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The Influence of Teacher Competence and Differentiated Instruction on The Learning Outcomes of Students with Special Educational Needs: The Mediating Role of Learning Motivation

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Abstract

The abstract should be written in a single paragraph consisting of 150–200 words. It should briefly introduce the background of the study by explaining the relevance of educational technology and innovation in contemporary learning contexts. It should identify the research gap, limitation, or unresolved issue addressed by the study, followed by a clear statement of the research objective and the scope of the study. The abstract should also describe the research methodology, including the research approach, data sources or participants, and data analysis techniques. It should summarize the main findings, discuss their implications for educational technology and innovation, provide recommendations or directions for future research, and conclude by emphasizing the study's contribution to improving learning and educational practice.

Keywords: teacher competence; differentiated instruction; learning motivation; learning outcomes; students with special educational needs.

Introduction

Inclusive education is an educational paradigm that positions all learners, including learners with special needs, as subjects who have equal rights to receive quality educational services in accordance with their characteristics, needs, and potential (Rapisa et al., 2026). Implementing inclusive education requires a paradigm shift in learning, moving from a uniform approach toward learning that is responsive to learner diversity. Teacher competence becomes a fundamental factor because teachers are required not only to master instructional content but also to be able to design, implement, and evaluate learning that is adaptive to learners' individual needs (Rusconi & Squillaci, 2023). Differentiated instruction is viewed as one of the effective approaches for realizing learning that is fair, inclusive, and learner-centered through the adjustment of content,

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process, product, and the learning environment according to learners' readiness, interests, and learning profiles (Muh. Asriadi et al., 2023).

Although differentiated instruction has become one of the primary approaches in the implementation of inclusive education, its application in the field still faces various challenges (Langelaan et al., 2024). Difficulties arise in identifying learners' learning needs, formulating instructional strategies suited to individual characteristics, and systematically differentiating content, process, product, and the learning environment. This condition means that instructional services for learners with special needs have not been fully able to accommodate the diversity of abilities, learning readiness, and learning profiles of each learner. In addition, limited pedagogical competence, a lack of ongoing training, and minimal institutional support further hinder the optimal implementation of differentiated instruction in inclusive schools (Aprima & Sari, 2022; Lestari et al., 2025; Safitri et al., 2023). Therefore, improving teachers' competence in designing and implementing differentiated instruction has become an urgent need in order to create a learning process that is effective, inclusive, and oriented toward improved learning outcomes for learners with special needs.

Alongside teacher competence and the implementation of differentiated instruction, learning motivation is a psychological factor that plays an important role in determining the learning success of students with special needs (Sedanza, 2026). Learning motivation encourages learners to engage actively in the learning process, sustain effort when facing difficulties, and develop persistence in achieving learning goals. Among learners with special needs, learning motivation is often shaped by classroom learning experiences, including how teachers provide support and feedback and create a learning environment that is safe, inclusive, and respectful of diversity. Differentiated instruction designed according to learners' readiness, interests, and learning profiles is believed to be able to increase engagement and intrinsic motivation, which ultimately has an impact on improved learning outcomes (Carici & Priyadi, 2026). Meta-analytic findings indicate that the implementation of differentiated instruction has a positive effect on learners' academic achievement, particularly when supported by teachers' competence in managing adaptive, learner-centered instruction (Muh. Asriadi et al., 2023). Learning motivation is therefore thought to be an important mechanism that bridges the influence of teacher competence and differentiated instruction on the learning outcomes of students with special needs.

The learning outcomes of students with special needs are an important indicator for assessing the effectiveness of inclusive education. However, the attainment of learning outcomes is not only influenced by learners' initial abilities but is also the result of an interaction between internal and external factors (Patras et al., 2023). Internal factors include learning motivation, interest, and learning readiness, while external factors include teacher competence, instructional strategy, the learning environment, and school support. Teachers who possess adequate professional and pedagogical competence tend to be able to design differentiated instruction suited to learners' characteristics, thereby increasing learning engagement and motivation and ultimately producing more optimal learning achievement (Wang & Tian, 2023). The relationships among teacher competence, the implementation of differentiated instruction, learning motivation, and learning outcomes therefore need to be understood as an interrelated system that supports educational success for students with special needs.

Research on inclusive education indicates that a model of relationships among variables involving teacher competence, differentiated instruction, learning motivation, and learning outcomes is increasingly relevant to examine using a structural approach (Purnama, 2021). Various recent studies reveal that teacher competence not only has a direct effect on the quality of instruction but also shapes teachers' ability to implement effective differentiated instructional strategies in inclusive classrooms. In addition, instructional practices oriented toward learners' individual needs have been shown to increase motivation, student engagement, and academic achievement (Hamdana et al., 2023; Mukti et al., 2023; Putra et al., 2020). These findings indicate that the relationships among variables in inclusive education are complex and involve mediating mechanisms that need to be tested empirically. Developing a research model that positions learning motivation as a mediating variable is therefore expected to provide a deeper understanding of how teacher competence and the implementation of differentiated instruction jointly affect the learning outcomes of students with special needs, while also enriching the development of theory and practice in inclusive education going forward.

The implementation of differentiated instruction has become one of the main focuses in carrying out the Merdeka Curriculum, which emphasizes learner-centered instruction and accommodates the diversity of learning characteristics (Martanti et al., 2022). For students with special needs, implementing this approach requires teachers to have competence that includes not

only mastery of content and pedagogy but also the ability to conduct diagnostic assessment, develop individualized lesson plans, select flexible instructional strategies, and provide evaluation suited to learners' needs (Rijal et al., 2024). Limited conceptual understanding, limited experience teaching students with special needs, and a lack of ongoing professional training are challenges that affect instructional effectiveness and learning outcome achievement. This condition points to the need for research that provides empirical evidence regarding the relationships among teacher competence, the implementation of differentiated instruction, learning motivation, and learning outcomes as a basis for formulating policy and programs to enhance teacher competence in inclusive education.

Improving the learning outcomes of students with special needs does not depend on a single factor alone but is the result of the interaction among teacher competence, the implementation of differentiated instruction, and learners' learning motivation. Although each variable has been widely studied separately, research that integrates the direct and indirect relationships among these variables particularly by positioning learning motivation as a mediating variable in the context of education for students with special needs remains relatively limited. This research gap is important to address given the need for empirical evidence that can explain the mechanism by which teacher competence and the implementation of differentiated instruction affect learning outcomes through increased learning motivation. Therefore, this study aims to analyze the effect of teacher competence and the implementation of differentiated instruction on the learning outcomes of students with special needs, with learning motivation as a mediating variable. The findings of this study are expected to make a theoretical contribution to the development of instructional models in inclusive education and to serve as a basis for policymaking and the development of teacher competence programs to improve the quality of educational services for students with special needs.

Methodology

This study used a quantitative approach with an explanatory survey method. The quantitative approach was chosen because the study aimed to test the causal relationships among teacher competence, differentiated instructional methods, learning motivation, and the learning outcomes of students with special needs. The explanatory survey design was used to explain the direct and

indirect effects among variables based on data obtained from respondents. The study was conducted at schools implementing inclusive education and/or Special Schools in the predetermined research area. The research timeline covered the preparation stage, instrument development, data collection, data analysis, and report writing.

The population in this study consisted of teachers who teach students with special needs at inclusive schools and Special Schools. The research sample was determined using a purposive sampling technique, in which respondents were selected based on specific criteria, such as teachers who had implemented differentiated instruction and had experience teaching students with special needs. When using Structural Equation Modeling (SEM), so that the analysis results meet model feasibility requirements. The data collection technique used was a survey employing a questionnaire. A questionnaire was then created using Google Forms and distributed via the WhatsApp application with the assistance of teachers.

Result

The results of the study show that teacher competence is an important factor determining the success of instruction for students with special needs. Teachers with strong pedagogical, professional, social, and personal competence are able to create a conducive learning environment, thereby increasing students' motivation and learning outcomes. In addition, differentiated instruction has been shown to provide a learning experience that better matches students' individual needs. Adjustments to content, methods, media, and forms of assessment make students more active, more confident, and more highly motivated to learn. Increased learning motivation then has a positive impact on students' learning outcome achievement. These findings indicate that improving teacher competence and consistently implementing differentiated instruction are effective strategies for improving the quality of education for students with special needs. Schools therefore need to provide ongoing training to teachers on differentiated instruction and professional competence development so that inclusive educational services become increasingly optimal.

Results of the Reflective Construct Measurement Model Test (Outer Model)

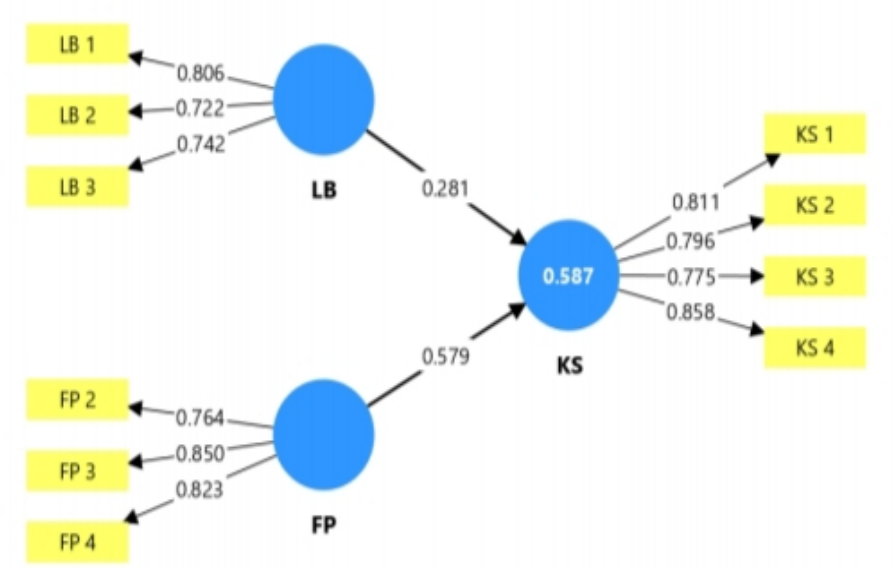

Figure 1. Results of the SEM-PLS Test on the Reflective Construct

Based on the results of the measurement model test, all indicators for each latent construct had loading factor values above 0.7, thus meeting the criteria for convergent validity. For the learning motivation construct (LB), indicator loading factor values ranged from 0.722 to 0.806. This indicates that these indicators are well able to represent students' learning motivation, encompassing enthusiasm for learning, persistence, and interest in participating in the learning process. Next, the differentiated instructional method construct (FP) also showed high loading factor values, ranging from 0.764 to 0.850. This value indicates that the indicators of differentiated instruction such as the adjustment of methods, materials, and learning activities to suit students' needs strongly and consistently explain the differentiated instruction construct. Meanwhile, the learning outcomes construct (KS) had indicator loading factor values between 0.775 and 0.858, indicating that students' learning outcomes, in the cognitive, affective, and psychomotor domains, can be validly measured through the indicators used. Accordingly, all indicators in this study were deemed suitable for use in further analysis.

Based on the results of the structural model test (inner model), an R-Square value of 0.587 was obtained for the learning outcomes construct. This value indicates that 58.7% of the variation in the learning outcomes of students with special needs can be explained by learning motivation and the differentiated instructional method, while the remaining 41.3% is influenced by other

variables outside the research model. This R-Square value falls into the moderate-to-strong category, indicating that the research model has fairly good explanatory power. Path analysis results show that learning motivation has a positive effect on learning outcomes, with a path coefficient value of 0.281. This result indicates that an increase in students' learning motivation is followed by an increase in learning outcomes, although the effect is moderate. Students with special needs who have high learning motivation tend to be more active in participating in instruction, completing tasks, and striving to achieve optimal learning outcomes.

In addition, the differentiated instructional method showed a positive and stronger effect on learning outcomes, with a path coefficient value of 0.579. This value indicates that implementing instruction tailored to the needs, abilities, and characteristics of students with special needs plays a highly dominant role in improving learning outcomes. This finding confirms that appropriate and flexible instructional strategies have a stronger direct effect on learning outcome achievement than learning motivation does. Overall, the SEM-PLS analysis results show that the research model meets feasibility criteria and is able to empirically explain the relationships among variables. The differentiated instructional method proved to be the primary factor influencing the learning outcomes of students with special needs, while learning motivation served as a supporting factor that further strengthened the achievement of learning outcomes. These findings imply that instructional success in inclusive education is greatly determined by teachers' ability to implement instruction that is adaptive and oriented toward students' individual needs.

Correlation Test Analysis

Table 1. Correlation Values for Each Model

	KE Total	DS Total	MB Total
KE_Total Person Correlation	1	.766**	.806**
Sig. (2-Tailed)		.000	.000
N	53	53	53
DS_Total Person Correlation	.766**	1	.766**
Sig. (2-Tailed)	.000		.000
N	53	53	53
MB_Total Person Correlation	.806**	.766**	1
Sig. (2-Tailed)	.000	.000	
N	53	53	53

Based on the results of the Pearson correlation test shown in the table above, relationships were obtained among Teacher Competence (KE_Total), Differentiated Instructional Method (DS_Total), and Learning Motivation (MB_Total) among students with special needs. The analysis results show that there are positive and significant relationships among the variables studied. The relationship between teacher competence and differentiated instructional method had a correlation coefficient value of 0.766 with a significance value of 0.000. This value indicates that teacher competence has a strong relationship with the implementation of differentiated instruction. In other words, the better a teacher's competence, the more optimal the implementation of differentiated instruction in the learning process.

Furthermore, the relationship between teacher competence and learning motivation showed a correlation coefficient value of 0.806 with a significance value of 0.000. This value falls into the strong and significant relationship category, meaning that teacher competence is closely related to students' learning motivation. Teachers with good pedagogical, professional, social, and personal competence tend to be able to create an enjoyable learning atmosphere, thereby increasing the learning motivation of students with special needs. In addition, the relationship between differentiated instructional method and learning motivation also showed a correlation coefficient value of 0.766 with a significance value of 0.000. This result indicates that the implementation of differentiated instruction has a strong and significant relationship with students' learning motivation. Instruction tailored to students' needs, abilities, and characteristics is able to encourage students to be more active, confident, and enthusiastic in participating in learning.

Overall, the results of this correlation test show that the three variables in the study have positive and significant relationships with one another. This finding reinforces that teacher competence and differentiated instructional method are important factors related to the increased learning motivation of students with special needs. These variable relationships thus support the proposed research model and serve as a basis for further analysis in testing effects and mediation.

Model Summary Analysis

Table 2. Model Summary Values

Model	R	R Square	Adjusted R Estimete
1	.838[a]	.703	.691

Based on the results of the multiple linear regression analysis presented in the Model Summary table, a correlation coefficient (R) value of 0.838 was obtained. This value indicates a very strong relationship between the independent variables in the study teacher competence and differentiated instructional method and the dependent variable, the learning outcomes of students with special needs, through learning motivation. The closer the R value is to 1, the stronger the relationship among the variables, so this result indicates that the regression model used has a close relationship among variables. The R Square (R^2) value obtained was 0.703. This indicates that 70.3% of the variation in the learning outcomes of students with special needs can be explained by teacher competence, differentiated instructional method, and learning motivation as included in the research model. Meanwhile, the remaining 29.7% is influenced by other factors outside this research model, such as family environment, facilities and infrastructure, students' psychological condition, and other external factors not examined in this study.

Furthermore, the Adjusted R Square value of 0.691 indicates that, after adjusting for the number of independent variables used, the regression model is still able to explain 69.1% of the variation in learning outcomes. The Adjusted R Square value, which is not far different from the R Square value, indicates that the regression model used is stable and is not biased by the addition of variables, so the model is considered fairly good and suitable for further analysis. The Std. Error of the Estimate value of 2.829 indicates the level of prediction error in the regression model. The smaller the standard error value, the better the model's ability to predict the dependent variable. This value indicates that the prediction error for learning outcomes in the model remains within a reasonable range, so the regression model used has a fairly good level of accuracy. Overall, the results of this regression analysis show that the research model built has strong explanatory power and is able to significantly explain the effect of teacher competence and differentiated instructional method on the learning outcomes of students with special needs through learning motivation.

Discussion

Based on the SEM-PLS analysis results, the differentiated instructional method proved to have the strongest effect on the learning outcomes of students with special needs. This finding supports the view of (Tomlinson, 2017) who states that differentiated instruction enables teachers to adjust instructional content, process, and product according to learners' readiness, interests, and learning profiles, making learning more meaningful and effective. Research conducted by (Mulyawati et al., 2022) also shows that differentiated instruction is able to increase student engagement and understanding, particularly in classes with diverse learning abilities. In the context of students with special needs, the results of this study reinforce those findings by showing that flexible, adaptive instruction has a strong effect on improving learning outcomes.

In addition, the results of this study also show that learning motivation has a positive effect on learning outcomes, although with a more moderate strength of effect. This finding is consistent with the theory of learning motivation put forward by (Sasmi et al., 2025), which states that motivation is an internal drive that influences the intensity and persistence of students in learning. Previous research by (Wulandari, 2022) also confirms that students with high learning motivation tend to have better learning achievement. In the context of students with special needs, learning motivation becomes an important aspect because these students often face academic and psychosocial obstacles that can diminish their enthusiasm for learning. Learning motivation therefore serves as a reinforcing factor in improving students' learning outcomes.

The role of teacher competence in this study is also consistent with the results of previous research. The correlation test results show that teacher competence has a strong relationship with students' learning motivation. This finding is in line with research by (Jauhari & Karyono, 2022) which states that teachers with good pedagogical, professional, social, and personal competence are able to create a conducive and motivating learning atmosphere. Other research by (Idhartono et al., 2023) also shows that teacher quality is one of the factors with the greatest influence on students' learning achievement. In inclusive education, teacher competence becomes increasingly important because teachers are required to understand the diverse characteristics and learning needs of students.

The results of this study also reinforce the findings of previous research linking differentiated instruction with learning motivation. The strong relationship between differentiated instructional method and learning motivation shows that when students feel that instruction matches their abilities and needs, they become more confident and motivated to learn. This finding is consistent with research by (Aprima & Sari, 2022) which states that instruction responsive to individual student differences can increase motivation and learning engagement, particularly among students with special needs. In addition, the regression analysis results show that teacher competence, differentiated instructional method, and learning motivation together are able to explain a substantial proportion of the variation in the learning outcomes of students with special needs. This finding supports previous research stating that learning outcomes are not influenced by a single factor but by a combination of students' internal and external factors. Research by (Riyadi et al., 2023) confirms that instructional effectiveness is strongly influenced by teacher quality, instructional strategy, and students' psychological condition, including learning motivation.

Conclusion

Based on the analysis and discussion presented above, it can be concluded that teacher competence and differentiated instructional method have a significant effect on the learning outcomes of students with special needs, both directly and indirectly through learning motivation. These findings indicate that the quality of inclusive instruction is greatly determined by teachers' ability to understand learners' characteristics and implement instructional strategies that are adaptive to students' individual needs.

The results of the statistical analysis show that the research model has a high strength of relationship, with an R value of 0.838, indicating a strong relationship among the variables of teacher competence, differentiated instructional method, learning motivation, and learning outcomes. The R Square value of 0.703 confirms that 70.3% of the variation in the learning outcomes of students with special needs can be explained by the variables in the model, while the remainder is influenced by other factors outside the study. This reinforces the conclusion that the pedagogical and psychological factors examined are the primary determinants of improved learning outcomes in inclusive educational settings.

Specifically, the differentiated instructional method was shown to make a more dominant contribution to learning outcomes than learning motivation. This finding indicates that, for students with special needs, an instructional approach suited to individual needs, abilities, and learning styles is a stronger determinant of learning success than internal motivation alone. Nevertheless, learning motivation still plays an important role as a mediating variable that strengthens the effect of teacher competence and instructional method on learning outcomes.

This conclusion is consistent with various previous studies stating that teachers' pedagogical competence plays an important role in creating an inclusive and effective learning environment. Prior research has also confirmed that differentiated instruction can increase the participation, engagement, and understanding of students with special needs by providing room for differences in ability and learning characteristics. In addition, learning motivation in the context of inclusive education is understood not as a standalone factor, but as the result of a positive interaction among teachers, instructional methods, and students' learning experiences.

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The Author's Conflict of Interest Statement

The author declares that there is no conflict of interest, either financial or non-financial, in the conduct of the research, writing, analysis and discussion, or publication of this article. The entire research process was carried out objectively and in accordance with academic principles.

References

Aprima, D., & Sari, S. (2022). Analisis Penerapan Pembelajaran Berdiferensiasi Dalam Implementasi Kurikulum Merdeka Pada Pelajaran Matematika SD. *Cendikia : Media Jurnal Ilmiah Pendidikan*, *13*(1), 95–101.

Carici, Y., & Priyadi, A. T. (2026). Diferensiasi Instruksi dan Asesmen Inklusif dalam Pendidikan: Sebuah Tinjauan Literatur Tentang Praktik, Tantangan, dan Strategi Implementa. *Jurnal Didaktika Pendidikan Dasar*, *10*(1), 229–244.

Hamdana, Basri, M., & Sulfasyah. (2023). Manajemen Pembelajaran Pendidikan Inklusif Pada Anak Berkebutuhan Khusus di SDN Unggulan Minginsidi I Makassar. *Jurnal Ilmu Pendidikan Dasar*, *08*(September), 2564–2573.

Idhartono, A. R., Hidayati, N., Arida Azka Nurina Ichwan, & Sabrina Nur Fisabilillah. (2023). Modifikasi Perangkat Pembelajaran Kurikulum Merdeka untuk Anak Berkebutuhan Khusus di Jenjang PAUD. *Kanigara: Jurnal Pengabdian Kepada Masyarakat*, *3*(2), 196–205. https://doi.org/10.36456/kanigara.v3i2.7791

Jauhari, M. I., & Karyono, K. (2022). Teori Humanistik Maslow dan Kompetensi Pedagogik. *Sustainable Jurnal Kajian Mutu Pendidikan*, *5*(2), 250–265. https://doi.org/10.32923/kjmp.v5i2.2585

Langelaan, B. N., Gaikhorst, L., Smets, W., & Oostdam, R. J. (2024). Differentiating instruction: Understanding the key elements for successful teacher preparation and development. *Teaching and Teacher Education*, *140*(May 2023), 104464. https://doi.org/10.1016/j.tate.2023.104464

Lestari, A., Damayanti, R., & Meilana, S. F. (2025). Early Assessment and Identification of Children with Special Needs to Support Inclusive Education. *Jurnal Nasional Holistic Science*, *5*(1), 71–74.

Martanti, F., Widodo, J., Rusdarti, R., & Priyanto, A. S. (2022). Penguatan Profil Pelajar Pancasila Melalui Pembelajaran Diferensiasi Pada Mata Pelajaran IPS di Sekolah Penggerak. *Prosiding Seminar Nasional Pascasarjana*, *5*(1), 415–417. https://doi.org/http://pps.unnes.ac.id/prodi/prosiding-pascasarjana-unnes/412

Muh. Asriadi, A. M., Hadi, S., Istiyono, E., & Retnawati, H. (2023). Does differentiated instruction affect learning outcome? Systematic review and meta-analysis. *Journal of*

Pedagogical Research, *7*(5), 18–33. https://doi.org/10.33902/JPR.202322021

Mukti, H., Arnyana, I. B. P., & Dantes, N. (2023). Analisis Pendidikan Inklusif: Kendala dan Solusi dalam Implementasinya. *Kaganga:Jurnal Pendidikan Sejarah Dan Riset Sosial Humaniora*, *6*(2), 761–777. https://doi.org/10.31539/kaganga.v6i2.8559

Mulyawati, Y., Zulela, M., & Edwita, E. (2022). Differentiation Learning to Improve Students Potential in Elementary School. *Pedagonal : Jurnal Ilmiah Pendidikan*, *6*(1), 68–78. https://doi.org/10.55215/pedagonal.v6i1.4485

Patras, Y. E., Mubarok, K., Gumelar, G., Utomo, E., & Hidayat, R. (2023). Competences of Teachers: Differentiated Learning, Solutions in Diversity. *Jurnal Pendidikan*, *15*(4), 6475–6486. https://doi.org/10.35445/alishlah.v15i4.3732

PURNAMA, Y. H. (2021). Implementasi Kurikulum 2013 Dalam Pendidikan Inklusi Di Royal Wells School Kota Bekasi. *ACADEMIA: Jurnal Inovasi Riset Akademik*, *1*(2), 253–259. https://doi.org/10.51878/academia.v1i2.743

Putra, Y. D., Astyowati, D. R., Aribowo, H., & Fitriyasari, A. (2020). Penerapan Manajemen Kurikulum Danpembelajaran Pendidikan Inklusif Berkebutuhan Khusus. *Jurnal Eksekutif*, *17*(2), 280–293.

Rapisa, D. R., Hermanto, H., & Suparno, S. (2026). Teacher Competency in Practicing Inclusive Education: A Systematic Review. *Journal of Teaching and Learning*, *20*(2), 57–73. https://doi.org/10.22329/jtl.v19i3.9373

Rijal, M., Mumpuniarti, & A.M, M. A. (2024). Integrating Gestalt Theory Concepts in Visual Perception Assessment for Children with Intellectual Disabilities. *Journal of Education Research and Evaluation*, *8*(2), 328–337. https://doi.org/10.23887/jere.v8i2.69127

Riyadi, S., Nuswantoro, P., Merakati, I., Sihombing, I., Isma, I., & Abidin, D. (2023). Optimalisasi Pengelolaan Sumber Daya Manusia Dalam Konteks Pendidikan Inklusif Di Sekolah. *Jurnal Review Pendidikan Dan Pengajaran (JRPP)*, *6*(2), 270–278.

Rusconi, L., & Squillaci, M. (2023). Effects of a Universal Design for Learning (UDL) Training Course on the Development Teachers' Competences: A Systematic Review. *Education Sciences*, *13*(5). https://doi.org/10.3390/educsci13050466

Safitri, N., Safriana, S., & Fadieny, N. (2023). Literatur Review: Model Pembelajaran Berdiferensiasi Meningkatkan Hasil Belajar Peserta Didik. *Jurnal Pendidikan Dan Ilmu Fisika*, *3*(2), 246–255. https://doi.org/10.52434/jpif.v3i2.2811

Sasmi, R. R., Shiha, S. N., Saregar, A., & Deta, U. A. (2025). Perpektif Siswa SMA Terhadap kearifan Lokal, Literasi Sains, dan Motivasi Belajar dalam Pembelajaran Fisika. *Reog: Journal of Ecoethnoscience Education*, *01*(01), 32–39.

Sedanza, M. A. C. (2026). When the Best Studies Show the Least: A Systematic Review and Typological Synthesis of Differentiated Instruction for Diverse English Learners in

Inclusive Education. *International Journal of Special Education*, *41*(8S), 559–570.

Tomlinson, C. A. (2017). *How to Differentiate Instruction in Academically Diverse Classrooms (3rd ed)*. ASCD.

Wang, T., & Tian, G. (2023). Linking Distributed Leadership with Differentiated Instruction in Inclusive Schools: The Mediating Roles of Teacher Leadership and Professional Competence. *Behavioral Sciences*, *13*(12). https://doi.org/10.3390/bs13120990

Wulandari, A. S. (2022). Literature Review: Pendekatan Berdiferensiasi Solusi Pembelajaran dalam Keberagaman. *Jurnal Pendidikan Mipa*, *12*(3), 682–689. https://doi.org/10.37630/jpm.v12i3.620