questionnaire produced an average score of 86.7%, also in the excellent category. These high scores demonstrate that the TaRL approach was well-received and considered effective in practice. The positive response from teachers reflected the suitability of the approach to classroom conditions, while student feedback suggested that learning became more meaningful and aligned with their level of understanding. This supports the claim that the TaRL approach can create a learning environment that is adaptive and responsive to students' diverse abilities, an essential factor in enhancing the overall effectiveness of the learning process [15].

Furthermore, the study found increases in all five indicators of critical thinking skills: providing simple explanations, building analytical skills, developing evidence-based arguments, making inferences, and evaluating and reflecting on thought processes. The findings indicate that combining the TaRL approach and PBL model effectively addressed the diversity of students' academic abilities, enhanced critical thinking, and increased student engagement [13]. These results align with findings by Nabila, which reported that the TaRL approach encouraged students to actively participate in learning, develop critical and creative thinking skills, and deepen their understanding of the subject matter [16]. According to Andriyani et al., using the PBL model combined with the TaRL approach can create an enjoyable learning experience and support students' academic success [17].

Teachers can categorise students according to their level of understanding in learning, labelling them as needing guidance or as proficient. The TaRL approach can increase student motivation, enhance activity and promote more effective learning [18]. The TaRL approach has advantages that can make students more active and learning-centred, thereby improving student learning outcomes [19].

The TaRL approach in the experimental class enables students to develop their potential according to their initial ability level. This approach also supports students working together in groups, trains them to think more critically when solving fraction problems, and encourages active participation in learning activities. This aligns with the stages of the approach used to meet the diverse needs of students [20].

The TaRL approach significantly enhances students' critical thinking abilities. Therefore, the hypothesis in this study is accepted, indicating that the TaRL method is effective in improving critical thinking skills in learning fractions among fourth-grade students at SDN Polisi 2.



Figure 3. TaRL-Based Learning Activities

This lesson emphasises the importance of visualising fraction concepts through concrete dice rolls, helping students relate numbers to represent parts of the whole. Thus, the active interaction in the fraction dice game strengthens the understanding of mathematical concepts and subtly develops essential critical thinking and problem-solving skills in an engaging and motivating context.

The TaRL approach can positively influence students' critical thinking skills. According to Alfi Rahmi et al., applying the TaRL approach, which aligns with a child's initial expertise, enables children to learn math without pressure, allowing them to understand, actively engage in learning, and enjoy the subject [21]. The TaRL approach is beginning to be used as an alternative Teaching method to help improve student learning quality [22]. By tailoring learning experiences to students' needs, educators can create an environment that encourages active engagement, critical thinking, and the application of scientific principles [23].

Other relevant research in this study shows that TaRL is a form of learning approach that focuses more on the ability level of students, the form of Teaching is directed and adapted to the level of ability of individual students, not to the overall learning outcomes, this form of Teaching is believed to be more helpful for students in developing their potential [24], [25], [26].

In addition to its proven effectiveness in enhancing critical thinking skills, the TaRL approach promotes greater student engagement and fosters a deeper understanding of the material. It encourages students to become actively involved in solving real-world problems that are meaningful and relevant to their everyday lives. The successful application of the TaRL approach in mathematics instruction within this study also indicates its potential for broader implementation in other subjects such as Indonesian Language, Social Sciences, and Cultural Arts. By aligning instructional content with students' actual levels of understanding, the TaRL approach provides a more adaptive and meaningful learning experience that supports diverse learners in heterogeneous classrooms.

These findings carry significant practical implications for teachers and education practitioners. In classrooms where learning gaps are common, TaRL offers a systematic and targeted method for addressing students' varied learning needs. Teachers are encouraged to adopt this approach to help close those gaps and ensure equitable access to quality learning. Furthermore, education policymakers may consider incorporating TaRL-based strategies into teacher professional development programs to reinforce differentiated instruction practices. While this study provides valuable insights, its scope was limited to a single school, a specific mathematical topic, and a brief implementation period. Further research involving various subjects and educational settings is recommended to strengthen the generalizability of these results.

4. CONCLUSION

Based on the study's findings and data analysis, it can be concluded that applying the Teaching at the Right Level (TaRL) approach significantly influences students' critical thinking abilities. This conclusion is reinforced by hypothesis testing, which produced a significance value of 0.000, confirming the statistical significance of the result (p < 0.05).

As a result, the null hypothesis (H₀) is rejected and the alternative hypothesis (H₁) is accepted. Furthermore, the N-Gain analysis demonstrates that the TaRL approach effectively enhances the critical thinking skills of fourth-grade students in class IVB at SDN Polisi 2, particularly in mathematics learning related to fractions. Future studies are recommended to explore the long-term impact of the TaRL approach across various mathematics topics and grade levels to assess its broader applicability and sustainability in diverse educational settings.

REFERENCES

- [1] F. N. Aisyah and Y. Gumala, "Implementasi Model Problem-Based Learning (PBL) Sebagai Upaya Meningkatkan Kemampuan Berpikir Kritis Peserta Didik Sekolah Dasar," vol. 4, pp. 1–14, 2025.
- [2] R. kamal Mustapa Alan, "Implementasi Pendekatan Pembelajaran Kurikulum Merdeka: Understanding By Design, Berdiferensiasi, Dan Deep Learning," vol. 10, pp. 427–441, 2025.
- [3] F. Fauziah, A. Muharam, and W. Mustikaati, "Analisis Kemampuan Berpikir Kritis Siswa dalam Pembelajaran Tematik di Kelas IV Sekolah Dasar," vol. 7, no. 1, pp. 1114–1120, 2021, [Online]. Available: http://proceedings.upi.edu/index.php/semnaspgsdpwk.
- [4] S. & R. A. Arsad Bahril, "Pengaruh Pendekatan Teaching At The Right Level(TARL) Terhadap Kemampuan Berpikir Kritis Dalam Pemecahan Soal Hots Matematika Peserta Didik.," vol. 12, no. 1, pp. 1–13, 2025.
- [5] F. Dini, R. Medriati, and D. Hamdani, "The Effect of Problem Based Learning Model with Teaching at the Right Level Approach to Improve Critical Thinking Ability in Physics," vol. 16, no. 1, pp. 112–119, 2025, doi: 10.26877/jp2f.v16i1.1385.
- [6] H. Komikesari, M. Mutoharoh, P. S. Dewi, G. N. Utami, W. Anggraini, and E. F. Himmah, "Development of e-module using flip pdf professional on temperature and heat material," *J. Phys. Conf. Ser.*, vol. 1572, no. 1, 2020, doi: 10.1088/1742-6596/1572/1/012017.
- [7] N. Setiyani and P. D. Purwati, "Developing Kemukus Mountain Flipbook Integrated With TaRL Approach In Improving Students' Comprehension Of Descriptive Texts," vol. 13, no. 1, pp. 281–293, 2025.
- [8] R. A. Afandi, N. S. Ningtyas, E. Susiyawati, and P. Pratiwi, "The Effectiveness of Differentiated Learning using the TaRL (Teaching at the Right Level) Approach for Improving Learning Interest and Learning Outcome," *J. Pijar Mipa*, vol. 19, no. 4, pp. 657–662, 2024, doi: 10.29303/jpm.v19i4.6860.
- [9] D. Sukmawati, I. Ayu, M. Ratna, and L. Hayati, "Integrating Teaching at the Right Level with Problem-Based Learning to Enhance Mathematics Learning Outcomes," vol. 11, no. May, pp. 1–17, 2025.
- [10] A. E. Andriani, S. Sulistyorini, and D. N. Tyas, "Development of a smart articulate storyline using teaching at the right level based learning tools to improve teaching skills," vol. 5, no. 1, pp. 75–89, 2025.
- [11] T. A. Widyastuti, D. A. Wulandari, D. Nugraini, E. A. Sentosa, E. R. Janti, and U. W. Dharma, "Improving Student Learning Outcomes With The Tarl Approach To Science Subjects," vol. 17, no. 1, pp. 53–68, 2025.
- [12] V. Yuli, "The influence of teaching at the Right Level (TaRL) approach on grade 1 students' reading and writing skills in Unggulan Aisyiyah Bantul Elementary School," vol. 8, no. 1, pp. 1–11, 2025
- [13] Wuryantoro & Candra Ayu and 1Program, "Analisis Hasil Belajar Peserta Didik Melalui Pembelajaran Berbasis Masalah Dengan Pendekatan TaRL," vol. 25, no. 1, pp. 89–97, 2024.
- [14] Purba, "Menjebatani Kesenjangan Pembelajaran: Eksplorasi Pendekatan TaRL Konsep, Praktik dan Tantangan," *Semin. Nas. Has. Penelit.*, 2024.
- [15] A. Ananda, I.I. Ulfa, J.F., & Yorianda, "Teaching at the Right Level (TaRL) as a Potential Solution for Improving Middle School Education: A Systematic Review of the Literature International Journal of Academic Pedagogical Research (IJAPR) Teaching at the Right Level (TaRL) as a Potential Soluti," *Int. J. Acad. Pedagog. Res.*, vol. 8, no. 4, pp. 1–12, 2024, doi: 10.5281/zenodo.11240915.
- [16] H. Nabila, H. Pradana, H. Abidin, H. Ditawati, and I. Munawaroh, "Implementasi Penerapan Pendekatan Teaching At The Right Level (TARL) Di SD Negeri 1 Winduhaji," vol. 04, no. 02, pp. 147–157, 2024.
- [17] R. Andriyani and Q. Mushafanah, "Peningkatan Hasil Belajar Matematika Melalui Model PBL

- dengan Pendekatan TaRL Kelas IV SDN Sarirejo," vol. 10, pp. 367-372, 2025.
- [18] L. Fitria, E. F. Sari, and Z. F. Khairunnikmah, "Upaya Meningkatkan Hasil Belajar Matematika Melalui Penerapan Pendekatan Teaching At the Right Learning (Tarl)," *Econ. Educ.*, vol. 13, no. 1, pp. 27–34, 2024.
- [19] E. Sastrawati, D. Kurnia, M. D. Saputra, P. Aprilia, and R. S. Wiyanpuri, "Peningkatan Hasil Belajar IPAS Peserta Didik Kelas V Melalui Pendekatan TARL," vol. 10, pp. 557–562, 2025.
- [20] M. Rahmawati, I. Malawi, and Soehartini, "Implementasi Model Pbl (Problem Based Learning)
 Dengan Pendekatan Tarl (Teaching At Theright Level) Untuk Meningkatkan Kemampuan
 Pemecahan Masalah Matematika Siswa Kelas Iv," vol. 10, 2024.
- [21] A. R. Harahap, B. N. Alamsyah, Rahmat Mushlihuddin, and E. Purba, "Penerapan Pendekatan TARL Untuk Meningkatkan Hasil Belajar Matematika Dengan Bantuan Media Quizizz Di Kelas I SD Negeri 067240 Medan Tembung," *Innov. J. Soc. Sci. Res.*, vol. 4, pp. 11625–11641, 2024, [Online]. Available: https://j-innovative.org/index.php/Innovative.
- [22] Aiyar Y, "Lesson in State Capacity from Delhi's Schools.," Oxford Univ. Press, 2024.
- [23] Ramlawati, N. I. Sari, R. Kusumawati, M. Yesin, N. Ilmi, and A. A. Arsyad, "the Effect of Differentiated Science Inquiry Learning Model Based on Teaching At the Right Level on Students' Critical Thinking and Science Process Skills," *J. Pendidik. IPA Indones.*, vol. 14, no. 1, pp. 1–16, 2025, doi: 10.15294/jpii.v14i1.19479.
- [24] R. N. Yusuf and A. H. Rambe, "Pengaruh Pendekatan Teaching at The Right Level (TaRL) Dengan Metode ADaBTa Terhadap Kemampuan Membaca Permulaan Siswa Kelas 1 MIS ANNUR Kecamatan Medan Labuhan," vol. 3, no. 2, pp. 175–188, 2025.
- [25] R. Naiborhu, "Pengaruh Pendekatan Teaching at The Right Level (TaRL) terhadap Kemampuan Membaca Siswa Kampung Bharu Malaysia," vol. 13, no. 1, pp. 1–7, 2025.
- [26] N. S. Octa Juliska Landia, Yantoro, "Analisis implementasi pendekatan Teaching at The Right Level (TaRL) Pada Pembelajaran Matematika Kelas IV di Sekolah Dasar," vol. 10, 2025.