



Non-Labeling Diagnostic Assessment from a Human Dignity Perspective: Implications for Students' Academic and Character Development

Maya Oktavia Tutughamiarso¹, Wahyudi Triwiyanto^{2*}

¹IPH Schools Surabaya, Indonesia.

^{2*}Christian Education Study Program, STAK Terpadu PESAT Salatiga, Indonesia.

*Corresponding Author. Email: triwiyantowahyudi@gmail.com

Abstract: This study aims to analyse how the results of the Middle Years Information System (MidYIS) initial assessment can be interpreted and utilised pedagogically as a non-labelling assessment to support students' academic and character development. A descriptive quantitative approach was used in this study, with a cross-sectional design, involving all 10th-grade students (n=35) at a private Christian high school in an urban Indonesian context as the sample, using a total sampling technique. Data were obtained from MidYIS Standard Age Scores (mean = 100, SD = 15) across six cognitive domains. The data analysis techniques in this study employed descriptive statistics and inferential statistical tests. The findings reveal significant cross-domain variation. Mathematics and Non-Verbal Reasoning demonstrate strong performance, with 45.7% of students in the Well Above to Far Above categories. In comparison, Perceptual Speed and Accuracy is the strongest domain (65.7% Above Average or higher). In contrast, Vocabulary shows greater dispersion, with 34.3% in the Below to Far Below categories. The Overall Ability mean (≈ 105.67) is slightly above the international benchmark, yet substantial intra-individual differences are evident, including cases of high mathematical ability alongside lower verbal performance. These results demonstrate that cognitive profiles are multidimensional and that a single ability label constitutes a scientific fallacy. MidYIS should therefore function as a reflective tool for differentiated learning rather than a predictive or labelling instrument, supporting educational practices grounded in assessment for learning and respect for human dignity.

Article History

Received: 06-01-2026
Revised: 10-02-2026
Accepted: 21-02-2026
Published: 25-03-2026

Key Words:

Assessment for Learning; Diagnostic Assessment; Differentiated Learning; Human Dignity; Non-Labeling.

How to Cite: Tutughamiarso, M. O., & Triwiyanto, W. (2026). Non-Labeling Diagnostic Assessment from a Human Dignity Perspective: Implications for Students' Academic and Character Development. *Jurnal Kependidikan : Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran, Dan Pembelajaran*, 12(1), 87-98. <https://doi.org/10.33394/jk.v12i1.19603>



<https://doi.org/10.33394/jk.v12i1.19603>

This is an open-access article under the [CC-BY-SA License](https://creativecommons.org/licenses/by-sa/4.0/).



Introduction

In recent years, schools in Indonesia have increasingly emphasised the use of initial assessments to map students' readiness, characteristics, and basic abilities before learning (Anggraena et al., 2025; Kemendikbudristek, 2022). To understand initial abilities, various educational units have also begun using more structured, data-based preliminary assessments. The Middle Years Information System (MidYIS) is one such preliminary assessment developed by Cambridge Insight (formerly CEM - Centre for Evaluation and Monitoring) to determine students' verbal, quantitative, and spatial abilities at the middle school level. MidYIS is not intended to provide rankings as summative assessments do, but rather to map students' cognitive potential as a basis for planning learning that suits each individual's needs and learning styles (Cambridge Assessment Centre for Evaluation and Monitoring (CEM), 2024). This approach aligns with the 2024 National Curriculum policy's focus on differentiation and personalisation in learning.

The utilisation of assessment results in practice often poses challenges. One issue that arises is the tendency toward labelling, the assignment of a fixed label to students based on



their assessment scores. Labelling, whether explicit or implicit, can negatively impact students' psychological development and learning motivation. Labelling students as "smart" or "less capable" can influence how they view themselves and their learning (Gervas & Lweyemamu, 2024; Knight, 2025; Porta & Todd, 2024). Students can become trapped in a fixed mindset, believing their abilities are fixed and unchangeable. As a result, students view their failures as proof of their incompetence (Heyder & Pegels, 2025; Ortiz Alvarado et al., 2024; Zeeb et al., 2023). Conversely, students with a growth mindset view failure as part of the learning process and an opportunity for growth. In the context of MidYIS, the growth mindset framework guides teachers and schools to view assessment scores as an extension of growth rather than a limit on ability or a tool for categorisation (Ortiz Alvarado et al., 2024; Vestad & Bru, 2024).

Assessments that function as assessments for learning, rather than simply assessments of learning, by providing constructive summative feedback, will significantly increase student motivation to learn (Schellekens et al., 2021; Wolterinck et al., 2024). The quality of feedback to students is the main factor in improving learning outcomes, not scores or labels (Agricola et al., 2020; Haughney et al., 2020; Wisniewski et al., 2020). From this perspective, MidYIS provides initial data to help teachers design differentiated learning aligned with the zone of proximal development, so that each student can follow the learning process at an appropriate level of challenge (Lei & Bakar, 2025; Mudi & Samanta, 2024). The principle of non-labelling is also in line with UNESCO's inclusive education framework. UNESCO states that inclusive education must avoid any form of categorisation or labelling that limits learning opportunities or reinforces biased perceptions of students' abilities (Ebzeeva & Smirnova, 2023; Lindner & Schwab, 2025).

The use of assessment data requires ethical considerations. The educational data obtained represents students' learning identities and must be managed wisely because it is sensitive to privacy, context, and psychological impact on students (Stoliarchuk et al., 2025). School policies regarding the access, interpretation, and communication of assessment results are necessary to ensure that school data is not misused as a tool for judgment, but rather as a means for holistic student development.

A private Christian high school in an urban Indonesian context, as a Christian educational institution, has implemented MidYIS regularly and provides a concrete example of how the assessment data obtained can be used to facilitate students' academic and spiritual growth. The *data-driven instruction* approach provides teachers with guidelines for interpreting MidYIS results not as a categorisation tool but as a source of information that enriches the learning process and pastoral guidance. This aligns with the Christian-based education paradigm, which emphasises using initial assessments, such as MidYIS, to nurture and develop students' potential rather than to label or group students by ability. The Christian education paradigm views human beings as dignified individuals, God's creations, with the potential to grow and be transformed through continuous learning and guidance. This proves that growth-centred assessments improve academic outcomes and foster resilience, humility, and openness to lifelong learning (Paembonan & Ronda, 2024; Pike, 2024).

Initial assessments, including MidYIS, significantly contribute to predicting students' academic readiness and to supporting data-based learning planning (Alfageh et al., 2024; Jiang et al., 2022). On the other hand, studies on assessment for learning and growth mindset emphasise the importance of using assessment as a means of reflection and feedback to encourage student growth, rather than as a tool for categorisation or a final assessment (Ortiz Alvarado et al., 2024; Schellekens et al., 2021; Wolterinck et al., 2024). In addition, the discourse on inclusive education and data ethics highlights the risks of labelling and the



negative psychological impact on students' dignity and sense of self (Knight, 2025; Porta & Todd, 2024).

However, various studies still stand alone to some extent. Studies on MidYIS generally focus on predictive validity and academic achievement, whereas studies on growth mindset and assessment for learning focus more on psychological and pedagogical aspects, without directly linking these to data-based initial assessment practices. On the other hand, perspectives on data ethics and the dignity of students as human beings in the context of education are still rarely systematically integrated into discussions of the implementation of initial assessments in schools. Thus, there is a research gap: a conceptual framework that integrates MidYIS initial assessment with the principles of non-labelling, growth mindset, assessment for learning, and data ethics that respect human dignity in a holistic and applicable manner.

The scientific novelty of this article lies in its emphasis on the ethical dimensions of data and on respect for human dignity. This article views MidYIS as a tool for measuring students' initial abilities and as an instrument that must be used ethically, without labeling, and with interpretations that support student growth. This Research also fills a gap, as studies that critically examine Cambridge Assessment International Education's standardized cognitive assessments from the perspectives of data ethics and the protection of human dignity in learning practices remain limited. This study differs from previous studies that tend to emphasise predictive functions or ability categorisation. This article offers a conceptual paradigm for using MidYIS data to support differentiated learning and holistic character development in students without causing deterministic labelling.

The main issue of this study is how MidYIS initial assessment results can be interpreted and utilised pedagogically so that they function as a means of developing students' academic and character potential, rather than as a tool for labelling abilities that has the potential to inhibit students' long-term motivation and growth, while still respecting students as individuals with dignity. Therefore, the purpose of this study is to explain and analyse, conceptually and empirically, how MidYIS data can be interpreted and utilised within the framework of assessment for learning, growth mindset, and data ethics that respect human dignity to support differentiated learning and the academic and character growth of students. This study also aims to provide practical guidance for teachers and school leaders on utilising initial assessment results as a humanistic and transformative pedagogical reflection tool rather than a labelling tool.

Research Method

This study uses a descriptive, quantitative approach with a cross-sectional design. This approach was chosen to objectively describe students' initial ability profiles and cognitive potential based on the results of the MidYIS initial assessment, without manipulating variables or testing causal relationships. The study focuses on describing the distribution of student abilities to inform pedagogical reflection and differentiated learning planning. The population of this study comprised all 10th-grade students at a private Christian high school in an urban Indonesian context in the 2025-2026 academic year who took the MidYIS initial assessment. The sampling technique used was total sampling, meaning the entire population within the selected school was included as the research sample. As a pilot study, this research intentionally focuses on generating an in-depth understanding of student cognitive profiles within one specific school context, rather than aiming for broad generalization across multiple settings. The research sample consisted of 35 students. This



study did not use group division, either experimental or control groups, because the purpose of the study was descriptive and did not compare treatment groups.

The research instrument used was the Middle Years Information System (MidYIS), a standard initial assessment developed by the Cambridge Assessment Centre for Evaluation and Monitoring (CEM) at the University of Cambridge. MidYIS is designed to measure students' cognitive potential at the secondary education level through six domains of ability, namely Mathematics, Vocabulary, Non-Verbal Reasoning, Proofreading, and Perceptual Speed and Accuracy, as well as an Overall Ability aggregate score (Cambridge Assessment Centre for Evaluation and Monitoring (CEM), 2024). MidYIS is a standardised assessment tool widely used internationally and has demonstrated construct validity and reliability. The assessment is conducted online via the official Cambridge Insights platform, under the supervision of teachers, in accordance with standard procedures.

The research procedure was carried out in several stages, proceeding chronologically. The first stage was research preparation, which included coordinating with schools, scheduling assessments, and disseminating the assessment objectives to teachers and students. The second stage was the implementation of the MidYIS assessment, conducted online in schools under teachers' direct supervision. The Cambridge Insight platform automatically processes student responses and provides a score report for each domain of competence. The third stage is the collection and organisation of MidYIS results data, which is then anonymised to ensure the confidentiality of student identities. The final stage is data analysis and pedagogical interpretation, positioning the assessment results as initial data for learning reflection, rather than as a basis for labelling student abilities.

The research data analysis used descriptive statistics to examine the distribution of student scores across the MidYIS competency domains. The analysis focused on calculating the frequency and percentage of students within the competency categories established by Cambridge, ranging from Far Below Average to Far Above Average. These categories are determined by Standard Age Scores (SAS), which are standardised with an international mean of 100 and a standard deviation of 15, adjusted for students' age at the time of testing. Each categorical band corresponds to specific SAS ranges (e.g., Below Average, Average, Above Average) rather than stanine scores. Thus, the categorisation reflects relative performance compared to an international age-based norm group.

This study did not employ inferential statistical tests, as its purpose was to describe students' initial cognitive profiles rather than to test causal relationships or hypotheses. No missing data or outliers were identified, since all participants completed the assessment through a standardised online system. Consequently, no data transformation or statistical significance testing (p-values) was conducted.

The principles of educational research ethics were applied by anonymising all student data to ensure it contained no personally identifiable information. The data were used strictly for research and for internal school learning and development. The assessment results were interpreted in accordance with the principles of non-labelling and respect for students' dignity as human beings to avoid negative psychological effects. The data's validity was ensured using the MidYIS instrument, which is highly reliable and has been tested internationally. Thus, the data obtained are scientifically sound and provide a strong basis for pedagogical reflection and differentiated learning planning at a private Christian high school in an urban Indonesian context.

Results and Discussion

Analysis of the MidYIS assessment results for 10th-grade students at a private Christian high school in an urban Indonesian context reveals a pattern of heterogeneous cognitive abilities, with students in almost all domains measured concentrated in the medium to high categories. The main scientific finding of this study is that the student ability profile does not exhibit an extreme distribution but rather forms a relatively stable pattern that shifts upward compared to international benchmarks. This indicates that most students have an adequate cognitive foundation to participate in differentiated learning at the intermediate to advanced level (Govindarajoo et al., 2025; OECD, 2020).

The findings of the initial assessment are scientifically important because they confirm that MidYIS is not a fixed indicator of student ability but rather a spectrum of learning potential. Thus, the initial assessment is not intended as a deterministic categorisation tool, but rather serves as a pedagogical baseline.

Table 1. MidYIS Results for 10th-Grade Students.

Category	SAS Range	Math	Vocab	Non-V	Proof R	PSA	OA
Far Below Average	≤76	0%	8.6%	0%	2.9%	0%	5.7%
Well Below Average	77–88	20.0%	14.3%	0%	5.7%	2.9%	11.4%
Below Average	89–96	8.6%	11.4%	8.6%	11.4%	5.7%	5.7%
Average	97–105	17.1%	17.1%	14.3%	34.3%	0%	22.9%
Above Average	106–113	8.6%	31.4%	31.4%	22.9%	37.1%	17.1%
Well Above Average	114–125	31.4%	17.1%	31.4%	22.9%	28.6%	31.4%
Far Above Average	≥126	14.3%	2.9%	14.3%	2.9%	25.7%	5.7%
Sample Mean (SAS)	-	112	103	110	104	115	≈105.67
Global Mean		100	100	100	100	100	100

As shown in Table 1, the MidYIS international benchmark is set at a mean of 100 (SD = 15), with the Average band ranging from SAS 97–105. The sample's Overall Ability distribution is visibly right-shifted, with 54.2% of students in the Above to Far Above categories, indicating performance above the global normative midpoint. MidYIS results show that students' mathematical abilities tend to cluster in the Above Average to Well Above Average categories, with a minimal proportion in the low category. These scientific findings indicate a relatively strong numerical cognitive readiness in this cohort of students, enabling the implementation of problem-solving and higher-order reasoning-based learning. This trend can be explained theoretically through the assessment-for-learning approach, which creates a challenging yet supportive learning environment that encourages students to progressively develop their numerical abilities (Shi & Hargis, 2023; Wolterinck et al., 2024). These findings confirm that MidYIS can effectively identify initial academic readiness without grouping students. These findings are also interpreted as a foundation for pedagogical reflection, not as a basis for justifying student labelling or as a predictive tool (Gervas & Lweyemamu, 2024; Kashikar et al., 2025; Knight, 2025; Sideli et al., 2021).

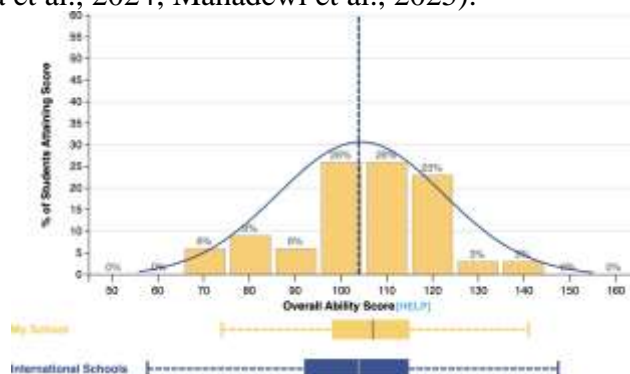
The distribution of students' vocabulary skills shows greater variation than in other domains. This finding indicates that verbal skills exhibit the highest level of heterogeneity, reflecting differences in students' literacy backgrounds and learning experiences. Scientifically, this variation confirms that verbal skills cannot serve as a single indicator of students' overall intelligence. This phenomenon can be interpreted through the perspective of a growth mindset, which positions language ability as a dynamic competency that can be developed through consistent exposure, targeted practice, and appropriate learning strategies

(Yeager & Dweck, 2020). These findings are consistent with inclusive education studies that emphasise that low achievement in a single cognitive domain should not be interpreted as a permanent limitation (Florian & Beaton, 2018; Köpfer, 2025). Therefore, these results reinforce the use of MidYIS as a tool for identifying learning needs, rather than as a basis for labelling abilities.

Students' non-verbal abilities show a strong concentration in the middle to high categories, with very few in the lowest category. These findings indicate that visual-spatial reasoning is a major strength in students' cognitive profiles. From a theoretical perspective, high levels of non-verbal ability correlate with cognitive flexibility and problem-solving abilities that do not depend on language skills. These findings align with Grey et al.'s research (Gray et al., 2022), which shows that non-verbal assessments can more objectively describe learning potential because they are relatively free of linguistic bias. However, this study extends the conceptual contribution by emphasising that nonverbal strengths should be understood as pedagogical opportunities to diversify learning strategies rather than as indicators of intellectual superiority (Jamshid S. et al., 2023; Scharrer, 2022; Solikah et al., 2025).

The distribution of proofreading abilities shows the highest concentration in the average category, with a smaller proportion in the very high category. These findings indicate that reading accuracy and sensitivity to linguistic details are still developing, even though the basic foundations have been established. Scientifically, this pattern reflects the characteristics of metacognitive skills that develop through continuous practice and specific, targeted feedback. This aligns with the findings of Wisniewski et al., (2020) who found that the quality of feedback has a greater influence on improving literacy skills than the assessment score itself. Thus, proofreading results should be understood as the basis for continuous pedagogical intervention, not as a fixed indicator of students' literacy skills.

PSA shows that the strongest and most prominent aspect of performance is marked by above-average to very high category dominance. These findings indicate that most students have high information-processing speed and cognitive accuracy, both important components of cognitive efficiency. This pattern can be understood in the context of contemporary learning, which increasingly demands rapid responses to visual stimuli and digital information flows (Çeken & Taşkın, 2022). However, pedagogically, these findings also emphasise the importance of caution so that cognitive speed is not reduced to an overall intellectual advantage. Data ethics principles must use PSA results as a basis for adaptive learning design, not to legitimise academic ability hierarchies (Al Faqir et al., 2025; Beneke et al., 2022; De Lucca et al., 2024; Mahadewi et al., 2025).



Graph: Comparison of Overall Ability Scores of 10th Grade Students at a private Christian high school in an urban Indonesian context with International Benchmarks



The distribution of Overall Ability scores follows a relatively normal curve, with a rightward shift relative to international benchmarks. These findings indicate that, collectively, students' abilities are above the global average, although there remains significant individual variation. Scientifically, this pattern reinforces the argument that initial assessments should ideally be used to understand variations in learning potential within an educational community, rather than to compare students competitively. These findings align with UNESCO's inclusive education framework and approach, which rejects categorisations that could reinforce bias and inequality (Ainscow, 2020; Ebzeeva & Smirnova, 2023).

Beyond the distribution patterns observed in each individual domain, a deeper cross-domain comparison reveals an important intra-individual phenomenon. When scores are compared, variations within the same student become apparent. Although Mathematics demonstrates a strong concentration in the Well Above and Far Above categories, Vocabulary shows a relatively higher proportion of students in the Below to Well Below categories. The distribution pattern presented in Table 1 shows that while 45.7% of students are in the Well Above to Far Above categories in Mathematics, 34.3% fall within the Below to Far Below categories in Vocabulary, indicating cross-domain divergence. A closer inspection indicates that several students who perform strongly in Mathematics fall into lower categories in Vocabulary.

This cross-domain variation is pedagogically significant. It indicates that cognitive strengths are domain-specific rather than uniform across abilities. A student who excels in quantitative reasoning but shows weaker verbal performance does not present an inconsistency; rather, this reflects the multidimensional structure of cognitive development. Such profiles require differentiated learning strategies that provide literacy scaffolding while maintaining cognitive challenge in mathematical reasoning.

From a scientific perspective, this intra-individual variation challenges the validity of single global labels such as "smart," "high ability," or "weak." When a student demonstrates high mathematical reasoning alongside limited vocabulary, any single cognitive label becomes reductive. The data show that cognitive profiles are uneven, dynamic, and context-sensitive. Therefore, assigning fixed descriptors constitutes a scientific simplification that fails to capture the complexity of human learning potential.

These findings reinforce that non-labelling is not merely an ethical stance but also a scientifically grounded position. Respect for human dignity in assessment practice requires acknowledging multidimensional cognitive evidence. Consequently, differentiated learning is not simply a pedagogical preference, but a logical implication of cross-domain variability revealed through diagnostic assessment.

Integrative Discussion: From Measurement to Pedagogical Reflection

In summary, the findings of this study confirm that MidYIS results reflect dynamic learning potential rather than marking the limits of student ability. The shift in distribution to the middle-high category does not automatically indicate absolute superiority; rather, it creates strategic opportunities to implement more challenging, meaningful, and differentiated learning.

Compared to previous studies that positioned MidYIS primarily as a predictive tool for academic achievement, this study makes a scientific contribution by showing how initial assessment data can be interpreted in the context of assessment for learning, a growth mindset, and educational ethics that respect human dignity (Ortiz Alvarado et al., 2024; Wolterinck et al., 2024; Yeager & Dweck, 2020). Thus, initial assessments can serve as pedagogical reflection tools (Abiolu, 2022; Gao et al., 2025; Sujianti et al., 2025) that



empower teachers to design inclusive, adaptive learning experiences oriented toward academic growth and character building.

All of the findings and discussions in this study substantially address the research objective of explaining how MidYIS data can be interpreted and used to support differentiated learning and character development without labelling students. By situating the assessment results within a reflective and humanistic framework (Saidolimxon, 2025; Viterouli et al., 2025), this study emphasises that the initial assessment is not an end in itself but rather a transformative instrument in educational practice (Viterouli et al., 2025).

Conclusion

This study emphasises that the MidYIS initial assessment results reflect a dynamic spectrum of learning potential rather than static abilities or a basis for labelling students' abilities. These findings indicate that MidYIS is better positioned as a pedagogical starting point for understanding student learning readiness than as a deterministic predictive instrument. Thus, the interpretation of MidYIS needs to be directed towards process-oriented, developmental learning decisions that optimise individual potential. The main implication of this finding is the need to reposition the function of MidYIS in educational practice, from a static grouping instrument to a reflective instrument for differentiated learning that affords respect for human dignity. This perspective reinforces the role of initial assessment as an integral part of assessment for learning, supporting academic development while fostering an inclusive, non-labelling, and growth-oriented attitude in students.

Recommendation

Further research is recommended to explore the use of MidYIS as a non-labelling diagnostic assessment through longitudinal and mixed-methods designs to examine how pedagogical interpretations of assessment data influence students' academic trajectories and character development over time. Expanding research across diverse school types and socio-cultural contexts would strengthen the external validity of these findings.

Beyond research implications, several practical follow-up recommendations emerge from this study. For teachers, professional development in assessment literacy is essential. Teachers need structured training on interpreting Standard Age Scores (SAS) beyond categorical labels and on using cross-domain profiles to design differentiated instruction. Emphasis should be placed on avoiding global ability judgments and instead providing domain-specific feedback that supports growth-oriented learning.

For school leaders, institutional guidelines for ethical data use should be established. Schools should develop clear protocols to prevent ability-based streaming or fixed grouping solely based on MidYIS categories. Leadership should also promote collaborative reflection sessions in which teachers analyse diagnostic data collectively to ensure balanced, non-deterministic interpretations.

For education policy makers, assessment frameworks should incorporate explicit ethical principles regarding data interpretation, confidentiality, and non-labelling practices. Policies should encourage the use of assessment for formative and developmental purposes rather than for high-stakes categorisation. Integrating data ethics into national teacher training standards would further safeguard students' dignity.



References

- Adhari, D., Yuliani, H., & Nasir, M. (2024). Alat Ukur Literasi Sains Pada Pembelajaran IPA Terintegrasi Lingkungan: Sistematika Literatur Review. *Kappa Journal*, 8(2). <https://doi.org/10.29408/kpj.v6i2.26075>
- Abiolu, R. T. I. (2022). Applying Reflective Writing as a Participatory Methodology for “Speaking-Up” about Gender-Based Violence in South Africa. *Critical Arts*, 36(3–4). <https://doi.org/10.1080/02560046.2022.2122526>
- Agricola, B. T., Prins, F. J., & Sluijsmans, D. M. A. (2020). Impact of feedback request forms and verbal feedback on higher education students’ feedback perception, self-efficacy, and motivation. *Assessment in Education: Principles, Policy and Practice*, 27(1), 6–25. <https://doi.org/10.1080/0969594X.2019.1688764>
- Ainscow, M. (2020). Promoting inclusion and equity in education: lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1), 7–16. <https://doi.org/10.1080/20020317.2020.1729587>
- Al Faqir, A. A., Nurriky, A. R., Anggraini, L., & Cholimah, N. (2025). Systematic Literature Review: The Influence of Intelligence Variation in Adaptive Learning Design. *Jurnal Keilmuan Pendidikan*, 1(2). <https://doi.org/10.63203/040943100>
- Alfageh, D. H., York, C. S., Hodge-Zickerman, A., & Xie, Y. (2024). Elementary teachers’ use of adaptive diagnostic assessment to improve mathematics teaching and learning: A case study. *International Electronic Journal of Mathematics Education*, 19(1), 1–15. <https://doi.org/10.29333/iejme/14190>
- Anggraena, Y., Ginanto, D. E., Kesuma, A. T., & Setiyowat, D. (2025). Pembelajaran dan Asesmen: Pendidikan Anak Usia Dini, Jenjang Pendidikan Dasar, dan Jenjang Pendidikan Menengah (Edisi Revisi). In *Badan Standar, Kurikulum, dan Asesmen Pendidikan (BSKAP) Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi*. <https://repositori.kemendikdasmen.go.id/33290/1/Panduan%20Pembelajaran%20Asesmen.pdf>
- Beneke, M. R., Siuty, M. B., & Handy, T. (2022). Emotional Geographies of Exclusion: Whiteness and Ability in Teacher Education Research. *Teachers College Record*, 124(7), 105–130. <https://doi.org/10.1177/01614681221111431>
- Cambridge Assessment Centre for Evaluation and Monitoring (CEM). (2024). MidYIS: Middle Years Information System – Assessment overview. *Cambridge University Press & Assessment*. <https://www.cem.org/midyis>
- Çeken, B., & Taşkın, N. (2022). Multimedia learning principles in different learning environments: a systematic review. In *Smart Learning Environments* (Vol. 19, Number 9, pp. 1–22). <https://doi.org/10.1186/s40561-022-00200-2>
- De Lucca, N., Watkins, J., Swanson, R. D., & Portsmore, M. (2024). Examining interactions between dominant discourses and engineering educational concepts in teachers’ pedagogical reasoning. *Journal of Engineering Education*, 113(1), 30–52. <https://doi.org/10.1002/jee.20563>
- Ebzeeva, Y. N., & Smirnova, Y. B. (2023). Contemporary trends in educational policy: UNESCO higher education roadmap. *RUDN Journal of Sociology*, 23(2), 329–337. <https://doi.org/10.22363/2313-2272-2023-23-2-329-337>
- Florian, L., & Beaton, M. (2018). Inclusive pedagogy in action: getting it right for every child. *International Journal of Inclusive Education*, 22(8), 870–884. <https://doi.org/10.1080/13603116.2017.1412513>



- Gao, Y., Zhai, X., Li, M., Lee, G., & Liu, X. (2025). A Multimodal Interactive Framework for Science Assessment in the Era of Generative Artificial Intelligence. *Journal of Research in Science Teaching*, 62(9), 2014–2028. <https://doi.org/10.1002/tea.70009>
- Gervas, I., & Lweyemamu, D. (2024). The Effect of School Labelling on Student Academic Performance at Morogoro Municipality in Tanzania. *International Journal of Current Research in the Humanities*, 27(1), 353–369. <https://doi.org/10.4314/ijcrh.v27i1.22>
- Govindarajoo, M. V. V., Nair, S. M., Sekhon, R. S., Wai, C. S., Hoong, L. C., Huat, T. B., & Okawa, T. (2025). Exploring teachers' views on benefits, ethical issues, and challenges in integrating AI tools in Malaysian schools. *Edelweiss Applied Science and Technology*, 9(9), 699–710. <https://doi.org/10.55214/2576-8484.v9i9.9935>
- Gray, S. I., Levy, R., Alt, M., Hogan, T. P., & Cowan, N. (2022). Working Memory Predicts New Word Learning Over and Above Existing Vocabulary and Nonverbal IQ. *Journal of Speech, Language, and Hearing Research*, 65(3), 1044–1069. https://doi.org/10.1044/2021_JSLHR-21-00397
- Haughney, K., Wakeman, S., & Hart, L. (2020). Quality of feedback in higher education: A review of literature. In *Education Sciences* (Vol. 10, Number 3, pp. 1–15). <https://doi.org/10.3390/educsci10030060>
- Heyder, A., & Pegels, H. (2025). Detrimental effects of instructors' fixed mindsets on students' anticipated motivation and emotions in secondary and higher education. *Social Psychology of Education*, 28(1), 1–27. <https://doi.org/10.1007/s11218-024-10001-9>
- Jiang, B., Li, X., Yang, S., Kong, Y., Cheng, W., Hao, C., & Lin, Q. (2022). Data-Driven Personalized Learning Path Planning Based on Cognitive Diagnostic Assessments in MOOCs. *Applied Sciences (Switzerland)*, 12(8), 1–13. <https://doi.org/10.3390/app12083982>
- Jamshid S., T., Umid A., O., Shakhnoza T., N., Saodat A., S., Moxigul I., K., Gulshan M., A., & Nafisa, O. (2023). The Use of Intelligent Mathematical Models for Regional Investment Distribution Processes Analysis. *American Journal of Business and Operations Research*, 9(1), 17–25. <https://doi.org/10.54216/ajbor.090102>
- Kashikar, L., Lüke, T., & Grosche, M. (2025). Effects of Diagnostic Labels for Students With Learning Problems on Teachers' Stereotypes and Performance Expectations. *Journal of Learning Disabilities*, 59(1), 37–54. <https://doi.org/10.1177/00222194251315187>
- Kemendikbudristek. (2022). Panduan Pembelajaran dan Asesmen. *Badan Standar, Kurikulum, Dan Asesmen Pendidikan Kementerian Pendidikan, Kebudayaan, Riset, Dan Teknologi Republik Indonesia*.
- Knight, C. (2025). Dyslexia: Identity, labelling and its place in inclusive education. *British Journal of Special Education*, 52(2), 251–257. <https://doi.org/10.1111/1467-8578.70028>
- Köpfer, A. (2025). Reconstructing Students' Appropriation of Space in Inclusive Schools in Austria and Germany Using Bourdieu's Theory of Social Space. *International Journal of Inclusive Education*, 29(2), 175–191. <https://doi.org/10.1080/13603116.2022.2073057>
- Lei, W., & Bakar, K. A. (2025). Language Scaffolding Strategies Based on Vygotsky's Zone of Proximal Development in Early Reading Education: A Cross-Cultural Comparison. *Forum for Linguistic Studies*, 7(6), 967–984. <https://doi.org/10.30564/fls.v7i6.9624>
- Lindner, K. T., & Schwab, S. (2025). Differentiation and individualisation in inclusive education: a systematic review and narrative synthesis. *International Journal of*



- Inclusive Education*, 29(12), 2199–2219.
<https://doi.org/10.1080/13603116.2020.1813450>
- Mahadewi, L. P. P., Wibawa, B., & Syahrial, Z. (2025). Configuring culturally relevant e-adaptive learning design to facilitate students' digital communication skills acquisition. *International Journal of Innovative Research and Scientific Studies*, 8(4), 315–327. <https://doi.org/10.53894/ijirss.v8i4.7783>
- Mudi, S., & Samanta, T. K. (2024). Applying Vygotsky's Zone of Proximal Development in Modern Classroom Settings: A Call for Social Learning in the Digital Age. *International Journal For Multidisciplinary Research*, 6(4), 1–6. <https://doi.org/10.36948/ijfmr.2024.v06i04.24233>
- Sujianti, N. P. I. P., Sanjiyasa, I. B. M., Mesa, J., Saingo, M., & Bili, P. (2025). EVALUATING LEARNING OUTCOMES STRATEGIES FOR ENHANCING TEACHING EFFECTIVENESS IN THE CLASSROOM. *International Journal of Education and Social Science Studies*, 1(2), 69–76. <https://doi.org/10.60153/ijesss.v1i2.194>
- OECD. (2020). *Education at a Glance 2020: OECD Indicators*, OECD Publishing, Paris. <https://doi.org/10.1787/69096873> -En, 1–476
- Ortiz Alvarado, N., Quintanilla Domínguez, C., Ayala Gaytan, E., & Del Castillo de la Fuente, E. (2024). Development and validation of the Multidimensional Mindset Scale: Growth and fixed mindsets. *International Journal of Consumer Studies*, 48(3), 1–13. <https://doi.org/10.1111/ijcs.13054>
- Paembonan, Y., & Ronda, D. (2024). Revitalisasi Nilai-nilai Imago Dei dalam Pembentukan Karakter Anak Pada Era Digital. *SOPHIA: Jurnal Teologi Dan Pendidikan Kristen*, 5(2), 97–111. <https://doi.org/10.34307/sophia.v5i2.281>
- Pike, M. A. (2024). The 'image of God' and the schooling of virtue: Christian-ethos schools of character for the whole community. *Journal of Beliefs and Values*, 1–16. <https://doi.org/10.1080/13617672.2024.2377911>
- Porta, T., & Todd, N. (2024). The impact of labelling students with learning difficulties on teacher self-efficacy in differentiated instruction. *Journal of Research in Special Educational Needs*, 24(1), 108–122. <https://doi.org/10.1111/1471-3802.12619>
- Saidolimxon, A. (2025). The Concept Of Personal Perfection In Sufi Teaching And Its Resonance In Modern Pedagogy. *International Journal of Pedagogics*, 5(10), 425–438. <https://doi.org/10.37547/ijp/volume05issue10-104>
- Scharrer, T. (2022). Creating an atmosphere of intellectual superiority: Islamic missionary work in Kenya as staged competition in a climate of religious diversity. *Journal of Contemporary Religion*, 37(2), 203–222. <https://doi.org/10.1080/13537903.2022.2073029>
- Schellekens, L. H., Bok, H. G. J., de Jong, L. H., van der Schaaf, M. F., Kremer, W. D. J., & van der Vleuten, C. P. M. (2021). A scoping review on the notions of Assessment as Learning (AaL), Assessment for Learning (AfL), and Assessment of Learning (AoL). In *Studies in Educational Evaluation* (Vol. 71, pp. 1–15). <https://doi.org/10.1016/j.stueduc.2021.101094>
- Shi, W., & Hargis, J. (2023). Bridge the Gap—Incorporating Classroom Response Systems for Classroom-Embedded Formative Assessment. *OALib*, 10(02), 1–25. <https://doi.org/10.4236/oalib.1109829>
- Sideli, L., Barone, M. V., Ferraro, L., Giunta, S., Mannino, G., Seminerio, F., Sartorio, C., Maniaci, G., Guccione, C., Giannone, F., la Barbera, D., & la Cascia, C. (2021). Perceived public stigma towards schizophrenia among healthcare students: The



- relationship with diagnostic labelling and contact with people with schizophrenia. *Journal of Psychopathology*, 27(2), 99–105. <https://doi.org/10.36148/2284-0249-381>
- Solikah, A. A., Saputro, S., & Yamtinah, S. (2025). Trend in Science Education Assessment Instruments: A Systematic Literature Review (2014-2024). *AL-ISHLAH: Jurnal Pendidikan*, 17(3). <https://doi.org/10.35445/alishlah.v17i3.6198>
- Stoliarchuk, O., Klishevych, N., Pavliuk, R., Tian, L., Binkivska, K., Serhieienkova, O., Strunhar, A., & Divchuk, T. (2025). The Advantages and Risks of AI in Sustainable Societal Development: Perspectives of Future Psychologists. *European Journal of Sustainable Development*, 14(2), 562–574. <https://doi.org/10.14207/ejsd.2025.v14n2p562>
- Vestad, L., & Bru, E. (2024). Teachers' support for growth mindset and its links with students' growth mindset, academic engagement, and achievements in lower secondary school. *Social Psychology of Education*, 27(4), 1431–1454. <https://doi.org/10.1007/s11218-023-09859-y>
- Viterouli, M., Belias, D., Koustelios, A., & Tsigilis, N. (2025). VALIDITY AND RELIABILITY ASSESSMENT OF THE TRANSFORMATIVE LEARNING OUTCOMES AND PROCESSES (TROPOS) SURVEY IN PUBLIC SECTOR WORK-RELATED LEARNING. *Serbian Journal of Management*, 20(2), 413–428. <https://doi.org/10.5937/sjm20-53336>
- Wisniewski, B., Zierer, K., & Hattie, J. (2020). The Power of Feedback Revisited: A Meta-Analysis of Educational Feedback Research. In *Frontiers in Psychology* (Vol. 10, pp. 1–4). <https://doi.org/10.3389/fpsyg.2019.03087>
- Wolterinck, C., Poortman, C., Schildkamp, K., & Visscher, A. (2024). Assessment for Learning: Developing the required teacher competencies. *European Journal of Teacher Education*, 47(4), 711–729. <https://doi.org/10.1080/02619768.2022.2124912>
- Yeager, D. S., & Dweck, C. S. (2020). What can be learned from growth mindset controversies? *American Psychologist*, 75(9), 1269–1284. <https://doi.org/10.1037/amp0000794>
- Zeeb, H., Ibach, A., Voss, T., & Renkl, A. (2023). How does teachers' noticing of students' fixed mindsets relate to teachers' knowledge, beliefs, and experience? An exploratory study. *Teaching and Teacher Education*, 130, 1–14. <https://doi.org/10.1016/j.tate.2023.104170>