

DAFTAR PUSTAKA

- Agustini.K.et.al.2020. *Flipped Learning for 21st Century Competence Development: The Systematic Literature Review*[Presiding session].Asian Education Symposium (AES 2020). Advances in Social Science, Education and Humanities Research. <http://creativecommons.org/licenses/by-nc/4.0/>.
- Agustini.K.et.al.2022. Quantum Flipped Learning and Students' Cognitive Engagement in Achieving Their Critical and Creative Thinking in Learning. *International Journal of Emerging Technologies in Learning*. 17(18). 4-25. <https://doi.org/10.3991/ijet.v17i18.32101>
- Akinoğlu, O., & Tandoğan, R. Ö. 2007. The Effects of Problem-Based Active Learning in Science Education on Students' Academic Achievement, Attitude and Concept Learning. *Eurasia Journal of Mathematics Science and Technology Education*, 3(1), 71–81. <https://doi.org/10.12973/ejmste/75375>
- Akzaha.Z.S.et.al.2023. Pengaruh Model Problem Based Learning Based Flipped Classroom terhadap Kemampuan Berpikir Kritis IPA SD. *Jurnal Inovasi Pendidikan Dasar*.7(2),32-39. <http://unikastpaulus.ac.id/jurnal/index.php/jipd>
- Amiruddin.et.al. 2024. The Application of a Multimedia-Assisted Problem-Based Learning Model Based on Android to Enhance Students Critikal Thinking Skills. *JPPIPA (Jurnal Penelitian Pendidikan IPA)*. 9(2), 88-98 <http://journal.unesa.ac.id/index.php/jppipa>
- Ananda.Y.et.al.2023. Application of the Video-Assisted Problem Based Learning Model to Increase Student Learning Motivation in Virus Material. *Journal of Research in Science Education*. 9(8), 6230-6237. <http://jppipa.unram.ac.id/index.php/jppipa/index>
- Arends.R.I. 2012. *Learning to Teach (9th edition)*. MCGraw-Hill Companies. <http://www.mhhe.com/arends9e>
- Arifin.Z.et.al.2021. Independent Learning through Interactive Multimedia Based on Problem Based Learning. *Jurnal Edutech Undiksha*. 9(2). 244-253. <https://ejournal.undiksha.ac.id/index.php/JEU/index>
- Association for Educational Communications and Technology. (2023). AECT definition for educational technology. <https://www.aect.org/aect/about/aect-definition>
- Azwar, S. 2012. *Reliabilitas dan validitas*. Yogyakarta: Pustaka Pelajar.

- Bergmann, J., & Sams, A. 2012. *Flip Your Classroom: Reach Every Student in Every Class Every Day*. International Society for Technology in Education (ISTE).
- Candiasa, I. M. 2010. *Statistik Univariat dan Bivariat Disertai Aplikasi SPSS*. Singaraja: Undiksha Press.
- Candiasa, I. M. 2019. *Analisis Data dengan Statistik Univariat dan Bivariat*. Singaraja: Undiksha Press.
- Chueh, H.E. & Kao, C.Y.2024. Exploring The Impact of Integrating Problem Based Learning and Agile In The Classroom on Enjancing Professional Competence. *Heliyon*, 10(3), www.cell.com/heliyon
- Diantari, N.K.I. dkk. 2021. Model Pembelajaran Master Berbantuan Media Mind Mapping dan Dampaknya terhadap Hasil Belajar IPA. *Indonesian Journal of Instruction*, 2(2), 83-91. <https://doi.org/10.23887/iji.v2i2.44514>
- Ennis, R. H. 2011. *The Nature of Critical Thinking: An Outline of Critical Thinking Dispositions and Abilities*. University of Illinois. <http://faculty.ed.uiuc.edu/rhennis>
- Facione, P. A. 2015. *Critical thinking: What it is and why it counts* (2015 update). Insight Assessment. <http://www.insightassessment.com>
- Far'i.L.A.et.al. 2023. The Effect of The Multimedia-Assisted Problem-Based Learning Model on Student Learning Motivation. *Interdisciplinary Journal of Education*. 1(1), 139-149. <https://skillerindonesia.id/index.php/ije/index>
- Fauzi.A.K. dkk. 2022. Tes Kemampuan Berpikir Kritis pada Pembelajaran IPA di SMP berbasis Model Rasch. *Pancasakti Science Education Journal*. 7(1), 59 – 67. <http://scienceedujournal.org/index.php/psej>
- Fauziah.U & Fitria.Y. 2022. Pengaruh Model Pembelajaran Berbasis Masalah dan Kemampuan Awal terhadap Kemampuan Berpikir Kritis Siswa pada Pembelajaran Tematik Terpadu. *Jurnal Basicedu Research & Learning in Elementary Education*. 6(2), 2836 - 2845 <https://jbasic.org/index.php/basicedu>
- Fikri.M.I.A. 2024. Metode pembelajaran konvensional: Drill, hafalan dan demonstrasi. *Maliki Interdisciplinary Journal (MIJ)*. 2(1) 1264-1270. <http://urj.uin-malang.ac.id/index.php/mij/index>

- Hita.N.M.N.S. dkk. 2022. Pengaruh Model Problem Based E-Learning Terhadap Motivasi Berprestasi dan Hasil Belajar Informatika pada Siswa SMP. *Jurnal Teknologi Pembelajaran Indonesia*. 12(1).1-11.
- Kemendikbudristek, 2023. PISA 2022 dan Pemulihan Pembelajaran di Indonesia.
- Keputusan Kepala Badan Standar Kurikulum dan Asesmen Pendidikan Kementerian Pendidikan Kebudayaan Riset dan Teknologi Nomor 032/H/KR/2024 tentang Capaian Pembelajaran pada Pendidikan Anak Usia Dini, Jenjang Pendidikan Dasar dan Jenjang Pendidikan Menengah Kurikulum Merdeka.
- Keputusan Kepala Badan Standar Kurikulum dan Asesmen Pendidikan Kementerian Pendidikan Dasar dan Menengah Nomor 046/H/KR/2025 tentang Capaian Pembelajaran pada Pendidikan Anak Usia Dini, Jenjang Pendidikan Dasar dan Jenjang Pendidikan Menengah.
- Khoirudin.R. dkk. 2022. Kemampuan Berpikir Kritis Siswa SMP pada Pembelajaran IPA. *Jurnal Ilmiah Profesi Guru (JIPG)*. 3(2), 150-161. <http://jurnal.ustjogja.ac.id/index.php/jipg/index>
- Muttaqin.M.Z.H. dkk. 2022. Pemahaman Nature of Science (Hakekat IPA) Bagi Guru IPA: Solusi Membelajarkan IPA Multidimensi. *Jurnal Ilmiah Wahana Pendidikan*, 8 (21), 8-15 <https://doi.org/10.5281/zenodo.7272704>
- Novitasari.K.W.A. 2023. Analisis Keterampilan Berpikir Kritis Menurut Indikator Facione pada Pembelajaran Kimia Daring dan Luring. *Jurnal Sains Riset (JSR)*. 13(3), 839-849. <https://journal.unigha.ac.id/index.php/JSR>
- Novitasari. I. 2023. Pengaruh Model Pembelajaran Project Based Learning (PjBL), Konvensional, Dan Perhatian Orang Tua Terhadap Hasil Belajar Peserta Didik Kelas II SDN Tandes Kidul I/110 Surabaya. *PACIVIC (Jurnal Pendidikan Pancasila dan Kewarganegaraan)*. 3(1), 49-60. <http://jurnal.unipasby.ac.id/index.php/pacivic/>
- Nurma'ardi. H. & Kuswaty. M. 2023. Keefektifan Pembelajaran Problem Based Learning terhadap Kemampuan Berpikir Kritis dan Motivasi Belajar Siswa Sekolah Dasar. *Journal of Instructional and Development Researches*. 3(4), 139-146. <https://www.journal.iel-education.org/index.php/JIDeR>
- OECD. (2019). *PISA 2018 results (Volume I): What students know and can do*. OECD Publishing.

https://www.oecd.org/content/dam/oecd/en/publications/reports/2019/12/pisa-2018-results-volume-i_947e3529/5f07c754-en.pdf

Olaf Zawacki-Richter & Insung Jung.2022. *Handbook of Open, Distance and Digital Education*. Singapura: Springer Nature Singapore Pte Ltd. <https://doi.org/10.1007/978-981-19-2080-6>

Parwati.N.N.et.al. 2023. TPACK Theoretical Correspondence with Learning Variables and Its Application Effectiveness in Learning. *Journal of Pedagogy and Education Science (JPES)*. 2(3), 244-256 <https://doi.org/10.56741/jpes.v2i03.402>

Parwati.N.N. et.al. 2025. Optimization Student Learning Outcomes Through Hyflex Learning Based on Student Engagement. *Journal of Applied Science, Engineering, Technology, and Education*. 7(3), 427 – 440. <https://doi.org/10.35877/454RI.asci4134>

Perwithasari.N.M.N.et.al. 2023. The Effect of Problem-Based Learning Model Assisted by Contextual Videos on Students' Learning Outcomes in The Subject of Sound Waves. *Jurnal Pendidikan Fisika dan Teknologi (JPFT)*. 9(2), 216-223. <https://dx.doi.org/10.29303/jpft.v9i2.5269>

Prasetyo.Y. dkk. 2025. Pengaruh Model Pembelajaran Flipped Problem Based Learning Terhadap Kemampuan Berpikir Kritis Siswa. *Jurnal Ilmu Pendidikan*.8(1),183-194. <https://jayapanguspress.penerbit.org/index.php/cetta>

Rafigoh.A.R.A. dkk. 2023. Problem Based Learning Berbantuan Audio Visual terhadap Kemampuan Berpikir Kritis Siswa SD. *Jurnal Pedagogik Pendidikan Dasar*. 10(1), 27-36. <https://ejournal.upi.edu/index.php/ppd/index>.

Raharja.K.A.T. dkk. 2023. Pengaruh Problem Based Learning Flipped Classroom Berbantuan Vidio Interaktif terhadap Kemampuan Berpikir Kritis dan Motivasi Belajar Matematika. *Jurnal Teknologi Pembelajaran Indonesia*.13(1), 21-31

Rahayuningsih.S. dkk. 2022. Komparasi Efektivitas Model Pembelajaran Project Based Learning (PjBL) dan Konvensional: Studi Pada Siswa Menengah Pertama. *Jurnal Riset HOTS Pendidikan Matematika*. 2(2), 118-129. <https://doi.org/10.51574/kognitif.v2i2.654>

Rauf.I. dkk. 2022. Pengaruh Model Problem Based Learning Terhadap Kemampuan Berpikir Kritis Siswa. *Pedagogika*. 13(2), 162-183. pedagogika.fip@ung.ac.id

- Salamah.A.U. dkk. 2023. Komparasi Model Pembelajaran Problem Based Learning (PBL) dan Model Pembelajaran Konvensional Pada Mata Kuliah Struktur Beton 2: Tinjauan Literatur terhadap Hasil Belajar Mahasiswa. *Prosiding Seminar Pendidikan Kejuruan dan Teknik Sipil (E-Journal)* 1, 190-199
- Santyasa, I W.et al. 2020. The effect of problem-based flipped learning and academic procrastination on students' critical thinking in learning physics in high school. *Advances in Social Science, Education and Humanities Research*, volume 566, Proceedings of the 5th Asian Education Symposium 2020 (AES 2020), 456-462. <http://creativecommons.org/licenses/by-nc/4.0/>.
- Santyasa. W. 2023. *Metodologi Penelitian Pendidikan*. Singaraja: Undiksha Press.
- Sardiman, A. M. 2001. *Interaksi dan motivasi belajar mengajar* (Edisi revisi). Jakarta: Raja Grafindo Persada.
- Sardiman, A. M. 2005. *Interaksi & Motivasi Belajar Mengajar*. Jakarta: Raja Grafindo Persada.
- Saputri.M.G. dkk. 2024. Pengaruh Model PBL Berbantuan Video Pembelajaran terhadap Kemampuan Berpikir Kritis Siswa pada Pelajaran IPAS. *Ainara Journal*. 5(4), 533-538. <http://journal.ainarapress.org/index.php/ainj>
- Siahaan. J.H. dkk. 2022. Studi Komparasi Kemampuan Berpikir Kritis Siswa dengan Menggunakan Model Pembelajaran Berbasis Masalah dan Model Pembelajaran Konvensional Pada Mata Pelajaran Ips Terpadu Kelas VIII di Smp Negeri 10 Pematangsiantar T.A. 2022/2023. *Cendikia : Media Jurnal Ilmiah Pendidikan*. 13 (2), 188-195. www.iocscience.org/ejournal/index.php/Cendikia
- Sitompul. N.N.S. 2021. Pengaruh Model Pembelajaran Problem Based Learning terhadap Peningkatan Kemampuan Berpikir Kritis Matematis Siswa SMP Kelas IX. *Jurnal Pendidikan Matematika*. 4(1), 45-54. <http://dx.doi.org/10.30656/gauss.v4i1.3129>
- Slavin.R.E.2011. *Psikologi Pendidikan Teori dan Praktek*. Jakarta: PT. Indeks
- Suartama. I.K. et.al. 2019. Development of an instructional design model for mobile blended learning in higher education. *International Journal of Emerging Technologies in Learning*. 14(16). 4-22. <https://doi.org/10.3991/ijet.v14i16.10633>

- Suartama. I.K. et.al. 2020. Development of Ubiquitous Learning Environment Based on Moodle Learning Management System. *International Journal of Interactive Mobile Technologies (iJIM)*. 14(14). 182–204. <https://doi.org/10.3991/ijim.v14i14.11775>
- Suartama. I.K. et.al. 2024. Instructional Design Models for Pervasive Learning Environment: Bridging Formal and Informal Learning in Collaborative Social Learning. *Educ Sci (Basel)*. 4(12). <https://doi.org/10.3390/educsci14121405>
- Sudarma. I.K. dkk. 2015. *Desain Pesan: Kajian Analitis Desain Visual (Teks dan Image)*. Yogyakarta: Graha Ilmu
- Sudarma. I.K. et. al. 2021. Improving Children's Cognitive Ability Through Information Processing Theory-Based Digital Content. *International Journal of Elementary Education*. 6(1), 118-126. <https://dx.doi.org/10.23887/ijee.v6i1>
- Sudarma. I.K. et. al. 2025. Utilization of Diagnostic Multiple Intelligence System (DMIS) Applications to Diagnose Intelligence and Provide Differentiated Digital Content to Optimize Learning Outcomes. *TPM*. 32(S2). <https://www.tpmmap.org/>
- Sudarmanto.E.dkk. 2021. *Model Pembelajaran Era Society 5.0*. Cirebon: Penerbit Insania. <https://www.researchgate.net/publication/35678749>
- Sudarmika. P. et.al. 2020. Comparison between Group Discussion Flipped Classroom and Lecture on Student Achievement and Student Characters. *International Journal of Instruction*. 13(3), 171-186.
- Sudatha.I.G.W. et.al.2024. Pelatihan dan Pendampingan Pengembangan Video Pembelajaran Tipe Talking Head Bagi Guru-Guru di LB Negeri 1 Singaraja dan SLB Negeri 2 Singaraja. *Proceeding Seminar Nasional Pengabdian Masyarakat Universitas Pendidikan Ganesha* (pp. 1395-1399). <https://eproceeding.undiksha.ac.id/index.php/SENADIMAS/article/download/621/233/3509>
- Sugiyono. 2019. *Metode penelitian kuantitatif, kualitatif, dan R&D*. Bandung: Alfabeta.
- Sukmana.A.I.W. et.al. 2023. Problem-Based Learning Interactive Learning Multimedia to Improve Science Content Learning Competency. *Jurnal Edutech Undiksha*. 11(1), 195-202. <https://doi.org/10.23887/jeu.v11i1.58508>

- Supriana. I.K. dkk. 2023. Pengaruh Model Pembelajaran Problem Based learning terhadap kemampuan Berpikir Kritis dan Hasil Belajar IPA. *Jurnal Pendidikan Dasar Indonesia*. 7(1), 130-142.
- Syamsidah & Suryani.H. 2018. *Buku Model Problem Based Learning (PBL)*. Yogyakarta: Penerbit Deepublish.
- Tegeh, I.M. et.al. 2022. Group Investigation Flipped Learning in Achieving of Students' Critical and Creative Thinking Viewed from Their Cognitive Engagement in Learning Physics. *Journal of Education Technology*. 6(2). 350-362. <https://ejournal.undiksha.ac.id/index.php/JET>
- Wahab. R. 2016. *Psikologi Belajar*. Jakarta: PT. Raja Grafindo Persada
- Warpala.I.W.et.al. 2023. The Comparison Of Students' Critical Thinking Skill By The Implementation Of Think Pair Share And Student Teams Achievement Division Cooperative Learning Model In Biology Instruction At SMAN 2 Singaraja. *Wahana Matematika dan Sains: Jurnal Matematika, Sains, dan Pembelajarannya*. 17(1), 1-11. <https://ejournal.undiksha.ac.id/index.php/JPM/article/view/61915/26022>
- Warpala.I.W.et.al. 2025. Scientific creativity of prospective teachers through eco-friendly project-based blended learning. *International Journal of Education and Practice*. 13(4), 1307-1319. https://www.researchgate.net/publication/396449817_Scientific_creativity_of_prospective_teachers_through_eco-friendly_project-based_blended_learning
- Windari.E.P. dkk. 2021. *Bagaimana Implementasi Model Problem Based Learning dalam Berbagai Disiplin Ilmu?* [Presiding session] Riksha Bahasa XV <http://proceedings.upi.edu/index.php/riksabahasa>.
- Yunita.N. dkk. 2024. Pengaruh Model PBL Berbantuan Multimedia Terhadap Motivasi Matematika Dan Kemampuan Berpikir Kritis Pada Siswa Kelas V SDN 21 Bengkalis. *Jurnal Intelek Insan Cendikia*. 1(8), 3047-7824. <https://jicnusantara.com/index.php/jiic>
- Zainal.N.F. 2022. Problem Based Learning pada Pembelajaran Matematika di Sekolah Dasar/ Madrasah Ibtidaiyah. *Jurnal Basicedu*. 6(3), 3584-3593. <https://jbasic.org/index.php/basicedu>
- Zunindar. 2020. *Strategi Pembelajaran*. Medan:Perdana Publishing.