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Enhancing Critical Thinking and Learning Outcomes: The Impact of Differentiated Learning Strategies in Elementary School

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Abstract: This study aims to create a simple Differentiated Learning Strategy (DSLS) to improve critical thinking skills and student learning achievement in elementary schools in Jombang Regency. This study aims to help teachers create an inclusive, interactive, and motivating environment for students by addressing the challenges of implementing DSLS and the Merdeka Curriculum policy. The method used is a quasi-experimental design with a non-equivalent approach. The assessment tools used consist of observation sheets based on Bloom's Taxonomy and learning outcome tests specifically designed to evaluate high-order thinking skills (HOTS) through C4 questions. Data analysis was carried out using repeated measure ANOVA to assess the effectiveness of the intervention. The results showed that the implementation of SDLS significantly improved critical thinking skills and student learning outcomes. This study significantly improves the quality of elementary education and serves as a guide for teachers to implement differentiated learning in other schools.

Keywords: Critical thinking; Differentiated learning; Elementary school; Learning outcomes

Introduction

Differentiated Learning Strategy (DSLS) is a method that helps each student learn in different ways. Differentiated learning in education acknowledges that students have varied learning styles, speeds, interests, and abilities (Almujab, 2023). This approach allows teachers to create relevant and challenging learning experiences for every student, helping them reach their full potential (Marlina, 2020). This strategy uses different teaching methods, tailored materials, varied assessments, and personal support to foster an inclusive learning environment and engage students (Purnawanto, 2023).

The Indonesian government addressed this issue by issuing Regulation Number 13 of 2022, which modifies Regulation 22 of 2020 from the Minister of Education, Culture, Research, and Technology. This policy highlights the significance of digital transformation and innovation in education, promoting diverse and adaptive learning strategies, such as differentiated learning in the Independent Curriculum. The Ministry of Education emphasizes that differentiated learning is essential for improving the quality of education to meet current needs.

While the DLS aims to enhance education quality, many elementary schools in Indonesia, including those in Jombang District, Jember Regency, still encounter numerous challenges. Initial observations reveal that many teachers still rely on limited lecture methods. This method often fails to enhance students' critical thinking skills, which may negatively impact their academic success and the development of essential 21st-century skills.

This phenomenon does not only occur in Jombang District but is also a common challenge in various

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regions in Indonesia. Many elementary schools have not fully implemented DSLS, even though the policy already exists. A lack of understanding and teacher training on this strategy is a key reason the lecture method remains the dominant approach in education.

Observations in several elementary schools reveal that despite the implementation of the Independent Curriculum, challenges with differentiated learning persist. Interviews with teachers and principals revealed a continued lack of understanding on how to effectively implement differentiated learning. The lecture method leads to low student engagement and creates a gap between curriculum goals and student performance, particularly in critical thinking skills.

Critical thinking skills are essential in education, as they encompass students' ability to systematically analyze, evaluate, and synthesize information. Differentiated learning can improve critical thinking skills by offering challenges suited to students' abilities and interests. Proper implementation can teach students to recognize valid arguments, assess evidence, and form opinions based on logic and facts (Manurung et al., 2023).

In addition to enhancing critical thinking skills, differentiated learning can contribute to improving student learning outcomes. Learning outcomes include the understanding, skills, and knowledge acquired by students after participating in the learning process. Learning improvements will be measured through exams, assignments, projects, and observations, which are key indicators of the effectiveness of educational methods (Saraswati et al., 2024).

Along with the introduction of the Merdeka Curriculum, the focus on differentiated learning has increased. However, obstacles in its implementation are still a major issue. In Jombang District, many teachers have not effectively implemented educational policies, leading to significant challenges in critical thinking skills and academic achievement at the elementary level. This study aims to create an effective DSLS to enhance critical thinking skills and improve student learning outcomes in elementary schools. The goal is for teachers to create a more inclusive and interactive learning environment that encourages active student participation.

This study seeks to create a Differentiated Learning Strategy (DSLS) to enhance critical thinking skills and academic performance in elementary schools, particularly in Jombang District. This study aims to help teachers create an inclusive, interactive, and motivating environment for students by addressing the challenges of implementing DSLS and the Merdeka Curriculum policy. This approach aims to make students more active, creative, and critical in their learning, helping to bridge the gap between curriculum goals and academic performance. This research aims to enhance the quality of basic education in Jombang District and beyond, serving as a model for other schools in Indonesia to improve education overall.

Method

This study used a Quasi-Experimental design with a Non-Equivalent Control Group Approach to evaluate the effect of differentiated learning strategies on critical thinking skills and learning outcomes in 5th-grade students of SD Negeri Jombang 02. The research sample consisted of 78 students taken using the Total Sampling technique, divided into experimental and control groups. The instruments used were observation sheets for critical thinking skills, based on Bloom's Taxonomy and tailored to the topic of light, and question sheets focused on Higher-Order Thinking Skills (HOTS C4), aligned with the learning plan and question grid. Both instruments have been tested for validity and reliability to ensure consistency and accuracy of measurement. Repeated Measures ANOVA was used to analyze data and identify significant changes in critical thinking skills and student learning outcomes from the pretest through three intervention stages. The research at SD Negeri Jombang 02 lasted four weeks, during which researchers observed student engagement and responses during differentiated learning.

This research uses the Quasi Experiment type. According to Indra (2021), experimental research is a study that identifies the causal relationship between independent variables and dependent variables, where the independent variable is controlled in such a way that the effect caused to the dependent variable can be known. The independent variables in this study are Differentiated Learning Strategy, while the dependent variables are motivation and learning achievement. The following is the experimental design that the researcher used.

Table 1. Nonequivalent Pretest-Posttest Control Group Design

Group	Pretest	Treatment	Posttest
Experiment	0_1	X	0_2
Control	0_1	-	0_2

Used to investigate information by providing structured and numerical data. According to Cohen et al. (2007). The test is one of the most powerful data collection techniques for collecting numerical data (Cohen et al., 2017). In this study, the test was conducted to collect critical thinking data and student learning outcomes.

Result and Discussion

According to the table 2, all data have a value greater than 0.05, indicating that the data in this study are normally distributed. Based on table 3, the significance value of 0.000 indicates that the variance between measurement times is inconsistent.

The table 4 shows that both Learning Outcomes and critical thinking in the Intervention Group changed significantly over time, with a p-value of 0.000. In the Control Group, the critical thinking and learning outcomes showed minimal changes over time, with significance values of 0.0547 and 0.244, respectively.

The table 5 shows that the Intervention Group has an F value of 109.269 and a significance of 0.000, indicating a significant difference in Learning Outcomes compared to the control group. While in the Control Group, the F value = 0.565 and sig = 0.639 indicate no significant difference. In the Intervention Group, the F value is 17057.856 and the significance level is 0.000, showing a significant improvement in critical thinking skills. However, in the Control Group, the F value = 1.399 and sig = 0.247 indicate no significant difference.

Table 2. Normality Test Results

Variable	Intervention group				control group			
	Pretest	Day 1	Day 2	Day 3	Pretest	Day 1	Day 2	Day 3
Learning outcomes	0.339	0.214	0.236	0.068	0.132	0.162	0.148	0.189
Critical Thinking	0.093	0.134	0.149	0.149	0.439	0.178	0.439	0.178

Table 3. Homogeneity Test Results

Variable	Mauchly's W	Approc. Chi-Square	Df	Sig
Intervention Group Learning Outcomes	0.006	187.471	5	0.000
Control Group Learning Outcomes	0.001	246.792	5	0.000
Critical Thinking Intervention Group	0.000	-	5	-
Critical Thinking Control Group	0.000	-	5	-

Table 4. Test of Within-Subject Effect Results

Variable	Greenhouse-Geisser correction			
	Df	Mean Square	F	Sig
Intervention Group Learning Outcomes	1.981	3635.741	109.269	0.000
Control Group Learning Outcomes	1.735	19.776	0.565	0.547
Critical Thinking Intervention Group	1.109	45379.336	17057.856	0.00
Critical Thinking Control Group	1.000	3.692	1.399	0.244

Table 5. Hypothesis Test

Variable	df	Mean Square	F	Sig
Intervention Group Learning Outcomes	3	3632.741	109.269	0.000
Control Group Learning Outcomes	3	11.436	0.565	0.639
Critical Thinking Intervention Group	3	16781.615	17057.856	0.000
Critical Thinking Control Group	3	1.231	1.399	0.247

Discussion

Critical Thinking

The results of this study indicate that the application of differentiated methods in learning significantly affects students' critical thinking skills. Statistical analysis showed that the group using this method had a significant increase, with an F value of 17,057.856 (p = 0.001). Students using this approach develop critical thinking skills more effectively than the Control Group, which had an F value of 1.399 (p = 0.247). Thus, DSLS is not only effective but also better able to stimulate students' critical thinking skills than conventional approaches.

This finding supports previous studies that stress the need for tailored teaching methods to enhance critical thinking skills. Research by Alnahdi et al. (2022) found that this method enhances students' critical thinking skills in inclusive learning environments. Pozas et al. (2021) found that using this strategy more often is linked to improved critical thinking skills in students. Therefore, differentiated learning provides a greater opportunity to practice critical thinking skills compared to approaches that do not involve differentiation. Research by Noviyanti et al. (2023) showed that elementary school students' critical thinking skills improved after receiving differentiated learning. A literature review by Minangkabau et al. (2024) found that differentiated learning effectively enhances critical thinking skills by catering to diverse learning styles, ability levels, and student interests.

In grade 5 science, especially in the study of light, this strategy greatly enhances students' critical thinking

skills. Tomlinson's theory (2013) states that this method helps students learn based on their needs, interests, and readiness, enhancing their engagement in meaningful learning. This approach aims to help students develop critical thinking skills to understand complex scientific concepts like light.

To effectively implement this approach, we will conduct project-sharing activities focused on the topic of light. Students are assigned projects based on their interests and skills, like experimenting with light and shadow or observing light properties. This project requires students to search for information, plan steps, and manage each stage of the experiment. This involves analyzing the results, determining the most effective steps, and evaluating conclusions based on the data obtained.

Project-based activities include light and shadow experiments, where students use flashlights to see how light creates shadows on different objects. They can build simple optical models using recycled materials to learn about refraction and reflection of light. Activities also involve researching light properties, like using prisms to create a spectrum of colors. Students can assess classroom lighting and create effective solutions, including planning the best lighting for the room. These activities help students grasp the concept of light while also developing critical thinking, collaboration, and communication skills essential for differentiated learning. Directed and reflective discussions are key parts of differentiated learning, encouraging students to share their opinions, listen to others, and explore various perspectives on light behavior. Students are encouraged to analyze ideas, question arguments, and develop logical opinions on what they learn. These activities effectively enhance students' critical thinking skills, particularly in assessing scientific views on light. The findings of this study have important implications for education, especially in classrooms with students from diverse backgrounds. Differentiated learning methods help teachers foster critical thinking skills in students, which are essential for solving complex problems and making informed decisions (Rivas et al., 2023).

However, the implementation of this method requires high skills and commitment from teachers (Rezania et al., 2023). Many teachers lack the knowledge to create learning activities that meet the diverse needs of their students. Therefore, regular training and professional development are essential to understand how to design effective learning activities (Purwowidodo et al., 2023). Limited resources, such as learning materials and facilities, can hinder differentiated learning methods (Purwandari et al., 2024). Schools lacking access to books, teaching aids, or technology limit students' critical thinking opportunities. Schools need to identify and address these resource deficiencies to create a better learning environment. Some teachers may have difficulty adapting materials to different levels of student ability. Limited time spent designing activities that are appropriate for each group can also be a barrier. To effectively address these challenges, we can provide tailored learning modules for different skill levels and use technology to enhance differentiation. Furthermore, educators can leverage collaboration with their peers to exchange innovative ideas and effective strategies for successfully implementing DSLS.

Concrete support from teachers in improving students' critical thinking skills varies widely. Teachers can foster a positive classroom environment by beginning each session with interactive icebreakers, like small group discussions on relevant topics. Before studying light, teachers can ask students to share their experiences with light in daily life to encourage participation.

Teachers should give constructive feedback to students after they complete assignments, focusing on aspects like argument analysis and improving conclusions from experimental data. Teachers can create challenging activities, like problem-based projects, where students design simple tools using light principles. This promotes collaboration and creative problem-solving. Teachers can enhance class discussions by asking open-ended questions that encourage deeper thinking, like the effects of light not passing through an object on the environment. Using these resources, educators can improve students' critical thinking skills and help them become independent and innovative learners.

Learning Outcomes

Differentiated Learning Strategies focus on adapting teaching methods to fit students' styles and needs. This theory suggests that students build knowledge through their own experiences, fostering an inclusive learning environment that promotes this theory suggests that students learn by using their own experiences and understandings, which creates a better learning environment and promotes engagement and understanding. This strategy allows teachers to vary activities, difficulty levels, and teaching methods, helping each student reach their potential. The importance of constructivist theory is clear in differentiated learning, as DSLS helps students with different learning styles engage in an inclusive classroom and focus on their potential (Mishra, 2023). 5th grade students in Jombang District, Jember Regency were selected for the study due to their diverse academic performance and learning styles. This condition highlights the varied learning needs that traditional methods do not adequately address, necessitating more

inclusive and adaptive strategies like DSLS. Given the low learning achievements in this group, implementing DSLS is crucial to enhance student engagement and learning outcomes, particularly in critical stages of basic education like grade 5.

This study found that the group using DSLS saw a significant improvement in Learning Outcomes, with an F value of 109.269 and a significance level of 0.000, indicating positive changes over time. The Control Group had an F value of 0.565 and a significance level of 0.639, showing no significant difference in student learning outcomes. This finding aligns with Pozas et al. (2021), which identified a positive link between DSLS implementation and student success. Alnahdi et al. (2022) support that inclusive strategies, such as DSLS, can improve academic performance in various subjects.

In addition, in the implementation of DSLS, various concrete methods are used to improve student Learning Outcomes. Math problems can be categorized into three difficulty levels based on student abilities. Group projects, discussions, and role-plays can also enhance understanding of ecosystem topics (Galiç et al., 2023). Grouping students by interests in English lessons boosts engagement and enhances small group work. Customized feedback and educational technologies like Kahoot and Quizizz help teachers tailor the difficulty level, offering a more personalized learning experience for each student. However, it is important to note that there are some fundamental differences between this study and previous studies. Alnahdi et al. (2022) conducted a meta-analysis, while Pozas et al. (2021) performed an observational study in a single class without distinct experimental groups. This study employed an experimental design with a control group, allowing for a detailed analysis of the effects of DSLS. This study centered on 5th-grade students in Jombang District, Jember Regency, who performed poorly academically, offering a clear context for examining the use of DSLS in this group. A study Maulidia et al. (2023), shows that different teaching strategies can improve learning results by addressing the varied needs and interests of students, which boosts their motivation and engagement in primary school. Research by Hidayat et al. (2023), found that differentiated learning greatly enhanced student performance, shown by a notable difference in scores. However, it specifically focuses on class X students, not primary school students, so conclusions for younger students may vary. Additionally, other studies indicate that differentiated learning strategies significantly enhance primary school students' learning outcomes by accommodating individual differences in learning styles, interests, and abilities, thus fostering engagement and motivation, ultimately leading to improved educational quality and student performance (Nurwidiawati et al., 2024).

Although DSLS has various benefits, its implementation also faces several challenges. Time constraints and varying teacher skills can limit the effectiveness of DSLS (Gheyssens et al., 2022). Differences in student abilities in a class complicate DSLS, as it requires tailored materials and teaching methods. To overcome these obstacles, professional training for teachers is very important to increase their confidence and understanding in implementing DSLS. Collaboration among teachers, effective planning, and the use of educational technology can help create diverse learning materials that meet student needs. The skills students gain from DSLS improve both their academic success and their future (Kemendikbudristek RI, 2024). In an increasingly complex world, critical, adaptive, and collaborative thinking skills are very important. With DSLS, students are accustomed to adjusting their learning approaches, solving problems creatively, and working together in teams. These skills empower individuals to face challenges in diverse work settings, fostering self-confidence and enhancing personal development for life. The skills gained from the DSLS process prepare students for future challenges and enable them to contribute positively to society and the workplace. DSLS implementation enhances higher-order thinking skills, particularly in analysis (level C4) according to the revised Bloom's Taxonomy. DSLS involves students in learning through various activities that enhance critical thinking and understanding (Lafendry, 2023). These findings indicate that DSLS has significant potential in supporting higher academic achievement and more holistic character development of students.

Conclusion

The results showed that Differentiated Learning Strategy (DSLS) helped improve critical thinking skills and student learning outcomes by matching the teaching approach to each student's unique learning needs and styles. Statistical analysis indicated that students in the experimental group showed significant improvement, confirming that DLS is more effective than traditional methods. significance values of 0.0547 and 0.244, respectively, While in the Control Group, the F value = 0.565 and sig = 0.639 indicate no significant difference. In the Intervention Group, the F value is 17057.856 and the significance level is 0.000, showing a significant improvement in critical thinking skills. However, in the Control Group, the F value = 1.399 and sig = 0.247 indicate no significant difference. These findings support the study's goals, demonstrating that DLS is an effective strategy in elementary education for enhancing critical thinking skills and academic success.

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References

Almujab, S. (2023). Pembelajaran Berdiferensiasi: Pendekatan Efektif Dalam Menjawab Kebutuhan Diversitas Siswa. *Oikos: Jurnal Kajian Pendidikan Ekonomi Dan Ilmu Ekonomi*, *8*(1), 1–17. Retrieved from http://repo.iain-tulungagung.ac.id/5510/5/BAB 2.pdf

Alnahdi, G. H., Lindner, K.-T., & Schwab, S. (2022). Teachers' Implementation of Inclusive Teaching Practices as a Potential Predictor for Students' Perception of Academic, Social and Emotional Inclusion. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.917676

Cohen, L., Manion, L., & Morrison, K. (2017). *Critical educational research* (8th ed.). Routledge.

Galiç, S., & Yıldız, B. (2023). The Effects of Activities Enriched with Game Elements in Mathematics Lessons. *Innoeduca. International Journal of Technology and Educational Innovation*, *9*(1), 67–80. https://doi.org/10.24310/innoeduca.2023.v9i1.15396

Gheyssens, E., Coubergs, C., Griful-Freixenet, J., Engels, N., & Struyven, K. (2022). Differentiated instruction: the diversity of teachers' philosophy and praxis to adapt teaching to students' interests, readiness and learning profiles. *International Journal of Inclusive Education*, *26*(14), 1383–1400. https://doi.org/10.1080/13603116.2020.1812739

Hidayat, N., Ruhiyat, Y., & Anriani, N. (2023). Improving Student Learning Outcomes through Differentiated Learning and Adversity Intelligence. *PPSDP International Journal of Education*, *2*(2), 352–359. https://doi.org/10.59175/pijed.v2i2.135

Indra, I. M. (2021). *Desain penelitian eksperimen.* Klaten: CV Tahta Media Group.

Kemendikbudristek RI. (2024). *Peraturan Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia Nomor 12 Tahun 2024 Tentang Kurikulum Pada Pendidikan Anak Usia Dini, Jenjang Pendidikan Dasar, dan Jenjang Pendidikan Menengah*. Jakarta: Kementerian Pendidikan dan Kebudayaan. Retrieved from https://kurikulum.kemdikbud.go.id/file/1711507788_manage_file.pdf

Lafendry, F. (2023). Teori Pendidikan Tuntas Mastery Learning Benyamin S Bloom. *Tarbawi : Jurnal Pemikiran Dan Pendidikan Islam*, *6*(1), 1–12. https://doi.org/10.51476/tarbawi.v6i1.459

Manurung, A. S., Fahrurrozi, F., Utomo, E., & Gumelar, G. (2023). Implementasi Berpikir Kritis dalam Upaya Mengembangkan Kemampuan Berpikir Kreatif Mahasiswa. *Jurnal Papeda: Jurnal Publikasi Pendidikan Dasar*, *5*(2), 120–132. https://doi.org/10.36232/jurnalpendidikandasar.v5i2.3965

Marlina. (2020). *Strategi Pembelajaran Berdiferensiasi di Sekolah Inklusif*. Padang: Afifa Utama.

Maulidia, F. R., & Prafitasari, A. N. (2023). Strategi Pembelajaran Berdiferensiasi Dalam Memenuhi Kebutuhan Belajar Peserta Didik. *ScienceEdu*, *6*(1), 55. https://doi.org/10.19184/se.v6i1.40019

Minangkabau, L., S, P., Djafar, S., & Nurdin, N. (2024). Literature Review: Pembelajaran Berdiferensiasi Untuk Meningkatkan Kemampuan Berpikir Kritis Matematika. *Kognitif: Jurnal Riset HOTS Pendidikan Matematika*, *4*(2), 846–858. https://doi.org/10.51574/kognitif.v4i2.1961

Mishra, N. R. (2023). Constructivist Approach to Learning: An Analysis of Pedagogical Models of Social Constructivist Learning Theory. *Journal of Research and Development*, *6*(01), 22–29. https://doi.org/10.3126/jrdn.v6i01.55227

Noviyanti, N., Yuniarti, Y., & Lestari, T. (2023). Pengaruh Pembelajaran Berdiferensiasi Terhadap Kemampuan Computational Thinking Siswa Sekolah Dasar. *Prima Magistra: Jurnal Ilmiah Kependidikan*, *4*(3), 283–293. https://doi.org/10.37478/jpm.v4i3.2806

Nurwidiawati, D., Dhini, D. A., & Patras, Y. E. (2024). An implementation of primary school differentiated learning. *Dikoda: Jurnal Pendidikan Sekolah Dasar*, *5*(01), 24–45. https://doi.org/10.37366/jpgsd.v5i01.4631

Pozas, M., Letzel, V., Lindner, K.-T., & Schwab, S. (2021). DI (Differentiated Instruction) Does Matter! The Effects of DI on Secondary School Students' Well-Being, Social Inclusion and Academic Self-Concept. *Frontiers in Education*, *6*, 1–11. https://doi.org/10.3389/feduc.2021.729027

Purnawanto, A. T. (2023). Modul Pembelajaran Berdiferensiasi. *Jurnal Pedagogy*, *16*(1). Retrieved from https://jurnal.staimuhblora.ac.id/index.php/pedagogy/article/view/152

Purwandari, W., Safitri, I. N., & Karimah, M. M. (2024). Eksplorasi Hakekat Pembelajaran Matematika di

Madrasah Ibtidaiyah dalam Konteks Kurikulum Merdeka. *Indonesian Research Journal on Education : Jurnal Ilmu Pendidikan*, *4*(4). https://doi.org/10.31004/irje.v4i4.1130

Purwowidodo, A., & Zaini, M. (2023). *Teori dan Praktik Model Pembelajaran Berdiferensiasi Implementasi Kurikulum Merdeka Belajar* (1st ed.). Yogyakarta: Penebar Media Pustaka.

Rezania, V., Fihayati, Z., Amrullah, M., Ambarwati, F. I., & Putri, R. M. (2023). Pemahaman Guru Terhadap Problem Based Learning Kolaboratif Pada Pembelajaran IPS SD. *Geography : Jurnal Kajian, Penelitian Dan Pengembangan Pendidikan*, *11*(2), 226. https://doi.org/10.31764/geography.v11i2.16225

Rivas, S. F., Saiz, C., & Almeida, L. S. (2023). The Role of Critical Thinking in Predicting and Improving Academic Performance. *Sustainability (Switzerland)*, *15*(2), 1–10. https://doi.org/10.3390/su15021527

Saraswati, T., Efendi, M., & Widyaanti, E. (2024). Pengembangan Teknik Evaluasi Non-Tes. *Ulil Albab : Jurnal Ilmiah Multidisiplin*, *3*(8), 22–29. https://doi.org/10.56799/jim.v3i8.4090

Tomlinson, C. A. (2013). *The differentiated classroom: Responding to the needs of all learners* (2nd ed.). ASCD.