

## DAFTAR PUSTAKA

- Abraham, I., & Supriyati, Y. (2022). Desain Kuasi Eksperimen Dalam Pendidikan: Literatur Review. *Jurnal Ilmiah Mandala Education*, 8(3), 2476–2482. <https://doi.org/10.58258/jime.v8i3.3800>
- Ainurrohman, M. T. ... Artik, A. (2024). Upaya Meningkatkan Kedisiplinan Siswa melalui Model Pembelajaran Project Based Learning: Studi pada Mata Pelajaran IPA di Sekolah Dasar. *Ainara Journal (Jurnal Penelitian Dan PKM Bidang Ilmu Pendidikan)*, 5(2), 156–164. <https://doi.org/10.54371/ainj.v5i2.418>
- Al-Qoyyim, T. M., & Kurniawan, W. (2025). Project-Based Learning in Science Learning: A Literature Review. *Contextual Natural Science Education Journal*, 3(1), 1–14. <https://doi.org/10.29303/cnsej.v3i1.1053>
- Altay, B., & Saracaloglu, A. S. (2017). Investigation on the Relationship among Language Learning Strategies, Critical Thinking and Self-Regulation Skills in Learning English. *Novitas-ROYAL (Research on Youth and Language)*, 11(1), 1–26.
- Anggrella, D. P., & Sudrajat, A. K. (2025). Profile and views on botanical literacy: A study from a final year preservice biology teacher. *JPBI (Jurnal Pendidikan Biologi Indonesia)*, 11(2), 548–561. <https://doi.org/10.22219/jpbi.v11i2.40470>
- Ariefka, R. ... Saputri, A. (2023). Augmented Reality in Solar System Learning at Primary School Level in Indonesia: A systematic literature review. *Al-Marshad: Jurnal Astronomi Islam Dan Ilmu-Ilmu Berkaitan*, 9(2), 102–113. <https://doi.org/10.30596/jam.v9i2.16504>

- Aziz, S. A., & Nurachadijat, K. (2023). Project Based Learning dalam Meningkatkan Keterampilan Belajar Siswa. *Jurnal Inovasi, Evaluasi Dan Pengembangan Pembelajaran (JIEPP)*, 3(2), 67–74. <https://doi.org/10.54371/jiepp.v3i2.273>
- Bonnet, O. (2025). *AUGMENTED REALITY FOR STEM EDUCATION : VISUALIZING COMPLEX CONCEPTS THROUGH INTERACTIVE LEARNING*.
- Carter, A. G. ... Sidebotham, M. (2016). Efficacy of teaching methods used to develop critical thinking in nursing and midwifery undergraduate students: A systematic review of the literature. *Nurse Education Today*, 40, 209–218. <https://doi.org/10.1016/j.nedt.2016.03.010>
- Castaño, C. ... Ortega-Del-Rosario, M. D. L. A. (2025). Developing Sustainability Competencies Through Active Learning Strategies Across School and University Settings. *Sustainability*, 17(19), 8886.
- Covelli, V. ... Cantoia, M. (2023). After the first lockdown due to the COVID-19 pandemic: Perceptions, experiences, and effects on well-being in Italian people. *Frontiers in Psychology*, 14(June), 1–11. <https://doi.org/10.3389/fpsyg.2023.1172456>
- Dari, O. W., & Taufina, T. (2021). Penerapan Model Problem Based Learning (PBL) Pada Pembelajaran Tematik Terpadu di Kelas V Sekolah Dasar (Studi Literatur). *Jurnal Inovasi Pendidikan Dan Pembelajaran Sekolah Dasar*, 4(1), 98. <https://doi.org/10.24036/jippsd.v4i1.109461>
- Dewi, S. E. ... Siti, R. (2024). Penerapan Problem Based Learning Untuk Meningkatkan Ketrampilan Pemecahan Masalah dan Efikasi Diri. *Prosiding*

*Seminar Nasional Pendidikan Profesi Guru Universitas Sarjanawiyata Tamansiswa*, 3(1).

Dongyu, Z. ... Wanyi, D. (2013). Sociocultural theory applied to second language learning: Collaborative learning with reference to the chinese context. *International Education Studies*, 6(9), 165–174.  
<https://doi.org/10.5539/ies.v6n9p165>

Dutilh Novaes, C. (2021). Who's Afraid of Adversariality? Conflict and Cooperation in Argumentation. *Topoi*, 40(5), 873–886.  
<https://doi.org/10.1007/s11245-020-09736-9>

Dyah, D. S. ... Rizki Aprilian, F. (2025). Development of Augmented Reality Based Learning Media on Geometry Learning Integrated Science Technology Engineering Art Mathematic-Project Based Learning. *Journal of Education Technology*, 9(1), 39–50. <https://doi.org/10.23887/jet.v9i1.88630>

Efstratia, D. (2014). Experiential Education through Project Based Learning. *Procedia - Social and Behavioral Sciences*, 152, 1256–1260.  
<https://doi.org/10.1016/j.sbspro.2014.09.362>

Ennis, R. H. (1985). Critical thinking: A streamlined conception. *Teaching Philosophy. National Inst. Of Education*, 14(1), 5–24.

Facione, P. A. (2015). Permission to Reprint for Non-Commercial Uses Critical Thinking: What It Is and Why It Counts. *Insight Assessment*, 5(1), 1–30.

Fanchamps, L. J. A. ... (2024). *Teaching Educational Robotics Blended and Online with Augmented Reality*.  
<https://doi.org/10.13140/RG.2.2.32285.52964>

Fatahillah, A. F., & Faradillah, A. (2023). Project-based learning assisted

augmented reality in increasing students' mathematical understanding of concepts. *Jurnal Elemen*, 9(2), 450–463.

<https://doi.org/10.29408/jel.v9i2.12703>

Gargrish, S. ... Kaur, D. P. (2020). Augmented reality-based learning environment to enhance teaching-learning experience in geometry education.

*Procedia Computer Science*, 172(2019), 1039–1046.

<https://doi.org/10.1016/j.procs.2020.05.152>

Gray, J. A., & Diloreto, M. (2016). The Effects of Student Engagement, Student Satisfaction, and Perceived Learning in Online Learning Environments(0723) View project Curriculum and Teaching Dialogue View project. *International Journal of Educational Leadership Preparation*, 11(1), 1532.

Hakim, L. (2025). *Pengertian Quasi Eksperimen*. 1–10.

Hidayati, K. ... Wijayanto, D. S. (2024). Development of Learning Media to Improve Critical Thinking Skills and Creativity of Vocational Students.

*International Journal of Social Service and Research*, 4(03), 716–724.

<https://doi.org/10.46799/ijssr.v4i03.741>

Hulse, T. ... Ottmar, E. (2019). From here to there! Elementary: a game-based approach to developing number sense and early algebraic understanding.

*Educational Technology Research and Development*, 67(2), 423–441.

<https://doi.org/10.1007/s11423-019-09653-8>

Husamah, H. ... Rahardjanto, A. (2025). Botanical Literacy in the Last Ten Years: Insights from Scopus. *Prisma Sains : Jurnal Pengkajian Ilmu Dan Pembelajaran Matematika Dan IPA IKIP Mataram*, 13(2), 233.

*Prisma Sains : Jurnal Pengkajian Ilmu Dan Pembelajaran Matematika Dan IPA IKIP Mataram*, 13(2), 233.

<https://doi.org/10.33394/j-ps.v13i2.15160>

- Hyttinen, H. ... Shavelson, R. J. (2019). Enhancing scientific thinking through the development of critical thinking in higher education. *Redefining Scientific Thinking for Higher Education: Higher-Order Thinking, Evidence-Based Reasoning and Research Skills*, 59–78. [https://doi.org/10.1007/978-3-030-24215-2\\_3](https://doi.org/10.1007/978-3-030-24215-2_3)
- Indarasati, N. A. ... Lukito, A. (2019). Enhancing Students' Creative Thinking through Inquiry-Based Learning Integrating Mathematical Tools. *International Journal of Trends in Mathematics Education Research*, 2(2), 91–95. <https://doi.org/10.33122/ijtmer.v2i2.113>
- Jaramillo Gómez, D. L. ... Sanabria Alarcón, R. K. (2025). Determining Factors for the Development of Critical Thinking in Higher Education. *Journal of Intelligence*, 13(6), 1–22. <https://doi.org/10.3390/jintelligence13060059>
- Kitsantas, A. ... Schunk, D. H. (2025). Barry J. Zimmerman's Enduring Legacy: The Inspiring Fusion of Self-Regulated Learning Theory, Practice, and Mentorship. *Educational Psychology Review*, 37(3), 1–25. <https://doi.org/10.1007/s10648-025-10052-0>
- Landorf, H., & Wadley, C. (2022). The importance of John Dewey's philosophy for global learning theory and practice. *Social Studies Research and Practice*, 17(1), 6–18. <https://doi.org/10.1108/ssrp-09-2021-0027>
- Lee, R. ... Jennifer Hill Melissa Hanzsek-Brill, C. (2022). Century Skills and Higher-Order Thinking Skills Century Skills and Higher-Order Thinking Skills Higher-Order Thinking Skills. *Culminating Projects in Information Media*, 41.
- Li, J. ... Liu, Y. (2024). Higher Education in China during the Pandemic: Analyzing

- Online Self-Learning Motivation Using Bayesian Networks. *Sustainability (Switzerland)*, 16(17). <https://doi.org/10.3390/su16177330>
- Lorenz, T. ... Binder, B. (2022). A Positive Psychology Resource for Students? Evaluation of the Effectiveness of the 6 Minutes Diary in a Randomized Control Trial. *Frontiers in Psychology*, 13(May), 1–12. <https://doi.org/10.3389/fpsyg.2022.896741>
- Mellinger, C. D., & Hanson, T. A. (2020). Methodological considerations for survey research: Validity, reliability, and quantitative analysis. *Linguistica Antverpiensia, New Series – Themes in Translation Studies*, 19, 172–190. <https://doi.org/10.52034/lanstts.v19i0.549>
- Muliasari, E. A. ... Saputra, E. R. (2022). Implementasi Program Asesmen Nasional di Sekolah Dasar. *Wacana Akademika: Majalah Ilmiah Kependidikan*, 6(2), 199–210.
- Mustajab, W., & Sutarni, N. (2024). Pengaruh Metode Pembelajaran Problem Based Learning ( PBL ) dan Problem Solving Terhadap Kemampuan Berpikir Kritis Siswa ( Kuasi Eksperimen Pada Materi Koperasi di Kelas X IPS di SMAN 30 Kabupaten Tangerang ). 13(3), 3523–3538.
- Nevrelova, N. ... Schmid, A. (2024). Enhancing digital literacy in primary education through augmented reality. *Frontiers in Education*, 9(November), 1–13. <https://doi.org/10.3389/feduc.2024.1390491>
- Nida Winarti ... Nandang. (2022). Penerapan Model Pembelajaran Project Based Learning Untuk Meningkatkan Kemampuan Berpikir Kritis Siswa Kelas Iii Sekolah Dasar. *Jurnal Cakrawala Pendas*, 8(3), 552–563. <https://doi.org/10.31949/jcp.v8i3.2419>

- Ode, W. ... Widodo, A. (2016). *ANALISIS PENGUASAAN KONSEP DAN KETERAMPILAN BERPIKIR KREATIF SISWA SD MELALUI PROJECT BASED LEARNING oleh : Universitas Pendidikan Indonesia PENDAHULUAN Ilmu Pengetahuan Alam ( IPA ) berhubungan dengan cara mencari tahu tentang alam secara sistematis , se. 8(1).*
- Pai, P. ... Ii, G. (2025). *INOVASI MODEL PROJECT BASED LEARNING BERBASIS GAMIFIKASI DALAM PEMBELAJARAN PAI DI SDN GERBO II PURWODADI Alifatul Izzah 1 , Ahmad Ma'ruf 2 , Muhammada 3 1. 11(3), 1341–1351.*
- Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for research. *Frontiers in Psychology*, 8(APR), 1–28. <https://doi.org/10.3389/fpsyg.2017.00422>
- Park, J. H. ... Allen, H. (2021). Fostering Creativity and Critical Thinking in College: A Cross-Cultural Investigation. *Frontiers in Psychology*, 12(November). <https://doi.org/10.3389/fpsyg.2021.760351>
- Piekarski, W., & Thomas, B. (2002). ARQuake: The outdoor augmented reality gaming system. *Communications of the ACM*, 45(1), 36–38. <https://doi.org/10.1145/502269.502291>
- Prabowo, E., & Wakhudin, W. (2024). Pengembangan Media Augmented Reality (AR) untuk Meningkatkan Motivasi Belajar Siswa pada Mata Pelajaran IPAS Kelas 4 SD Negeri 3 Lingasari. *Jurnal Pendidikan Dan Pembelajaran Indonesia (JPPI)*, 4(2), 591–604. <https://doi.org/10.53299/jppi.v4i2.552>
- Prima, E. C. ... Rustaman, N. (2018). Learning solar system using PhET simulation to improve students' understanding and motivation. *Journal of Science*

- Learning*, 1(2), 60. <https://doi.org/10.17509/jsl.v1i2.10239>
- Redhana, I. W. (2019). Mengembangkan Keterampilan Abad Ke-21 Dalam. *Jurnal Inovasi Pendidikan Kimia*, 13(1), 2239–2253.
- Romadhon, I. F. ... Iriaji, I. (2023). Penerapan AR Berbasis Audio Visual Interaktif Karya Kaligrafi untuk Meningkatkan Kemampuan dan Kreativitas SDM MA Ibadurrochman. *Prosiding Seminar Nasional Pengabdian Masyarakat*, 1. <https://doi.org/10.61142/psnpm.v1.77>
- Rosita, D. ... Ibrahim, I. (2025). The Impact of Augmented Reality-based Learning Media on Primary Students' Retention of Human Sensory System Concepts. *Journal of Integrated Elementary Education*, 5(2), 407–420. <https://doi.org/10.21580/jieed.v5i2.25276>
- Sakr, A., & Abdullah, T. (2024). Virtual, augmented reality and learning analytics impact on learners, and educators: A systematic review. In *Education and Information Technologies* (Vol. 29, Issue 15). Springer US. <https://doi.org/10.1007/s10639-024-12602-5>
- Sari, J. ... Mardeli. (2025). Potensi Augmented Reality Dalam Meningkatkan Motivasi Belajar Pendidikan Agama. *Jurnal Teknologi Pendidikan*, 5(1). <https://doi.org/10.37304/jtekipend.v5i1.17217>
- Sugianto, E. S. (2022). The Role of Collaborative Learning and Project Based Learning to Increase Students' Cognitive Levels in Science Literacy. *Proceedings of the International Conference on Madrasah Reform 2021 (ICMR 2021)*, 633(Icmr 2021), 67–72. <https://doi.org/10.2991/assehr.k.220104.011>
- Sukowati, V. P., & Harjono, N. (2023). Penerapan Model Problem Based

- Learning untuk Meningkatkan Kemampuan Berpikir Kritis dan Hasil Belajar IPA Siswa Kelas V SD. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, 6(12), 10641–10646. <https://doi.org/10.54371/jiip.v6i12.3212>
- Sulistiari, T. ... Sriyanto, M. I. (2023). Faktor yang mempengaruhi kemandirian belajar dalam proyek penguatan profil pelajar pancasila. *Didaktika Dwija Indria*, 11(2). <https://doi.org/10.20961/ddi.v11i2.75561>
- Surma, T. ... Kirschner, P. A. (2025). Developing Curriculum for Deep Thinking The Knowledge Revival. In *Springer Briefs in Education: Vol. Part F4047*. <https://doi.org/10.1007/978-3-031-74661-1>
- Taupik, R. P., & Fitriani, Y. (2021). Jurnal basicedu. *Jurnal Basicedu*, 5(5), 1525–1531.
- Tazhitova, G. ... Kassymbekova, N. (2022). Local Materials as a Means of Improving Motivation to EFL Learning in Kazakhstan Universities. *Education Sciences*, 12(9). <https://doi.org/10.3390/educsci12090604>
- Tibahary, A. R. (2018). Model-Model Pembelajaran Inovatif Muliana. *Scolae: Journal of Pedagogy*, 1(03), 54–64.
- Tsuzuki, T. ... Chiba, I. (2019). Effortful processing reduces the attraction effect in multi-alternative decision making: An electrophysiological study using a task-irrelevant probe technique. *Frontiers in Psychology*, 10(APR), 1–9. <https://doi.org/10.3389/fpsyg.2019.00896>
- Vygotsky, L. S. (1978). *Mind and Society: The Development of Higher Psychological Processes*. *University of Texas Press Slavic Series*, 1, 91.
- Wang, T., & Tan, L. (2023). The Conceptualisation of User-App Interactivity in Augmented Reality-Mediated Learning: Implications for Literacy Education.

*Sustainability* (Switzerland), 15(14), 1–20.

<https://doi.org/10.3390/su151410949>

Widodo, H. ... Huda, M. (2024). The implementation of project based-learning as ISMUBA curriculum development in muhammadiyah schools. *TADRIS: Jurnal Pendidikan Islam*, 19(1), 142–160.  
<https://doi.org/10.19105/tjpi.v19i1.10169>

Williams, D. M. (2023). A meta-theoretical framework for organizing and integrating theory and research on motivation for health-related behavior. *Frontiers in Psychology*, 14(February), 1–10.  
<https://doi.org/10.3389/fpsyg.2023.1130813>

Yang, B. (2023). Virtual Reality and Augmented Reality for Immersive Learning: A Framework of Education Environment Design. *International Journal of Emerging Technologies in Learning (IJET)*, 18(20), 23–36.  
<https://doi.org/10.3991/ijet.v18i20.44209>

Yusuf, F. A. (2025). Investigating the impact of augmented reality-integrated project-based learning on university students' creative innovation, computational thinking, and academic resilience. *Journal of Pedagogical Research*, 9(4), 241–258. <https://doi.org/10.33902/JPR.202537068>

Zaki, K. A. ... Afzal, A. (2023). Impact of Teacher-Student Favoritism on Students' Learning Outcomes At University Level. *Journal of Social Research Development*, 4(01), 1–14. <https://doi.org/10.53664/jsrd/04-01-2023-01-01-14>

14

Zhang, L., & Ma, Y. (2023). A study of the impact of project-based learning on student learning effects: a meta-analysis study. *Frontiers in Psychology*,

