

## DAFTAR PUSTAKA

- Abdullah, R. S. (2014). *Pembelajaran Sainifik Untuk Implementasi Kurikulum 2013*. Jakarta: Bumi Aksara.
- Abidin, Y. (2017). *Pembelajaran Literasi Strategi Meningkatkan Kemampuan Matematika, Sains, Membaca dan Menulis*. Bandung: Bumi Aksara.
- Amri, S. (2013). *Pengembangan dan Model Pembelajaran dalam Krikulum 2013*. Jakarta: PT Prestasi Pustakaraya.
- Ardiyanti, W. N., Febriana, B. W., & Diniyati, A. (2017). An analysis of learning process based on scientific approach in physical chemsity experiment. *AIP Conference Proceedings*, 1823(1), 1-7.
- Arikunto, S. (2009). *Dasar-Dasar Evaluasi Pendidikan*. Jakarta: PT Bumi Aksara.
- Asyhari, A., & Hartati, R. (2015). PROFIL PENINGKATAN KEMAMPUAN LITERASI SAINS SISWA MELALUI PEMBELAJARAN SAINTIFIK. *Jurnal Ilmiah Pendidikan Fisika Al-BiRuNi*, 190.
- Aulia, D. M., Parno, & Kusairi, S. (2021). Pengaruh E-modulee Berbasis TPACK-STEM terhadap Literasi Sains Alat Optik dengan Model PBL-STEM Disertai Asesmen Formatif. *JRPF (Jurnal Riset Pendidikan Fisika)*, Vol. 6(No. 1), 7-12.
- Branch, R. M. (2009). *Instructional Design : The ADDIE Approach*. Boston: Springer .
- Branch, R. M. (2009). *Instructional Design: The ADDIE Approach*. New York: Business Media.
- Cutnel , J. D., & Johnson, K. W. (2013). *Introduction tophysic*. Hoboken: John Wiley & Son.
- Dani , D. (2009). Scientific Literacy and Purposes for Teaching Science:A Case Study of Lebanese Private School Teachers. *International Journal of Environmental & Science Education Vol. 4, No. 3*, 289-299.
- Daryanto. (2013). *Menyusun Modul (Bahan Ajar untuk Persiapan Guru dalam Mengajar)*. Yogyakarta: Gava Media.
- Daryanto. (2014). *Pembelajaran Sainifik*. Yogyakarta: Gavamedia.

- DeBoer, G. E. (2000). Scienti@c Literacy: Another Look at Its Historical and Contemporary Meanings and Its Relationship to Science Education Reform. *JOURNAL OF RESEARCH IN SCIENCE TEACHING VOL. 37, NO. 6*, 590.
- Depdiknas. (2008). *Penulisan Modul*. Jakarta: Direktorat Tenaga Kependidikan Ditjen PMPTK.
- Diani, R., Kesuma, G. C., Diana, N., Yuberti, Anggraini, R. D., & Fujiani, D. (2019). The Development Of Physics Module With The Scientific Approach Based On Islamic Literacy. *Journal of Physics: Conference Series Volume 1155*, 13.
- Dick, W., & Carey, L. (2001). *The Systematic Design of Instruction*. New York: Longman.
- Doyan, A., Susilawati, Kosim, Wardiawan, Z., Hakim, S., Mulyadi, L., & Hamidi. (2020). The development of physics module oriented generative learning to increase the cognitive learning outcomes and science process skills of the students. *Journal of Physics: Conference Series Volume 1521*, 6.
- Ellizar, E., Hardeli, H., Beltris, S., & Suharni, R. (2018). Development of Scientific Approach Based on Discovery Learning Module. *Materials Science and Engineering Volume 335*, 8.
- Farida, I. (2017). *Evaluasi pembelajaran berdasarkan kurikulum nasional*. Bandung: PT remaja Rosdakarya.
- Flores, J. E. (2019). LNU Pre-service Secondary Science Teachers' Scientific Literacy and Science Teaching Self-Efficacy. *Journal of Physics: Conference Series, 1254*, 1-5.
- Geban, C. C. (2015). Improving students' chemical literacy levels on thermochemical and thermodynamics concepts through a context-based approach. *Chemistry Education Research and Practice 16 (2)*, 313.
- Hadianto, A., & Festiyed. (2020). Meta analysis the use of e-modules based on research based learning. *Journal Of Physic: Conference Series volume 1481*, 1-6.
- Hake, R. R. (1999). Analyzing change/gain score.
- Hardinata, A., & Putri, R. E. (2019). Implementation of scientific literacy competencies pisa framework 2015 through lesson study: teacher

- knowledge and result discussion. *Journal of Physics: Conf. Series* 1317, 1-6.
- Hardyanti, R. C., Hartono, & Fianti. (2018). The analysis of physics learning in senior high school of Semarang based on the scientific approach and assessment. *Journal of Physics: Conf. Series Volume* 983, 1-8.
- Hasja, Y., Halim, A., & Musman, M. (2020). The development of students' worksheets based on a scientific approach on the heat transfer concept. *Journal of Physics: Conference Series Volume* 1460, 1-6.
- Haspen, C. D., & Syafriani. (2020). The preliminary study in the development of e-Physics module integrated ethnoscience. *Journal of Physics: Conference Series Volume* 1481, 1-5.
- Hastuti, P. W., Setianingsih, W., & Widodo, E. (2019). Integrating Inquiry Based Learning and Ethnoscience To Chance Students's Scientific Skills and Science Literacy. *Journal of Physics: Conference Series Volume* 1387, 1-7.
- Hidayanto, D. R., Munir, Rahman, E. F., & Kusnendar, J. (2017). The Application of ADDIE Model in Developing Adventure Game-based Multimedia Learning to Improve Students' Understanding of Basic Programming. *International Conference on Science in Information Technology (ICSITech)*.
- Hosnan. (2014). *Pendekatan Saintifik dan Kontekstual Dalam Pembelajaran Abad 21*. Jakarta: Ghalia Indonesia.
- Indonesia, M. (2019, Desember 3). *Mediaindonesia.com*. Diambil kembali dari <https://mediaindonesia.com/humaniora/275468/menteri-nadiem-akui-indonesia-krisis-literasi>
- Kemendikbud. (2015). *Mataeri Pelatihan Guru Implementasi Kurikulum 2013 Tahun 2015*. Jakarta: Kemendikbud.
- Kemendikbud. (2018). *Buku Pegangan Pembelajaran Berorientasi Keterampilan Berpikir Tingkat Tinggi Program Peningkatan Kompetensi pembelajaran Berbasis Zonasi*. Jakarta: Direktorat Jenderal Guru dan Tenaga Kependidikan Kementerian Pendidikan dan Kebudayaan.
- Kemendikbud. (2020, May 2020). Diambil kembali dari <https://www.kemdikbud.go.id/main/blog/2020/05/kemendikbud-terbitkan-pedoman-penyelenggaraan-belajar-dari-rumah>

- Kotrlik, J. W., & Atherton, J. C. (2011). Reporting and Interpreting Effect Size in Quantitative. *Agricultural Education Research* , Volume 52, Number 1, pp. 132–142 .
- Krisdiana, A., Aminah, N. S., & Nurosyid, F. (2018). Effects of cognitive conflict and scientific approach on students' alternative conceptions and scientific literacy levels regarding characteristics of mechanical waves. *AIP Conference Proceedings, 2014(1)*, 1-10.
- Kurniawan, R., & S, S. (2020). Media analysis in the development of e-module based guidance inquiry integrated with ethnoscience in learning physics at senior high school. *Journal of Physics: Conf. Series Volume 1481*, 1-5.
- Linda, R., Nufus, H., & Susilawati. (2020). The implementation of chemistry interactive e-module based on Kvisoft Flipbook Maker to improve student' self-learning. *AIP Conference Proceedings Volume 2243*, 1-7.
- Linda, R., Nufus, H., & Susilawati. (2020). The implementation of chemistry interactive e-module based on Kvisoft Flipbook Maker to improve student' self-learning. *AIP Conference Proceedings, 2243(1)*, 1-6.
- Machin, A. (2014). Implementasi Pendekatan Saintifik, Penanaman Karakter Dan Konservasi Pada Pembelajaran Materi Pertumbuhan. *Jurnal Pendidikan IPA Indonesia*, 28-35.
- Milda, J. R., Rahayu, S. L., & Susilo, H. (2021). Implementation of E-module Endocrine System Based on Problem Based Learning (PBL) to Improve Scientific Literacy and Cognitive Learning Outcome. *AIP Conference Proceedings, 2330*, 1-5.
- Mutholib, A. A., Sujadi, I., & Subanti, S. (2017). Mathematics teachers' beliefs about scientific approach (SA) and implementation in mathematics learning. *AIP Conference Proceedings, 1868(1)*, 1-5.
- Nashiroh, P. K., Kamdi, W., & Elmunsyah, H. (2017). The effectiveness of web-programming module based on scientific approach to train logical thinking ability for students in vocational high school. *AIP Conference Proceedings, 1887(1)*, 1-9.
- Nisak, F., & Yulkifli, Y. (2020). Preliminary analysis of development electronic module using inquiry based learning model for 21st century. *Journal of Physics: Conf. Series Volume 1481*, 1-8.



- Nofrianto, A., & Jumrawarsi. (2019). Teacher's Problem and Scientific Learning Approach: An Investigation on Teacher's Problem-Posing Ability. *Journal of Physics: Conf. Series Volume 1155*, 1-9.
- Nurjayadi, M., Sadono, R., & Afrizal. (2021). Development of e-module structure and protein function with flip PDF professional application through online learning. *AIP Conference Proceedings*, 2331(1), 1-7.
- OECD. (2017). *PISA 2015 Assessment and Analytical Framework: Science, Reading, Mathematic, Financial Literacy and Collaborative Problem Solving Revised Edition*. Paris: OECD Publishing.
- Perdana, F. A., Sarwanto, Sukarmin, & Sujadi, I. (2016). Development of e-module combining science process skills and dynamics motion material to increasing critical thinking skills and improve student learning motivation senior high school. *International Journal of Science and Applied Science: Conference Series Volume 1*, 45-54.
- Prastyanigrum, I., & Handika, J. (2017). Development of Smartphone e-Modul by Problem Solving Method for Biot-Savart Theory. *Journal of Physics: Conference Series Volume 909*, 1-8.
- Putri, S. R., & S, S. (2020). Analysis development of guided inquiry based physics emodule to improve critical thinking ability of students high school. *Journal of Physics: Conf. Series Volume 1481*, 1-6.
- Rachmatullah, A., Diana, S., & Rustaman, N. Y. (2016). Profile of Middle School Students on Scientific Literacy Achievements by Using Scientific Literacy Assessments (SLA). *AIP Conference Proceedings*, 1708(1), 1-5.
- Rahayu, Y. S., Astra, I. M., & Sugihartono, I. (2019). Development of Sound Wave and Light Wave E-Book Physics Based on Scientific Approach to Improve Science Process Skills for Secondary School Students. *AIP Conference Proceedings*, 2169(1), 1-11.
- Rahmawati, J. M., Lestari, S. R., & Susilo, H. (2021). Implementation of e-module endocrine system based on problem based learning (PBL) to improve scientific literacy and cognitive learning outcome. *AIP Conference Proceedings*, 2330(1), 1-5.
- Rahmawati, Y., Mardiah, A., Agustin, M. A., Faustine, S., Sandryani, W., Mawarni, P. C., & Virginati, M. (2021). Developing elementary school students' scientific literacy through the integration of ethnopedagogy. *AIP Conference Proceedings*, 2331(1), 1-9.

- Riduwan, & Sunarto. (2014). *Pengantar STATISTIKA untuk Penelitian Pendidikan, Sosial, EKonomi, Komunikasi dan Bisnis*. Bandung: Alfabeta.
- Rusilowati , A., Astuti, B., & Rahman, N. A. (2019). How to improve student's scientific literacy. *Journal of Physics: Conf. Series*, 1170 , 1-5.
- Rustana, C. E., & Sumantri, M. F. (2019). The analysis of mathematical adaptive reasoning (PAM) and scientific literacy on the 10th grade students' understanding of physics concepts. *AIP Conference Proceedings Volume 2169*, 1-6.
- Sani. (2016). *Inovasi Pembelajaran*. Jakarta: Bumi Aksara.
- Santoso, A. (2010). Studi Deskriptif Effect Size penelitian-penelitian. *jurnal Penelitian*.
- Sari, Y., Sunaryo, Seravina, V., & Astra, I. (2019). Developing E-Module for fluids based on problem-based learning (PBL) for senior high school students. *Journal of Physics: Conf. Series Volume 1185*, 1-8.
- Shofiyah , N., Afrilia, I., & Wulandari, F. E. (2020). Scientific Approach and The Effect on Students Scientific Literacy. *Journal of Physics: Conference Series Volume 1594*, 1-6.
- Stefanova, Y., Minevska, M., & Evtimova, S. (2010). SCIENTIFIC LITERACY: PROBLEMS OF SCIENCE EDUCATION IN BULGARIAN SCHOOL. *PROBLEMS OF EDUCATION IN THE 21st CENTURY*, 113.
- Sugiyono. (2013). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.
- Suryanti, Ibrahim, M., & Lede, N. S. (2018). Process skills approach to develop primary students' scientific literacy: A case study with low achieving students on water cycle. *Materials Science and Engineering Volume 296*, 1-7.
- Toharudin, U. (2011). *Membangun Literasi Sains Peserta Didik*. Bandung: Humaniora.
- Vieira, R. M., & Vieira, C. T. (2014). Fostering Scientific Literacy and Critical Thinking in Elementary Science Education. *Int J of Sci and Math Educ*.
- Wiwin, E., Kustijono, R., & Hakim, S. R. (2019). The effectiveness of scientific approach through the website in physics learning process at vocational high school. *Journal of Physics: Conference Series Volume 1171*, 1-8.

- Yamtinah, S., Saputro, S., Mulyani, S., Ulfa, M., Lutviana, E., & Shidiq, A. S. (2019). Do students have enough scientific literacy? A computerized testlet instrument for measuring students' scientific literacy. *AIP Conference Proceedings*, 2194(1), 1-8.
- Young, H. D., & Freedman, R. A. (2002). *Fisika Universitas Edidi Kesepuluh Jilid 2*. Jakarta: Erlangga.
- Yurnetti, Asrizal, Murtiani, & Usman, E. A. (2021). Effects of science learning material of motion in daily life theme on new literacy of students. *Journal of Physics: Conference Series*, 1876, 1-7.

