

DAFTAR PUSTAKA

- Alarcon, D. A. U., Talavera-Mendoza, F., Paucar, F. H. R., Caceres, K. S. C., & Viza, R. M. (2023). *Science and inquiry-based teaching and learning: a systematic review*. <https://doi.org/10.3389/feduc.2023.1170487>
- Alfiah, M. H., Bramastia, & Sukarmin. (2024). Peran Literasi Sains dalam Meningkatkan Kompetensi Siswa SMK: Sebuah Tinjauan Literatur. *Proceeding Biology Education Conference*, 21(1), 108-115. <https://jurnal.uns.ac.id/prosbi/article/view/97352>
- Amelia, M., Tawil, M., & Arsyad, A. A. (2023). Deskripsi Kemampuan Literasi Sains Aspek Kompetensi Peserta Didik. *Jurnal Pendidikan Dan Pembelajaran*, 3(2), 80–84. <https://journal.almeeraeducation.id/jpdp/article/view/328>
- Ananda, P. N., & Usmeldi, U. (2023). Meta-Analysis: Effect of Using Inquiry Based Learning (IBL) Model on Students' Competence. *Jurnal Pendidikan Fisika*. <https://doi.org/10.26618/jpf.v11i1.9802>
- Antonio, R., & Prudente, M. S. (2023). Effects of Inquiry-Based Approaches on Students' Higher-Order Thinking Skills in Science: A Meta-Analysis. *International Journal of Education in Mathematics, Science and Technology*. <https://doi.org/10.46328/ijemst.3216>
- Artikunto, S. (2013). *Prosedur Penelitian*. Jakarta: Rineka Cipta.
- Ashari, S. E., Rachmadiarti, F., & Herdyastuti, N. (2023). Analysis of the Science Literacy Profile of Students at State Junior High School. *IJORER : International Journal of Recent Educational Research*. <https://doi.org/10.46245/ijorer.v4i6.340>
- Ayu, G. N., Putri, C. A., Riyanto, A. R., & Koto, I. (2025). The Scientific Literacy Competence of Students in Indonesia and Mexico Based on PISA 2022: An International Comparative Study. *The Future of Education Journal*, 4, Page. <https://journal.tofedu.or.id/index.php/journal/index>
- Azwar, S. (2012). *Metode Penelitian*. Yogyakarta: Pustaka Pelajar.
- Bahtiar, R. S., Jarmani, J., Putri, E. A., Aulia, S. R., & Widyaningrum, R. (2025). Fostering Creative Thinking in Elementary Education: Integrating Social Inquiry Learning with Interactive Audio-Visual Media. *At-Thullab : Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, 8(2), 229–241. <https://doi.org/10.30736/atl.v8i2.2220>

- Dah, N. M., Mat Noor, M. S. A., Kamarudin, M. Z., & Syed Abdul Azziz, S. S. (2024). The impacts of open inquiry on students' learning in science: A systematic literature review. In *Educational Research Review* (Vol. 43). Elsevier Ltd. <https://doi.org/10.1016/j.edurev.2024.100601>
- Dermawati, N., Takda, A., & Sudiana, I. N. (2021). Pengembangan Perangkat Pembelajaran Model INoSIT (Integrated Nature of Science Inquiry Technology) UNTUK Meningkatkan Kompetensi Literasi Sains Peserta Didik KelasXII SMA. *Jurnal Biofiskim: Penelitian Dan Pembelajaran IPA*, 3(2), 95–105. <https://ojs.uho.ac.id/index.php/Biofiskim/article/view/16413>
- Febriana, N. (2023). Pengaruh Pembelajaran Berbentuk Simulasi Modells Terhadap Peningkatan Pemahaman Konsep Gerak Parabola. *Jurnal Pendidikan Madrasah*, 8. <https://doi.org/10.14421/jpm.2023.227-234>
- Haavind, S. (2024). A roadmap for virtual professional learning: Bringing inquiry science practices to life through teacher professional community. *School Science and Mathematics*, 124(1), 60–67. <https://doi.org/10.1111/ssm.12646>
- Harnwell, G. P. (1945). A new foundation. *Review of Scientific Instruments*, 16, 265–269.
- Hurd, P. D. (1958). Science literacy: Its meaning for American Schools. *Educational Leadership*, 16, hlm. 13-16.
- Kadir, A., Zulqarnain, T., Takda, A., Jahidin, Assingily, M. S., & Ahmad, M. (2025). Junior High School Students' Science Literacy Skills Based on The Nature of Science Literacy Test (NOSLiT). *Jurnal Pendidikan IPA Indonesia*, 14(1), 93–101. <https://doi.org/10.15294/jpii.v14i1.15739>
- Kanginan, M. (2017). *Fisika untuk SMA Kelas X*. Jakarta: Erlangga.
- Kelp, N. C., McCartney, M., Sarvary, M. A., Shaffer, J. F., & Wolyniak, M. J. (2023). Developing Science Literacy in Students and Society: Theory, Research, and Practice. *Journal of Microbiology & Biology Education*, 24(2). <https://doi.org/10.1128/jmbe.00058-23>
- Komariyah, U. (2021). *Analisis Kemampuan Literasi Sains Peserta Didik SMA Kelas XI pada Materi Usaha dan Energi*. Skripsi. Universitas Islam Negeri Syarif Hidayatullah, Jakarta.

- Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. (2025). *Keputusan Kepala Badan Standar, Kurikulum, dan Asesmen Pendidikan Nomor 46/H/KR/2025 tentang Capaian Pembelajaran pada Pendidikan Anak Usia Dini, Jenjang Pendidikan Dasar, dan Jenjang Pendidikan Menengah pada Kurikulum Merdeka*. (Diakses dari kurikulum.kemdikbud.go.id).
- Koderi., Latifah, S., Saregar, A., Y., & Kesuma, A. A. (2024). Inquiry-based physics learning: The impact of students' scientific reasoning ability in work and simple aircraft. *Proceedings of The Tegal International Conference on Applied Sciences 2022: Applied Science Research Post-Covid-19 Pandemic*. <https://doi.org/10.1063/5.0203029>
- Kotsis, K. (2025). Inquiry-Based Learning in Science: Mathematical Reasoning's Support of Critical Thinking. *Journal of Research in Mathematics, Science, and Technology Education*. <https://doi.org/10.70232/jrmste.v2i1.35>
- Kurniawan, P., Bungkang, Y., & Lumbu, A. (2022). The Development of Physics E-modules Based on PjBL Stem on Vector Analysis Material on Parabolic Motion. *Jurnal Ilmu Pendidikan Indonesia*, 2, 71–80. <https://doi.org/10.31957/jipi.v10i2.2192>
- Lazuardi, M. F. (2025). *Penerapan INoSIT Berbantuan Simulasi PhET untuk Meningkatkan Literasi Sains Siswa Kelas XII pada Materi Listrik Statis*. Skripsi. Universitas Pendidikan Indonesia, Bandung.
- Lestari, C. A. (2024). *Identifikasi Miskonsepsi Pada Materi Gerak Parabola Siswa Kelas X Di Kota Medan*. Skripsi. Universitas Negeri Medan, Medan.
- Limiansih, K., Sulistyani, N., & Melissa, M. M. (2024). Persepsi Guru SMP terhadap Literasi Sains dan Implikasinya pada Pembelajaran Sains di Sekolah. *Jurnal Pendidikan MIPA*, 14(3), 786–796. <https://doi.org/10.37630/jpm.v14i3.1858>
- Marwanti, K., Marina, D., & Astra, I. M. (2024). Increasing Scientific Literacy using a Guided Inquiry Approach assisted by PhET Simulations in Wave Material. *Jurnal Penelitian Pembelajaran Fisika*, 15(4), 355–360. <https://doi.org/10.26877/jp2f.v15i4.715>

- Morris, D. L. (2025). Rethinking Science Education Practices: Shifting from Investigation-Centric to Comprehensive Inquiry-Based Instruction. *Education Sciences*. <https://doi.org/10.3390/educsci15010073>
- Mutasam, U., Ibrohim, & Susilo, H. (2019). Penerapan Pembelajaran Sains Berbasis Inquiry Based Learning Terintegrasi Nature of Science Terhadap Literasi Sains. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, 5(10), 1467–1472. <http://journal.um.ac.id/index.php/jptpp/>
- Nasor, A., Lutfi, A., & Prahani, B. (2023). Science Literacy Profile of Junior High School Students on Context, Competencies, and Knowledge. *IJORER : International Journal of Recent Educational Research*. <https://doi.org/10.46245/ijorer.v4i6.436>
- National Research Council. (1996). *National science education standards*. National Academy Press.
- Nuria, W., Takda, A., & Penulis, N. (2025). Analisis Kemampuan Literasi Sains Pada Aspek Kompetensi Peserta Didik di SMAN 3 Kendari Kelas X Pada Materi Gerak Lurus. *JoPhRA: Journal of Physics Research and It's Application*, 1(2), 50–54. <https://jophra.uho.ac.id/index.php/journal/article/view/14>
- OECD. (2000). *Measuring student knowledge and skills. 2, PISA 2000 assessment of reading, mathematical and scientific literacy*. OECD Publisher.
- OECD. (2019). *PISA 2018 Assessment and Analytical Framework*. OECD Publishing. <https://doi.org/10.1787/b25efab8-en>
- OECD. (2023a). *PISA 2022 Results Factsheets Indonesia*. <https://oecdch.art/a40de1dbaf/C108>.
- OECD. (2023b). *PISA 2025 SCIENCE FRAMEWORK (DRAFT)*.
- Oliver, M., McConney, A., & Woods-McConney, A. (2019). The Efficacy of Inquiry-Based Instruction in Science: a Comparative Analysis of Six Countries Using PISA 2015. *Research in Science Education*, 51, 595 – 616. <https://doi.org/10.1007/s11165-019-09901-0>
- Osborne, J., & Allchin, D. (2025). Science literacy in the twenty-first century: informed trust and the competent outsider. *International Journal of Science Education*, 47(15–16), 2134–2155. <https://doi.org/10.1080/09500693.2024.2331980>

- Osborne, J., Pimentel, D., Alberts, B., Allchin, D., Barzilai, S., Bergstrom, C., Coffey, J., Donovan, B., Kivinen, K., Kozyreva, A., & Wineburg, S. (2022). *Science Education in an Age of Misinformation*. Stanford University, Stanford, CA.
- Permatasari, N. A., & Puspitawati, R. P. (2025). Pengembangan Media Pembelajaran Submateri Sistem Sirkulasi Menggunakan Microsoft Sway Berbasis Inkuiri untuk Meningkatkan Literasi Sains. *BioEdu: Berkala Ilmiah Pendidikan Biologi*, 14(1), 178–187. <https://ejournal.unesa.ac.id/index.php/bioedu>
- Purnama, Z. R., Sitti Hamidah, I., Laely, N., & Tuto Tukan, I. (2024). Meningkatkan Kemampuan Literasi Sains Mahasiswa PGSD Unsar Melalui Model Pembelajaran Berbasis Masalah. *Jurnal Administrasi Terapan*, 3(1). <https://doi.org/10.31959/jat.v3i1.2528>
- Putri, N. N., Takda, A., & Agus, L. (2023). Pengembangan Perangkat Pembelajaran Fisika Model Integrated Nature of Science and Inquiry With Technology (INoSIT) Untuk Meningkatkan Kompetensi Literasi Sains Peserta Didik pada Materi Fluida Statis Kelas XI SMAN 1 Kapontori. *Jurnal Biofiskim: Penelitian Dan Pembelajaran IPA*, 5(1), 63. <https://doi.org/10.33772/biofiskim.v5i1.526>
- Rudolph, J. L. (2023). Scientific literacy: Its real origin story and functional role in American education. *Journal of Research in Science Teaching*, 61(3), 519–532. <https://doi.org/10.1002/tea.21890>
- Roy, G., Sikder, S., & Danaia, L. (2025). Adopting scientific literacy in early years from empirical studies on formal education: a systematic review of the literature. *International Journal of STEM Education*, 12(1), 1. <https://doi.org/10.1186/s40594-025-00547-1>
- Sakaroni, R., Wirdullutfi, W., & Hijriani, B. I. (2025). Menakar Literasi Mikrobiologi Mahasiswa Pendidikan Biologi Universitas Mataram. *Journal of Science and Education Research*, 4(2), 69–76. <https://doi.org/10.62759/jser.v4i2.316>
- Sanjiartha, I. G. D., Suwindia, I. G., & Winangun, I. M. A. (2024). Peran literasi sains dalam membentuk generasi berfikir kritis dan inovatif: kajian literature review. *Education and Social Sciences Review*, 5(2), 120–128. <https://doi.org/10.29210/07essr499900>

- Saraswati, Y., Indana, S., & Sudibyo, E. (2021). Science Literacy Profile of Junior High School Students Based on Knowledge, Competence, Cognitive, and Context Aspects. *IJORER : International Journal of Recent Educational Research*. <https://doi.org/10.46245/ijorer.v2i3.118>
- Sari, S. W., Yokhebed, Y., & Tenriawaru, A. B. (2025). Analisis Kemampuan Literasi Sains pada Materi Virus Kelas X di SMA Negeri 1 Rasau Jaya. *Jurnal Pendidikan MIPA*, 15(3), 1222-1231. <https://doi.org/10.37630/jpm.v15i3.3201>
- Sugiyono. (2007). *Statistika untuk Penelitian*. Bandung: Alfabeta.
- Sugiyono. (2013). *Metode Penelitian Kuantitatif*. Bandung: Alfabeta.
- Sutrisna, N., & Anhar, A. (2019). An Analysis of Student's Scientific Literacy Skills of Senior High School in Sungai Penuh City Based on Scientific Competence and Level of Science Literacy Questions. *Advances in Biological Sciences Research*, 10. DOI: 10.2991/absr.k.200807.032
- Suyanto., Mubarak, A. Z., Suryadi, B., Darmawan, C., & Rahmawati, Y. (2025). *Naskah akademik pembelajaran mendalam menuju pendidikan bermutu untuk semua*. Pusat Kurikulum dan Pembelajaran BSKAP Kemendikdasmen Republik Indonesia. <https://gurudikdas.dikdasmen.go.id/storage/users/3/Berita/2025/PDF/Pembelajaran%20Mendalam.pdf>
- Takda, A., Balulu, N., Kasmiati, S., & Vaz, B. L. (2024). The INoSIT (Integration Nature of Science in Inquiry with Technology) Model to Enhance the Scientific Literacy Skills of Junior High School Students: Development of Student Worksheet-Based Flip PDF Professional. *JIPF (Jurnal Ilmu Pendidikan Fisika)*, 9(2), 219. <https://doi.org/10.26737/jipf.v9i2.5164>
- Takda, A., Jadmiko, B., & Erman, E. (2022). Development of INoSIT (Integration Nature of Science in Inquiry with Technology) Learning Models to Improve Science Literacy: A Preliminary studies. *Jurnal Penelitian Pendidikan IPA*, 8(1), 18–31. <https://doi.org/10.29303/jppipa.v8i1.957>
- Tillah, N. F., & Subekti, H. (2025). Analisis Kemampuan Literasi Sains Siswa SMP Berdasarkan Indikator dan Level Literasi Sains. *Edusaintek: Jurnal Pendidikan, Sains dan Teknologi*, 12(1), 137–154. <https://doi.org/https://doi.org/10.47668/edusaintek.v12i1.1271>

- Usmadi, U. (2020). Persyaratan persyaratan analisis (Uji homogenitas dan uji normalitas). *Inovasi Pendidikan* , 7 (1).
- Van Der Graaf, J., Van De Sande, E., Gijsel, M. A. R., & Segers, E. (2019). A combined approach to strengthen children's scientific thinking: direct instruction on scientific reasoning and training of teacher's verbal support. *International Journal of Science Education*, 41, 1119 – 1138. <https://doi.org/10.1080/09500693.2019.1594442>
- Vo, D., & Simmie, G. M. (2024). Assessing Scientific Inquiry: A Systematic Literature Review of Tasks, Tools and Techniques. *International Journal of Science and Mathematics Education*, 23, 871 – 906. <https://doi.org/10.1007/s10763-024-10498-8>
- Wahid, A., Takda, A., & Anas, M. (2024). Pengembangan Perangkat Pembelajaran Model INoSIT untuk Meningkatkan Kompetensi Literasi Sains Siswa Pada Materi Optika Geometri Kelas XI SMA. *Jurnal Penelitian Pendidikan Fisika*, 9(1). <https://doi.org/10.36709/jipfi.v9i1.102>
- Yacoubian, H. A. (2018). Scientific literacy for democratic decision-making. *International Journal of Science Education*, 40, 308 – 327. <https://doi.org/10.1080/09500693.2017.1420266>
- Young, H. D., & Freedman, R. A. (2002). *Fisika Universitas (Edisi ke-10, Jilid 1)*. (Diterjemahkan oleh A. Safitri dkk.). Jakarta: Penerbit Erlangga.
- Yusmar, F., & Fadilah, R. E. (2023). Analisis Rendahnya Literasi Sains Peserta Didik Indonesia: Hasil PISA dan Faktor Penyebab. *LENSA (Lentera Sains): Jurnal Pendidikan IPA*, 13(1), 11–19. <https://doi.org/10.24929/lensa.v13i1.283>
- Zahara, F., & Afrizon, R. (2023). Development Physics Worksheet Integrated Scientific Literacy Using A Constructive Approach on Parabolic Motion Materials. *Pillar of Physics Education*, 50(1), 50–58. <https://pdfs.semanticscholar.org/c9e1/2983f8ec6fd1c827ff1b05b39101a8a2bd4c.pdf>