

DAFTAR PUSTAKA

- Aditya Sugiansyah, A., Solari, H., & Fauzil Adhim, M. (2025). Penerapan Model Case-Based Learning Untuk Meningkatkan Kemampuan Berpikir Kritis Siswa Sekolah Menengah. *Cendikia Pendidikan*. <https://doi.org/10.9644/sindoro.v3i9.252>
- Alivia, N. S., & Utomo, A. C. (2024). Peningkatan Kerjasama melalui Pembelajaran Kooperatif Tipe STAD pada Mata Pelajaran Bahasa Indonesia Siswa Kelas II SD. *FONDATA*, 8(2), 354–366.
- Alya Simbolon, & Erryna Josephine. (2023). *Strategi Pembelajaran Berbasis Kasus (Case-Based Learning) dalam Meningkatkan Interprofessional Collaboration : Literature Review*.
- Amanda, F. F., Sumitro, S. B., Lestari, S. R., & Ibrohim. (2024). Enhancing Critical Thinking And Problem Solving Skills By Complexity Science-Problem Based Learning Model. *Multidisciplinary Journal of Educational Research*, 14(1), 96–114. <https://doi.org/10.17583/remie.9409>
- Anggristia, S., Edy, S., & Hariyadi, R. S. (2023). Upaya Peningkatan Kolaborasi Antar Peserta Didik Melalui Implementasi Manajemen Kelas Menggunakan Teknik Friendship Grouping. *DIDAKTIKA : Jurnal Pemikiran Pendidikan*, 29(2), 258. <https://doi.org/10.30587/didaktika.v29i2.6509>
- Anwar, R. B., & Rahmawati, D. (2024). *Case Based Learning* Sebagai Upaya Peningkatan Aktivitas Belajar Dan Komunikasi Matematis. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, 13(4), 1361. <https://doi.org/10.24127/ajpm.v13i4.11165>
- Aponno, J. V, Yamlean, P. V. Y., & Supriati, H. S. (2014). Uji Efektivitas Sediaan Gel Ekstrak Etanol Daun Jambu Biji (*Psidium Guajava Linn*) Terhadap Penyembuhan Luka Yang Terinfeksi Bakteri *Staphylococcus Aureus* Pada Kelinci (*Orytolagus cuniculus*). 3(3), 279–286.
- Apriliani, M. A., Mulyani, E., & Muslim, S. R. (2026b). Implementasi Case-based Learning Berpendekatan Teaching at the Right Level terhadap Kemampuan Pemecahan Masalah Matematis Implementation of Case-based Learning Using the Teaching at the Right Level Approach to Mathematical Problem-Solving Skills. *Jurnal Pendidikan Matematika Dan Sains*, 14(2), 470–481. <https://doi.org/10.21831/jpms.v14i2.96421>
- Ardhita Eko Ginanjar, Anita Dwi Anggraeni, Jun Surjanti, Retno Mustika Dewi, & Muhammad Abdul Ghofur. (2024). Pengembangan bahan ajar majalah interaktif berbantuan augmented reality untuk meningkatkan hasil belajar dan keterampilan kolaborasi siswa. *Equilibrium : Jurnal Ilmiah Ekonomi Dan Pembelajarannya*, 12, 1–6.

- Arikunto, S. (2012). *Dasar-dasar Evaluasi Pendidikan* (Edisi 2). Bandung: Remaja Rosdakarya.
- Arikunto, S. (2013). *Dasar-Dasar Evaluasi Pendidikan*. Jakarta: Bumi Aksara.
- Aripin, I. (2019). Pendidikan Nilai Pada Materi Konsep Sistem Imun. *4*(1), 1–11.
- Asmaul, A., & Resti, R. D. S. (2024). *Implementasi Model Pembelajaran Kolaboratif Untuk Meningkatkan Hasil Belajar Siswa. 1*(2), 773–778.
- Astiswijaya, Nike, Kusnandi Kusnandi, & Dadang Juandi. (2023). A Literature Review about One of the Successful Skills of the 21st Century: Collaborative Ability Student. *Didaktika Religia: Journal of Islamic Education*, 232–254.
- Astriawati, F., & Yennita, Y. (2023). Collaborative Case-Based Learning: Implikasinya Terhadap Kemampuan Analisis Mahasiswa Pada Topik Monera Dan Protista. *Diklabio: Jurnal Pendidikan Dan Pembelajaran Biologi*, *7*(2), 240–249. <https://doi.org/10.33369/diklabio.7.2.240-249>
- Aulia, S., & Rofiq, W. (2026). *Jurnal Penelitian Pendidikan Guru Sekolah Dasar Pengaruh Model Pembelajaran Kooperatif Tipe Jigsaw terhadap Peningkatan Kemampuan Kolaboratif dan Hasil Belajar Peserta Didik Sekolah Dasar. 14*(4), 775–788.
- Ayu, R. E., Sari, I., Yuniasti, A., Wulandari, R., Hadi, W. P., Ahied, M., & Sutarja, M. C. (2022). Peningkatan Keterampilan Pemecahan Masalah Siswa Melalui Pembelajaran Collaborative Problem Solving Berbantuan Media Phet. In *Jurnal Natural Science Educational Research* (Vol. 5).
- Azrai, E. P., Heryanti, E., Zain, A., & Ningsih, P. (2022). *Problem-solving ability: Implementation of RICOSRE learning models on environmental change topic* (Vol. 8, Number 2). <http://ejournal.umm.ac.id/index.php/jpbi>
- Bahar, R., Munadi, S., & Rosnawati, R. (2023). The *Brainstorming* Method on Pesantren Students' Mathematical Connection and Metacognition Skills. *Pegem Journal of Education and Instruction*, *13*(3). <https://doi.org/10.47750/pegegog.13.03.24>
- Bertills, K., Granlund, M., & Augustine, L. (2021). Student Self-Efficacy and Aptitude to Participate in Relation to Perceived Functioning and Achievement in Students in Secondary School With and Without Disabilities. *Frontiers in Psychology*, *12*. <https://doi.org/10.3389/fpsyg.2021.607329>
- Bhuttah, T. M., Xusheng, Q., Abid, M. N., & Sharma, S. (2024). Enhancing student critical thinking and learning outcomes through innovative pedagogical approaches in higher education: the mediating role of inclusive leadership. *Scientific Reports*, *14*(1). <https://doi.org/10.1038/s41598-024-75379-0>

- Budiastuti, P. N., & Rosdiana, R. (2023). Analisis Langkah-Langkah Model Pembelajaran Discovery Learning Dalam Rencana Pelaksanaan Pembelajaran Teks Cerita Inspiratif Kelas Ix Smp Di Kabupaten Bogor Utara. *Jurnal Pendidikan: Kebahasaan, Kesastraan, Dan Pembelajaran*, 3(1), 39–45. <http://journal.unpak.ac.id/index.php/triangulasi>
- Burgess, A., Matar, E., Roberts, C., Haq, I., Wynter, L., Singer, J., Kalman, E., & Bleasel, J. (2021). Scaffolding medical student knowledge and skills: team-based learning (TBL) and case-based learning (CBL). *BMC Medical Education*, 21(1). <https://doi.org/10.1186/s12909-021-02638-3>
- Campbell, N. A., Dickey, J. L., Simon, E. J., Taylor, M. R., & Reece, J. B. (2009). *Biology Seventh Edition*. US: Pearson Education.
- Chaerunisa, Z. F., & Pitorini, D. E. (2022). Profil Kemampuan Pemecahan Masalah Siswa SMA Mata Pelajaran Biologi. *BIO-PEDAGOGI*, 11(1), 8. <https://doi.org/10.20961/bio-pedagogi.v11i1.51644>
- Chaijum, N. (2020). Using *Brainstorming* through social media to promote engineering students' teamwork skills. In *European Journal of Science and Mathematics Education* (Vol. 8, Number 4).
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education*.
- Daimatul Minan, B., Yunitiara Rizqi, H., & Studi Pendidikan Guru Sekolah Dasar, P. (2025). Pengaruh Pembelajaran Think Pair Share dengan Media Monusra terhadap Kemampuan Pemecahan Masalah Siswa SD. *JANACITTA : Journal of Primary and Children's Education*, 8, 2615–6598. <http://jurnal.unw.ac.id/index.php/janacitta>
- Darmawati, Y., & Mustadi, A. (2023). The Effect of Problem-Based Learning on the Critical Thinking Skills of Elementary School Students. *Jurnal Prima Edukasia*, 11(2), 142–151. <https://doi.org/10.21831/jpe.v11i2.55620>
- Desti Ersa, M., Destiansari, E., Dwi Anjani, T., Studi Pendidikan Biologi, P., Islam Negeri Raden Fatah Palembang, U., kunci, K., & Berpikir Kritis Pembelajaran, K. (2023). *Pengaruh Metode Brainstorming Terhadap Kemampuan Berpikir Kritis Peserta Didik Pada Pembelajaran Materi Sistem Pencernaan Manusia*. (1). <http://jurnal.radenfatah.ac.id/index.php/bioilmi>
- Dewi, C. A., Habiddin, H., Dasna, I. W., & Rahayu, S. (2022). Case-Based Learning (CBL) in Chemistry Learning: A Systematic Review. *Jurnal Penelitian Pendidikan IPA*, 8(4), 2219–2230. <https://doi.org/10.29303/jppipa.v8i4.1971>

- Dewi, C. A., & Rahayu, S. (2023). Implementation of case-based learning in science education: A systematic review*. *Journal of Turkish Science Education*, 20(4), 729–749. <https://doi.org/10.36681/tused.2023.041>
- Dharmayanthi, N. P. I. (2023). Penerapan Model *Case Based Learning* (CBL) untuk Mengembangkan Critical Thinking Skills Siswa dalam Pembelajaran Geografi di SMA Negeri 1 Kuta Utara. *Jurnal Pendidikan Geografi Undiksha*, 10(3), 291–300. <https://doi.org/10.23887/jjpg.v10i3.50446>
- Doğan, Y., & Batdı, V. (2021). *Revisiting Brainstorming Within an Educational Context: A Meta-Thematic Analysis*. 8(3), 541–556.
- Dokter Imun. (2020, September 8). *Mengenali dan mengatasi tipe-tipe gejala reaksi hipersensitivitas obat*. Media Edukasi Autoimun, Alergi Dan Immunologi Oleh Peralmuni Cabang Banten.
- Emilia, N., Titin, & Afandi. (2025). Penerapan Model Pembelajaran *Case Based Learning* Untuk Meningkatkan Hasil Belajar Peserta Didik Pada Materi Virus Kelas Xg Madrasah Aliyah Negeri 2 Pontianak. *Jurnal Biogenerasi*, 10(4), 2114–2121. <https://doi.org/10.30605/biogenerasi.v10i4.6506>
- Eshuis, E. H., ter Vrugte, J., Anjewierden, A., Bollen, L., Sikken, J., & de Jong, T. (2019). Improving the quality of vocational students' collaboration and knowledge acquisition through instruction and joint reflection. *International Journal of Computer-Supported Collaborative Learning*, 14(1), 53–76. <https://doi.org/10.1007/s11412-019-09296-0>
- Faila, R. E., Supahar, S., & Pebriana, I. N. (2025). An Assessment to Measure Problem-Solving Ability and Science Process Skills: A Feasibility Test. *Jurnal Pendidikan Fisika*, 13(1), 90–102. <https://doi.org/10.26618/jpf.v13i1.15654>
- Fatimah Zulfah, K., Rebacca Sihotang, S., Hasanah, T., & Suryanda, A. (2024). Penerapan Model Discovery Learning Dalam Meningkatkan Hasil Belajar Peserta Didik Pada Pembelajaran Biologi. *Jurnal Edukasi Biologi*.
- Fatimatuazzahrah Fatimatuazzahrah, Lulu Sakinah, & Siti Alikha Alyasari. (2023). Problematika Implementasi Kurikulum Merdeka Di Sekolah: Tantangan Membangun Kualitas Pendidikan. *Jurnal Bintang Pendidikan Indonesia*, 2(1), 43–53. <https://doi.org/10.55606/jubpi.v2i1.2339>
- Fauzi, A., Ermiana, I., Nur, A., Rosyidah, K., & Sobri, M. (2022). Implementasi Case Method (Pembelajaran Berbasis Pemecahan Kasus) Ditinjau Dari Kemampuan Kolaboratif Mahasiswa.
- Fauziah Siregar, N., Junaedi, I., Matematika, F., Ilmu, D., & Alam, P. (2025). Analisis Pemecahan Masalah Pada Kurikulum Matematika Sekolah Di Singapore Dan Indonesia. *Jurnal Karya Pendidikan Matematika*, 12(1).

- Feng, Y., Xu, L., Zhang, J., Bin, J., Pang, X., He, S., & Fang, L. (2024). Allergenic protein-induced type I hypersensitivity models: a review. In *Frontiers in Allergy* (Vol. 5). Frontiers Media SA. <https://doi.org/10.3389/falgy.2024.1481011>
- Firman, Syamsiara Nur, & Moh. Aldi SL.Taim. (2023). Analysis of Student Collaboration Skills in Biology Learning. *Diklabio: Jurnal Pendidikan Dan Pembelajaran Biologi*, 82–89. <https://doi.org/10.33369/diklabio.7.1.82-89>
- Giri, S., & Batra, L. (2025). Memory Cells in Infection and Autoimmunity: Mechanisms, Functions, and Therapeutic Implications. In *Vaccines* (Vol. 13, Number 2). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/vaccines13020205>
- Haris, A., Hasyim, M., Ma'ruf, Halim, A. D., Mahir, & Ramadhan, I. (2025). The Effectiveness Of Dynamic Problem-Solving Strategy And Innovative Assessment Tools To Improve Students' Higher-Order Thinking Skills. *Jurnal Pendidikan IPA Indonesia*, 14(1). <https://doi.org/10.15294/jpii.v14i1.21433>
- Harun, H. B., & Abdullah, M. K. K. Bin. (2024). E-Collaborative Learning Synergy: Exploring Peer Interaction and English Proficiency in Virtual Collaborative Classrooms. *Jurnal Pendidikan Bitara UPSI*, (17), 47–58. <https://doi.org/10.37134/bitara.vol17.sp2.5.2024>
- Hendarwati, E., Nurlaela, L., Bachri, B. S., & Sa'ida, N. (2021). Collaborative Problem Based Learning Integrated with Online Learning. *International Journal of Emerging Technologies in Learning*, 16(13), 29–39. <https://doi.org/10.3991/ijet.v16i13.24159>
- Idris S, E. S. (2025). Pengaruh Model Pembelajaran *Case Based Learning* terhadap Keterampilan Berpikir Kritis dan Pemecahan Masalah pada Mata Pelajaran Proyek Kreatif dan Kewirausahaan. In *Indonesian Research Journal on Education Web Jurnal Indonesian Research Journal on Education* (Vol. 5).
- Irwanto, I., Pratiwi, Y., & Rizkyani, H. (2024). The Effect of Case-Based Learning on Students' Problem-Solving Ability. *International Journal of Religion*, 5(6), 235–242. <https://doi.org/10.61707/wbare032>
- Jahra Sinaga, F. (2020). Prosiding Seminar Nasional PBSI-III Tahun 2020 Tema: Inovasi Pembelajaran Bahasa dan Sastra Indonesia Guna Mendukung Merdeka Belajar pada Era Revolusi Industry 4.0 dan Society Pengembangan Instrumen Penilaian Berbasis Hots (Keterampilan Berpikir Tingkat Tinggi).
- Junita, A., Supriatno, B., & Purwianingsih, W. (2021). Profil keterampilan kolaborasi siswa SMA pada praktikum maya sistem ekskresi. *Assimilation: Indonesian Journal of Biology Education*, 4(2), 50–57. <https://doi.org/10.17509/aijbe.v4i2.41480>

- Kasih, K. (2025). Analisis Metode Pembelajaran Kooperatif Dalam Mengasah Kemampuan Mahasiswa menulis Opini yang Kritis dan Relevan di media Massa. *SENTRI: Jurnal Riset Ilmiah*, 4(10), 2706–2721.
- Kim, V. H. D., Upton, J. E. M., Derfalvi, B., Hildebrand, K. J., & McCusker, C. (2024). Inborn errors of immunity (primary immunodeficiencies). In *Allergy, Asthma and Clinical Immunology* (Vol. 20, Number Suppl 3). BioMed Central Ltd. <https://doi.org/10.1186/s13223-024-00938-z>
- Kochis, M., Kamin, D., Cockrill, B., & Besche, H. (2021). Understanding and Optimizing Group Dynamics in Case-Based Collaborative Learning. *Medical Science Educator*, 31(6), 1779–1788. <https://doi.org/10.1007/s40670-021-01367-y>
- Koehler, A. A., Fiock, H., Janakiraman, S., Cheng, Z., & Wang, H. (2020). Asynchronous online discussions during case-based learning: A problem-solving process. *Online Learning Journal*, 24(4), 64–92. <https://doi.org/10.24059/olj.v24i4.2332>
- Kurnia, R., & Rahmawati, N. (2023). *Dinamika Kelompok Dalam Cooperative Learning Model (Analisis Psikologi Sosial terhadap Interaksi Siswa dalam Pembelajaran Pendidikan Agama Islam)*. 15, 290–304.
- Kurnianto, D., Yani, A. T., Magister Pendidikan Matematika, M., Pontianak, U., & Prodi Magister Pendidikan Matematika FKIP Untan Pontianak, D. (2022). Development of Mathematics E-Modules Through the Professional Flip PDF Application Assisted React Strategy to Improve Problem Solving Ability of Vocational Middle School Students Concentration of Accounting Expertise. In *International Journal of Science and Society* (Vol. 4). <http://ijsoc.goacademica.com>
- Lavi, R., & Marti, D. (2023). A Proposed Case-Based Learning Framework for Fostering Undergraduate Engineering Students' Creative and Critical Thinking. *Journal of Science Education and Technology*, 32(6), 898–911. <https://doi.org/10.1007/s10956-022-10017-w>
- Listianto, A. F., Minarso, D., Maulidah, H., Saadah, N., Nurhayati, S., & Murniati, N. A. N. (2025). *Relevansi Perubahan Kurikulum Indonesia Terhadap Tantangan Pendidikan Abad Ke-21*.
- Lohakare, T., & Gomase, K. (2022). Systemic lupus erythematosus: a rare clinical image. In *Pan African Medical Journal* (Vol. 42). African Field Epidemiology Network. <https://doi.org/10.11604/pamj.2022.42.191.35508>
- Mahdi, O. R., Nassar, I. A., & Almuslamani, H. A. I. (2020). The role of using case studies method in improving students' critical thinking skills in higher

- education. *International Journal of Higher Education*, 9(2), 297–308. <https://doi.org/10.5430/ijhe.v9n2p297>
- Maria Anggelita, D., & Mariono, A. (2020). *Pengaruh Keterampilan Kolaborasi Terhadap Kemampuan Pemecahan Masalah Peserta didik SMK*. 5(2). <https://doi.org/10.32832/educate.v5i2.3323>
- Marshall, J. S., Upton, J. E. M., Vliagoftis, H., Hildebrand, K. J., Byrne, A., & Watson, W. (2024). Introduction to immunology and immune disorders. In *Allergy, Asthma and Clinical Immunology* (Vol. 20, Number Suppl 3). BioMed Central Ltd. <https://doi.org/10.1186/s13223-024-00932-5>
- Maulina, W. S. (2021). Increasing Student Participation in Groups Through the Application of Cooperative Learning Models. *Social, Humanities, and Educational Studies (SHES): Conference Series*, 4(6), 272–278.
- McDaniel, M. M., Meibers, H. E., & Pasare, C. (2021). Innate control of adaptive immunity and adaptive instruction of innate immunity: bi-directional flow of information. In *Current Opinion in Immunology* (Vol. 73, pp. 25–33). Elsevier Ltd. <https://doi.org/10.1016/j.coi.2021.07.013>
- Mena Niman, E., Yansen Edison, A., & Momang, B. (2024). INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND ANALYSIS The Effectiveness of the Discovery Learning Model on Student Learning Outcomes. *INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND ANALYSIS*. <https://doi.org/10.47191/ijmra/v7-i07-49>
- Minarni, M., Kundera, I. N., Tangge, L., Sutrisnawati, S., & Ramadhan, A. (2024). Pengaruh Model Pembelajaran *Case Based Learning* terhadap Keterampilan Proses Sains Siswa pada Materi Ekosistem di SMAN 4 Sigi. *Ideguru: Jurnal Karya Ilmiah Guru*, 10(1), 241–246. <https://doi.org/10.51169/ideguru.v10i1.1361>
- Mukaramah, M., Kustina, R., & Rismawati Program Studi Pendidikan Bahasa Indonesia STKIP Bina Bangsa Getsempena Banda Aceh, dan. (2020). Menganalisis Kelebihan Dan Kekurangan Model Discovery Learning Berbasis Audiovisual Dalam Pelajaran Bahasa Indonesia. In *Jurnal Ilmiah Mahasiswa Pendidikan* (Vol. 1, Number 1).
- Musnandar, E., Elymaizar, Z., & Raguati Fakultas Peternakan Universitas Jambi, dan. (2024). *Penerapan Pembejaraan Berbasis Case Based Learning (CBL) dalam Meningkatkan Kemampuan Analisis dan Memecahkan Masalah* *Application of Case Based Learning (CBL) to Improve Analytical and Problem-Solving Skills* (Vol. 13, Number 2).
- Nisa, H., Isnaini, M., Utami, L. S., & Islahudin, I. (2023). Collaborative Learning Effect on Improving Students' Creativity and Critical Thinking in the

- Independent Curriculum. *AL-ISHLAH: Jurnal Pendidikan*, 15(3). <https://doi.org/10.35445/alishlah.v15i3.3538>
- Noerfiadi, M., & Gumindari, S. (2025). Implementasi Metode *Brainstorming* dalam Meningkatkan Kreatifitas Berpikir dan Kemampuan Kolaboratif Siswa MTS Al-Ishlah Panambangan. *Jurnal Pendidikan Dan Keguruan*, 3(9), 1103–1115.
- Nurita, T., Yulianti, L., Handayanto, S. K., Hidayat, A., & Saleah, P. (2025). Case-Based Learning For Creative Thinking Skills On The Ideal Gas Law: Application Of The Understanding By Design Framework. *Jurnal Pendidikan IPA Indonesia*, 14(1), 70–82. <https://doi.org/10.15294/jpii.v14i1.16938>
- Ofstedal, K., & Dahlberg, K. (2009). Collaboration in student teaching: Introducing the collaboration self-assessment tool. *Journal of Early Childhood Teacher Education*, 30(1), 37–48. <https://doi.org/10.1080/10901020802668043>
- Pisetsky, D. S. (2023). Pathogenesis of autoimmune disease. In *Nature Reviews Nephrology* (Vol. 19, Number 8, pp. 509–524). Nature Research. <https://doi.org/10.1038/s41581-023-00720-1>
- Praminingsih, I., Miarsyah, M., & Kurniati, T. H. (2023). PBL with the *Brainstorming* method: Can it influence students' critical and creative thinking ability? *JPBI (Jurnal Pendidikan Biologi Indonesia)*, 9(3), 346–358. <https://doi.org/10.22219/jpbi.v9i3.28551>
- Pujirahayu, I., Fanani, M. R., & Hasanah, U. (2025). Penerapan Metode *Brainstorming* dalam Meningkatkan Motivasi Belajar Aqidah Akhlak Siswa Kelas XI A MA Plus Sunan Kalijaga , Pogalan , Trenggalek , Pada Semester Genap Tahun Ajaran 2023-2024. 1(1).
- Putra Herdiansyah, G., Utami, N. S., & Lestari, S. (2025). Peningkatan keterampilan kolaborasi dalam pembelajaran matematika melalui problem based learning pada siswa SMA. *Jurnal Ilmiah WUNY*, 7(1). <https://doi.org/10.21831/jwuny.v6i1>
- Putri, C. N. D., Sedyati, R. N., & Zulianto, M. (2025). Students' collaboration and communication skills with problem-based learning model. *Jurnal Inovasi Dan Teknologi Pembelajaran*, 10(3), 225–233. <https://doi.org/10.17977/um031v10i32023p225>
- Rahmi, A., & Fitriani, H. (2023). Analisis Keterampilan Kolaborasi Siswa SMA Kelas XI Melalui Model Pembelajaran Auditory, Intellectually, Repetition. *CHEDS: Journal of Chemistry, Education, and Science*, 7(2). <https://doi.org/10.30743/cheds.v7i1.8244>

- Rambe, A. Y. F., & Afri, L. D. (2020). Analisis Kemampuan Pemecahan Masalah Matematis Siswa Dalam Menyelesaikan Soal Materi Barisan Dan Deret. *Axiom : Jurnal Pendidikan Dan Matematika*, 9(2), 175. <https://doi.org/10.30821/axiom.v9i2.8069>
- Ramdani, D., Idaman, R. P., & Ali, M. (2025). Fostering 21st-century skills: The effectiveness of Ricosre and digital flipbooks in enhancing student collaboration in biology learning. *Biosfer*, 18(2), 424–436. <https://doi.org/10.21009/biosferjpb.59320>
- Riza, S., & Barrulwalidin, B. (2023). Ruang Lingkup Metode Pembelajaran. *ISLAMIC PEDAGOGY: Journal of Islamic Education*, 1(2), 120–131. <https://doi.org/10.52029/ipjie.v1i2.157>
- Rizal, M. K. R., Dwi Yulianti, Handoko, & Rosidin, U. (2024). Portfolio Assessment to Measuring Capabilities Communications and Collaborations Students. *Jurnal Imiah Pendidikan Dan Pembelajaran*, 8(1), 125–135. <https://doi.org/10.23887/jipp.v8i1.70094>
- Rubi Babullah, Siti Qomariyah, Neneng Neneng, Ujang Natadireja, & Siti Nurafifah. (2024). Kolaborasi Metode Diskusi Kelompok Dengan Problem Solving Learning Untuk Meningkatkan Keterampilan Pemecahan Masalah Siswa Pada Materi Aqidah Akhlak. *Jurnal Budi Pekerti Agama Islam*, 2(2), 65–84. <https://doi.org/10.61132/jbpai.v2i2.132>
- Rulistiani, V. U., Asyura, I., Kamali, A. S., & Linda, L. (2023). Pengaruh Metode *Brainstorming* Terhadap Keterampilan Berpikir Kreatif. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, 7(2), 1366–1378. <https://doi.org/10.31004/cendekia.v7i2.1784>
- Salsabila, E., & Antari Wijayanti, D. (2020). Pengaruh Model Pembelajaran Creative Problem Solving dengan Teknik Scaffolding terhadap Kemampuan Pemecahan Masalah Matematis Siswa di SMA Negeri 12 Jakarta. *Jurnal Riset Pembelajaran Matematika Sekolah*, 4.
- Saqr, M., López-Pernas, S., & Murphy, K. (2024). How group structure, members' interactions and teacher facilitation explain the emergence of roles in collaborative learning. *Learning and Individual Differences*, 112. <https://doi.org/10.1016/j.lindif.2024.102463>
- Sartania, N., Sneddon, S., Boyle, J. G., McQuarrie, E., & de Koning, H. P. (2022). Increasing Collaborative Discussion in Case-Based Learning Improves Student Engagement and Knowledge Acquisition. *Medical Science Educator*, 32(5), 1055–1064. <https://doi.org/10.1007/s40670-022-01614-w>
- Septiana Indriyani, R., Al Mujadidi, S., Studi Pendidikan Profesi Guru, P., PGRI Semarang, U., Jl Sidodadi Timur Nomor, I., & Cipto Semarang, -Dr. (n.d.).

Penerapan Model Problem Based Learning dengan Pendekatan Kontekstual dalam Meningkatkan Pemecahan Masalah Matematis Siswa. *Journal on Education*, 07(01), 4871–4879.

- Silitubun, E., Isro'iyah, L., Pakpahan, E. M., Hidayati, N., Panggabean, T. E., Santosa, T. A., Hendrik, H., Ilwandri, I., Nugraha, A. R., & Sjroida, D. F. (2024). The Effectiveness of Case-Based Learning to Improve the Collaboration and Communication Skills of Early Childhood Education Students. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 8(6), 1385–1394. <https://doi.org/10.31004/obsesi.v8i6.6233>
- Song, X., Liang, H., Nan, F., Chen, W., Li, J., He, L., Cun, Y., Li, Z., Zhang, W., & Zhang, D. (2025). Autoimmune Diseases: Molecular Pathogenesis and Therapeutic Targets. In *MedComm* (Vol. 6, Number 7). John Wiley and Sons Inc. <https://doi.org/10.1002/mco2.70262>
- Srinivasan, M., Wilkes, M., Stevenson, F., Nguyen, T., & Slavin, S. (n.d.). *Comparing Problem-Based Learning with Case-Based Learning: Effects of a Major Curricular Shift at Two Institutions*.
- Sugiyono. (2023). Metode Penelitian Kuantitatif, Kualitatif, Dan R&D. www.cvalfabeta.com
- Syahda Ayu Nurmaya, T., & Adawiyah, R. (2025). Pengaruh Interactive Read Aloud Berbantuan Literacy Cloud. In *Didaktika: Jurnal Kependidikan* (Vol. 14, Number 1). <https://jurnaldidaktika.org>591
- Taqiyuddin Hilali, M., Zubaidah, S., Biologi, D., & Matematika dan Ilmu Pengetahuan Alam, F. (2025). Peningkatan Keterampilan Kolaborasi dan Hasil Belajar Kognitif Siswa dengan Model Pembelajaran Group Investigation pada Materi Bioteknologi. In *Jurnal Pro-Life* (Vol. 12, Number 3).
- Tawil, M., & Liliarsari. (2013). *Berpikir Kompleks dan Implementasinya dalam Pembelajaran IPA*.
- Utami, K. B. (2022). Pengaruh Teknik Brainstorming Menggunakan Lkpd Terhadap Kemampuan Pemecahan Masalah Dan Komunikasi Matematis Dengan Memperhatikan Gaya Belajar Siswa Kelas Xi Mia Sman 1 Lubuk Basung. 2(1), 2774–5120. <https://doi.org/10.31933/eej.v2i1.485>
- Wang, R., Lan, C., Benlagha, K., Camara, N. O. S., Miller, H., Kubo, M., Heegaard, S., Lee, P., Yang, L., Forsman, H., Li, X., Zhai, Z., & Liu, C. (2024). The interaction of innate immune and adaptive immune system. In *MedComm* (Vol. 5, Number 10). John Wiley and Sons Inc. <https://doi.org/10.1002/mco2.714>

- Wanudyastuti, A., Raekhan, M. R. R., Rizqiah, N., & Setiyoko, D. T. (2025). Analisis Pola Interaksi Sosial Terhadap Perilaku Peserta Didik Di Sekolah Dasar. *Jurnal Ilmiah Wahana Pendidikan*, 11(8. A), 27–35.
- Waruwu, S., Telaumbanua, Y. N., Lase, S., & Zega, Y. (2023). Pengaruh Metode Pembelajaran *Brainstorming* Terhadap Kemampuan Pemecahan Masalah Matematis Siswa di SMP Negeri 3 Mandrehe Barat. *Indo-MathEdu Intellectuals Journal*, 4(2), 542–552. <https://doi.org/10.54373/imeij.v4i2.211>
- Wati, L., & Efendi, N. (2022). *Studi Literature Penerapan Discovery Learning Pada Pembelajaran IPA Sekolah Dasar* (Vol. 4).
- Widiastuti, I. A. M. S., Murtini, N. M. W., & Anto, R. (2022). *Brainstorming* as an Effective Learning Strategy to Promote Students' Critical Thinking Skills. *Jurnal Pendidikan Progresif*, 12(2), 969–971. <https://doi.org/10.23960/jpp.v12.i2.202243>
- Williams, B. (2004). The Implementation of Case-Based Learning-Shaping the Pedagogy in Ambulance Education. *Journal of Emergency Primary Health Care (JEPHC)*, 2, 3–4.
- Wiranata, S., & Afdal Jamil, Z. (2024). Metode Brainstorming Dalam Meningkatkan Keaktifan Belajar Siswa Madrasah Aliyah Negeri 1 Kota Sungai Penuh Di Provinsi Jambi. 9(5). <https://doi.org/10.36418/syntax-literate.v9i5>
- Yang, W., Zhang, X., Chen, X., Lu, J., & Tian, F. (2024). Based *Case Based Learning* and flipped classroom as a means to improve international students' active learning and critical thinking ability. *BMC Medical Education*, 24(1). <https://doi.org/10.1186/s12909-024-05758-8>
- Zamira Zebua, B., Sipayung, F., Sihombing, H., Laia, Y., Tambunan, H., Matematika, P., & Pascasarjana, F. (2025). Pengaruh Metode Pembelajaran Berbasis Masalah terhadap Self-Efficacy dan Kemampuan Pemecahan Masalah Matematis Ditinjau dari Kemampuan Awal Matematika Siswa SMA. *Journal on Education*, 07(02).
- Zhang, X., Zhang, B., & Zhang, F. (2023). Student-centered case-based teaching and online–offline case discussion in postgraduate courses of computer science. *International Journal of Educational Technology in Higher Education*, 20(1). <https://doi.org/10.1186/s41239-022-00374-2>