

DAFTAR PUSTAKA

- Abidin, Y. (2017). *Pembelajaran Literasi Strategi Meningkatkan Kemampuan Matematika, Sains, Membaca dan Menulis*. Bandung: Bumi Aksara.
- Akbar, M., Firman, H., & Rusyati, L. (2007). Developing Science Virtual Test to Measure Students' Critical. *IOP Conf. Series: 812 012106*.
- Al-Taweel, D., & Awad, A. (2020). Development and validation of medication assessment tools to evaluate prescribing adherence to evidence-based guidelines for secondary prevention of coronary heart disease in post-acute coronary syndromes patients in Kuwait. *PLoS One, 15*(11), 1-16.
- Angelia, I., Iswanto, B., & Susanti, D. (2018). E-Learning Berbasis Exe-Learning Untuk Pembelajaran Suhu dan Kalor dengan Model Pembelajaran Discovery Inquiry Di SMA Kelas XI. *Prosiding Seminar Nasional Fisika (E-Journal) SNF*.
- Arikunto, S. (2012). *Dasar-Dasar Evaluasi Pendidikan*. Jakarta: PT Bumi Aksara.
- Aslanoglu, A. E., Karakaya, I., & Sata, M. (2020). Evaluation of University Students' Rating Behaviors in Self and Peer Rating Process via Many Facet Rasch Model. *Eurasian Journal of Educational Research, 89*, 25-46.
- Astriawati, F., & Djukri. (2019). Developing Chamilo-Based E-Learning in Environmental Change Material to Enhance Students' Scientific Literacy Skills. *Journal of Physics: Conference Series, 1397 012049*.
- Atta, H., Vlorensius, Arras, I., & Iksanudin. (2019). Developing an instrument for students scientific literacy. *Journal of Physics: Conference Series 1422 012019*.
- Ayre, C., & Scally, A. J. (2014). Critical values for Lawshe's content validity ratio: Revisiting the original methods of calculation. *Measurement and Evaluation in Counseling and Development, 47*(1), 79–86. Diambil kembali dari <https://doi.org/10.1177/0748175613513808>
- Bahcivan, E., & Kapucu, S. (2014). Turkish Preservice Elementary Science Teachers' Conception of Learning Science and Science. *International Journal of Environmental & Science Education, 9*(4), 429-442.

- Barus, G., Sinaga, J. D., & Moron, Y. D. (2019). Testing the quality of film-based creative and innovative character education test with rasch model. *Jurnal Konseling dan Pendidikan*, 7(2), 71-80.
- Basyari, A., Sunaryo, & Iswanto, B. H. (2012). Pengembangan Media Pembelajaran Fisika Berbasis Adobe Flash untuk Menjelaskan Fisika Inti dan Radioaktivitas untuk SMA Kelas XII. *Seminar Nasional Fisika 2012* (hal. 116-120). Jakarta: UNJ.
- C. Geller, K. N. (2014). What Makes the Finnish Different in Science? Assessing and Comparing Students. *Science Learning in Three Countries Int. J.Sci. Educ*, 36 18 3042–3066.
- Dani, D. (2009). Scientific Literacy and Purposes for Teaching Science: A Case Study of Lebanese Private School Teachers. *International Journal of Enviromental & Sains Education Vol. 4, No. 3*, 289-299.
- Deboer, G. E. (2000). Scientific Literacy: Another Look at Its Historical and Contemporary Meaning's. *Journal of Research on Science Teaching vol 37*, 590.
- Detik. (2020, Juli 17). *Detik.News*. Diambil kembali dari <https://news.detik.com/berita-jawa-timur/d-5097204/pakar-sebut-sistem-belajar-daring-tak-efektif-karena-metodenya-belum-disiapkan>
- Geban, C. C. (2015). Improving students' chemical literacy levels on thermochemical and thermodynamics concepts through a context-based approach. *Journal Education vol 16*, 302-307.
- Giancoli, D. C. (2001). *Fisika Jilid 2, diterjemahkan oleh Yuhilza Hanum dari Physics Fifth Edition*. Jakarta: Penerbit Erlangga.
- Halliday, R. (2005). *Fisika Dasar Edisi Ketujuh Jilid Satu*. Jakarta: Erlangga.
- Hamdu, G., Fuadi, F. N., Yulianto, A., & Akhirani, Y. S. (2020). Items Quality Analysis Using Rasch Model To Measure Elementary School Students' Critical Thinking Skill On Stem Learning. *Jurnal Pendidikan Indonesia*, 9(1), 61-74.
- Jalil, R., Prastowo, T., & Widodo, W. (2019). Development of A-SSI Learning Media (Android Social Scientific Issues) to Improve Science Literation in Earth Coating Subject for First Grade of Junior High School. *Journal of Physics: Conference Series*, 1417 012085. doi:doi:10.1088/1742-6596/1417/1/012085

- Kemendikbud. (2017, November 23). *Kemdikbud*. Diambil kembali dari Kurikulum Kemendikbud:
<http://kurikulum.kemdikbud.go.id/kurikulum/data/data/3%20Dokumentasi%20Implementasi/Literasi%20Sains.pdf>
- Kemendikbud. (2020, Juli 10). *Kemendikbud.com*. Diambil kembali dari <https://www.kemdikbud.go.id/main/blog/2020/03/mendikbud-terbitkan-se-tentang-pelaksanaan-pendidikan-dalam-masa-darurat-covid19>
- Khoirun, S., Novanti, E., Yulianti, E., & Mustikasari, V. R. (2018). Pengembangan Instrumen Tes Literasi Sains Siswa SMP Materi Tekanan Zat Dan Penerapannya dalam Kehidupan Sehari-Hari. *Jurnal Pembelajaran Sains Volume 2 Nomor 2*.
- Kompas. (2019, Desember 13). *Kompas.com*. Diambil kembali dari <https://nasional.kompas.com/read/2019/12/13/07265181/saat-nadiem-wacanakan-ganti-sistem-ujian-nasional?page=all>
- Kuznetsova, O., Palferova, S., & Sherstobitova, A. (2019). Application of Multivariate Statistical Methods for Assessment of Educational Competencies. *Smart Education and e-Learning*, vol. 144 pp, 608-618.
- Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel psychology*, 28(4), 563.
- Mardapi, D. (2008). *Teknik Penyusunan Instrumen Tes dan Nontes*. Jogjakarta: Mitra Cendikia Offset.
- Marwanti, K., Suherman, Wibowo, F. C., Darman, D. R., & Guntara, Y. (2020). Assessment Virtual Test (ASVITE): Assessment Virtual. *JPPPF (Jurnal Penelitian dan Pengembangan Pendidikan Fisika) vol 6 issue 1*.
- Murti, P. R., Aminah, N. S., & Harjan. (2018). The Analysis of High School Students' Science Literacy Based on Nature of Science Literacy Test (NOSLiT). *Journal of Physics: Conference Series 1097 012003*.
- Nahadi, Firman, H., & Kurniadi, H. (2017). Development and Validation of Chemistry Virtual Test. *Journal of Education and Learning (EduLearn) Vol 12 No 1*, 44-51.
- OECD. (2017). *Assessment and Analytical Framework: Science, Reading, Mathematic, Financial Literacy and Collaborative Problem Solving Revised Edition*. Paris: OECD Publishing.

- Pratiwi, S. N., Cari, C., & Aminah, S. (2019). Pembelajaran IPA Abad 21 dengan Literasi Sains Siswa. *Jurnal Materi dan Pembelajaran Fisika (JMPF)*, Volume 9 Nomor 1 2019 ISSN : 2089-6158.
- Rafannisa, I., Susila, A. B., & Iswanto, B. H. (2018). Pengembangan Media Pembelajaran Video Tutorial Berbasis Web Untuk Materi Gelombang Bunyi di SMA. *Prosiding Seminar Nasional Fisika (E-Journal) Volume VII*, 98-103.
- Ray, S., & Srivastava, S. (2020). Virtualization of Science Education: a Lesson from the COVID-19 Pandemic. *Journal of Proteins and Proteomics vol 11*, 1:77–80.
- Riduwan, & Sunarto. (2014). *Pengantar Statistika Pendidikan, Sosial, Ekonomi, Komunikasi, dan Bisnis*. Bandung: Alfabeta.
- Riduwan, & Sunarto. (2014). *Pengantar Statistika untuk Penelitian Pendidikan, Sosial, EKonomi, Komunikasi dan Bisnis*. Bandung: Alfabeta.
- Rohmah, S., Karniawati, I., & Ramalis, T. (2018). Analysing PISA-like Assessment Test Measuring Scientific Literacy Using Three-Parameter Logistic (3PL) of IRT-2018. *Journal of Physics: Conf. Series 1108 012084*.
- Ronny, S., Mebinger-Koppelt, J., & Rudig. (2014). Developing a computer-based assessment of complex problem solving in Chemistry. *International STEAM Journal Education*, 1:2.
- Rusilowati, A., Nugroho, S. E., Susilowati, E. S., Mustika, T., Harfiyani, N., & Prabowo, H. T. (2017). The Development Of Scientific Literacy Assessment To Measure Student's Scientific Literacy Skills In Energy Theme. *Journal of Physics: Conf. Series 983 012046*.
- Rustaman, N. (2017). Assessment in Science Education. *Journal of Physics: Conf. Series 895 012141*.
- Rustaman, Y. N. (2004). *Literasi Sians Anak Indonesia 2000 & 2003*.
- Rusyati, L. (2019). Validation of science virtual test (SVT) to assess 9th grade students' critical thinking on living things and environmental sustainability theme. *Journal of Physics: Conference Series*, 1280 032055.
- Rychen, D. &. (2003). *Key competencies for a successful life and a well functioning society*. Cambridge, MA: Hogrefe & Huber.

- Sastradika, D., & Jumadi. (2017). Development of Subject-specific Pedagogy Based on Guided Inquiry about Newton's Law to Improve Senior High School Students' Scientific Literacy Ability. *Journal of Physics: Conf. Series* 1097 012017.
- Scalise, K. d. (2016). Computer-Based Assessment in E-Learning: A Framework for Constructing-Intermediate Constraint Questions and Tasks for Technology Platforms. *The Journal of Technology, Learning, and Assessment*, 4(6), 356-368.
- Siuki, H. A., Tehrani, H., Aval, M. G., Ebrahimipour, H., Jafari, A., & Shahroodi, M. V. (2020). Psychometric Properties of a Questionnaire on Brucellosis Prevention Behaviors Based on the PRECEDE Model Among Rural Farmers and Their Family Members. *Risk Management and Healthcare Policy*, 13, 539-548.
- Stefora, Y., Minevska, M., & Evtimova, S. (2010). Scientific Literacy: Problems Of Science Education In Bulgarian School. *Problem Of Education in The 21st Century Vol 19*, 113-118.
- Sumintono, B., & Widhiarso, W. (2015). *Aplikasi Pemodelan Rasch Pada Asessment Pendidikan*. Cimahi: Trim Komunikata.
- Supahar, & Bashooir, K. (2018). Validitas dan reliabilitas instrumen asesmen kinerja literasi sains pelajaran Fisika berbasis STEM. *Jurnal Penelitian Dan Evaluasi Pendidikan*. 22(2), 168–181. Diambil kembali dari <https://doi.org/10.21831/pep.v22i2.20270>
- Toharudin, U., Hendrawati, & Rustaman. (2011). *Membangun Literasi Sains Peserta Didik*. Bandung: Humaniora.
- Tvenge, N. O. (2020). Added value of virtual approach to simulation-based learning in a manufacturing learning factory. *CIRP Conference of Intelligent Computation in Manufacturing Engineering, CIRP ICME*, 36-41.
- Umar, R. (2013). Review Tentang Virtualisasi. *Journal Informatika Vol 7 No 2*, 775-784.
- Unesco. (2004). *The Plurality of Literacy and its Implication for Policies and Program: Position Paper*. Paris, Perancis: United National Education, Scientific, and Cultural Organization.
- Valantika, L., Firman, H., & Nahadi. (2017). Development virtual test of reaction rate based visual perceptual skills to measure students' mastery concept .

IOP Conf. Series, Journal of Physics: Conf. Series 812 (2017) 012005
doi:10.1088/1742-6596/812/1/012005.

Vieira, R. M. (2014). Fostering Scientific Literacy and Critical Thinking. *International Journal of Science and Math Education Vol 14*, 659-680.

Wamsler, C. (2020). Education for sustainability Fostering a more conscious society and transformation towards sustainability. *International Journal of Sustainability in Higher Education*, vol. 21 No. 1.

Wibowo, F., Suhandi, A., Nahadi, Samsudin, A., Rahman, D. R., Suherli, Z., . . . Bayram, C. (2017). Virtual microscopic simulation (VMS) to promote students' conceptual change: A case study of heat transfer. *Asia-Pacific Forum on Science Learning & Teaching*, Volume 18, Issue 2, Article 12.

Widowati, A., Widodo, E., Anjarsari, P., & Setuju. (2017). The Development of Scientific Literacy through Nature of Science (NoS) within Inquiry Based Learning Approach. *ournal of Physics: Conf. Series*, 909.



