

DAFTAR PUSTAKA

- Aiken, L. R. (1985). Three Coefficients For Analyzing The Reliability And Validity Of Ratings. *Educational and Psychological Measurement*, 45, 131–141.
- Ainsworth, S. (1999). The Functions of Multiple Representation. *Computers and Education*, 33: 131-152.
- Al-Rsa'i, M. S., Khoshman, J. M., & Abu Tayeh, K. (2020). Jordanian Pre-Service Physics Teacher's Misconceptions about Force and Motion. *Journal of Turkish Science Education*, 17(4), 528-543.
- Anderson, T R., Schonborn, K. J., Plessis, L., Gupthar, A. S., & Hull, T. L. (2013). Multiple Representations in Biological Education. *Series: Models and Modeling in Science Education*, 19-38.
- Arikunto, Suharsimi. (2009). *Dasar-Dasar Evaluasi Pendidikan (edisi Revisi)*. Jakarta: Bumi Aksara.
- Arikunto, Suharsimi. (2012). *Dasar-Dasar Evaluasi Pendidikan*. Jakarta: Bumi Aksara.
- Bollen, L., Van Kampen, P., Baily, C., Kelly, M., & De Cock, M. (2017). Student difficulties regarding symbolic and graphical representations of vector fields. *Physical Review Physics Education Research*. 1-17.
- Budiman, A., & Jailani. (2014). Pengembangan Instrumen Assesmen Higher Order Thinking Skill (HOTS) pada mata pelajaran Matematika SMP Kelas VII semester 1. *Jurnal Riset Pendidikan*, 2(1), 139-151.
- Caleon, I. S. & Subramaniam, R. (2010) Development and Application of a Tree-Tier Diagnostic Tes to Assess Secondary Students' Understanding of waves. *International Journal of Science Education*. 32(7):939-961
- ceuppens, S., Deprez, J., Dehaene, W., & De Cock, M. (2018). Design and validation of a test for representational fluency of 9th grade students in physics and mathematics: The case of linear functions. *Physical Review Physics Education Research*. Diambil kembali dari <https://doi.org/10.1103/PhysRevPhysEducRes.14.020105>
- Chusni, M. M., Suranto, Rahardjo, S. B., & Saputro, S. (2020). Profile of multi-modal representation ability of junior high school students on science material in Sleman district. *Journal of Physics: Conference Series*, 1511(1). <https://doi.org/10.1088/1742-6596/1511/1/012107>
- Darsono, T., & M, B.N. (2019). Pengembangan Tes Diagnostik Menggunakan Certainty Of Response Index (CRI) Termodifikasi pada Materi Tekanan Zat untuk Siswa Kelas VIII SMP. *UPEJ Unnes Physics Education Journal*, 8(1), 22-27. <https://doi.org/10.15294/upej.v8il.29503>

- De Cock, M. (2012). Representation use and strategy choice in physics problem solving. *Physical Review Special Topics - Physics Education Research*, 8(2), 1–15. <https://doi.org/10.1103/PhysRevSTPER.8.020117>
- de Jong, T., & van der Meij, J. (2012). Learning with Multiple Representations. In N. M. Seel (Ed.), *Encyclopedia of the Sciences of Learning* (pp. 2026–2029). Boston, MA: Springer US.
- Fatmaryanti, S. D., Studi, P., Fisika, P., Purworejo, U. M., Penelitian, M. (2015). Profil Kemampuan Representasi Mahasiswa Pendidikan Fisika Universitas Muhammadiyah Purworejo. *Jurnal Pendidikan Fisika Dan Keilmuan*, 2014-2016.
- Faatmawati, & Anjarsari, P. (2021). Stimulus Guru dan Respon Siswa dalam Pembelajaran Bahasa Arab di Tingkat SMP. *Jurnal Kajian Pendidikan Islam*, 13-26.
- Furqon, M & Muslim. (2019). Investigating the ability of multiple representations and scientific consistency of high school students on newton's laws. *Journal of Physics*, 1-3.
- Giancoli. (2014). *Physics: Principles with Applications (7th ed.)*. New York: Prentice Hall.
- Gurel, D. K., Eryilmaz, A., & Mc Dermott, L. (2015). A review and comparison of diagnostic instruments to identify students' misconceptions in science. *Eurasia Journal of Mathematics, Science and Technology Education*, 989-1008.
- Halliday, D., Resnick, R., & Walker, J. (2011). *Fundamental of Physics (9th Editio)*. Amerika Serikat: John Wiley & Sons, inc.
- Hasbullah., Halim, Abdul., &Yusrizal. (2018). Penerapan Pendekatan Multi-Representasi Terhadap Pemahaman Konsep Gerak Lurus. *Jurnal IPA dan Pembelajaranipa*. 2 (2): 69-74.
- Hill, M., Sharma, M. D., & Johnston, H. (2015). How online learning modules can improve the representational fluency and conceptual understanding of university physics students. *European Journal of Physics*, 1-20.
- Ismail, M Ilyas. (2020). *Evaluasi Pembelajaran: Konsep Dasar, Prinsip, Teknik dan Prosedur*. Depok: PT RajaGrafindo Persada.
- Jauhariyah, M. N.R., Zulfa, I., Harizah, Z., & Setyarsih, W. (2018). Validity of Student's misconceptions diagnosis on chapter Kinetic Theory of Gases using three-tier diagnostic test. *Journal of Physics:Conference Series*, 1006(1). <https://doi.org/10.1088/1742-6596/1006/1/012005>
- Jihad, Asep & Haris, Abdul. (2013). *Evaluasi Pembelajaran*. Yogyakarta: Multi Pressindo.
- Kanginan, M. (2013). *Fisika 1 untuk SMA/MA Kelas XII*. Jakarta: Erlangga.

- Klein, P., Müller, A., & Kuhn, J. (2017). Assessment of representational competence in kinematics. *Physical Review Physics Education Research*, 1-18.
- Kohl, P.B., D. Rosegrant & ND. Finkelstein. (2007). *strongly and weakly directed approaches to teaching multiple representation use in physics*. *physical Review Special Topics-Physics Education Research* 3,010108.
- Kubsch, M., Nordine, J., Fortus, D., Krajcik, J., & Neumann, K. (2020). Supporting Students in Using Energy Ideas to Interpret Phenomena: The Role of an Energy Representation. *International Journal of Science and Mathematics Education*, 1635-1654. Diambil kembali dari <https://doi.org/10.1007/s10763-019-10035-y>
- Kuczmann, I. (2017). The Structure of Knowledge and Students' Misconceptions in Physics. *AIP Conference Proceedings*, 1916.
- Kusuma, Mochtar. (2016). *Evaluasi Pendidikan: Pengantar, Kompetensi dan Implementasi*. Yogyakarta: Parama Ilmu.
- Kusumawati, I., Kahar, M. S., Khoiri, A., & Mursidi, A. (2019). Differences analysis understanding the concept of students between the three islands (Java, Kalimantan, Papua) through multiple representations approaches to the material of Time Dilation. *Journal of Physics: Conference Series*, 1-2.
- Leone & Gire. (2006). Is Instructional Emphasis on the Use of Non-Matematical Representation Worth the Effort. *Physics Education Research Conference, American Institute of Physics*, 0-7534-0311-2/06:45-48.
- Lichtenberger, A., Wagner, C., Hofer, S. I., Stern, E., & Vaterlaus, A. (2017). Validation and structural analysis of the kinematics concept test. *Physical Review Physics Education Research*, 1-13.
- Lovisa, U. (2011). *Penggunaan Pendekatan Multi Representasi Pada Pembelajaran Konsep Gerak untuk Meningkatkan Pemahaman Konsep Siswa dan Memperkecil Miskonsepsi Siswa SMP*. Bandung: Universitas Pendidikan Indonesia.
- Magdalena, I. (2020). Pengembangan Instrumen Tes Siswa Tingkat Sekolah Dasar Kabupaten Tangerang. *Jurnal Pendidikan dan Ilmu Sosial*, 227-237.
- Maharani, D., Prihandono, T., Lesmono, A.D. (2015). Pengembangan LKS Multirepresentasi Berbasis Pemecahan Masalah pada Pembelajaran Fisika di SMA. *Jurnal Pembelajaran Fisika*. 4 (3):236-242.
- Mahardika, I. K., Rofiqoh Afifatur., & Supeno (2012). Model Inkuiri untuk Meningkatkan Kemampuan Representasi Verbal dan Matematis pada Pembelajaran Fisika di SMA. *Jurnal Pembelajaran Fisika*. Vol 1 (2): 165-171.

- Majidi Sharareh. (2012). Structural Patterns and Representation Forms of University Physics Teachers: Biot-Savart Law and Ampère'S Law. *Journal of Baltic Science Education*, 318-333.
- Maulidia, F & Pahlevi, T. (2020). Pengembangan Instrumen Penelitian Tes Soal Pilihan Ganda Berbasis HOTS Pada Mata Pelajaran Administrasi Umum Jurusan OTKP SMK Negeri 1 Lamongan. *Jurnal Pendidikan Administrasi Perkantoran (JPAP)*, 136-145
- Muhamad J Zamzam & Muhamad N. (2019). Analisis Arus Listrik Dan Medan Magnet Pada Daerah Aktif Penghasil Flare Noaa 12017. *Jurnal Sains Dirgantara*, 9-26.
- Nichols, K., Gillies, R., & Kleiss, D. (2013). Translating between representations in a social context: A study of undergraduate science students' representational fluency. *Instructional Science*, 699-728.
- Nichols, K., Ranasinghe, M., & Hanan, J. (2016). A professional learning model that cultivates primary science classrooms' representational profiles. *International Journal of Educational Research*, 12-33. Diambil kembali dari <https://doi.org/10.1016/j.ijer.2015.12.002>
- Nieminen, P., Savinainen, A., & Viiri, J. (2012). Relations between representational consistency, conceptual understanding of the force concept, and scientific. *Physical Review Special Topics - Physics Education Research*, 1-10.
- Nitz, S., Prechtel, H., & Nerdel, C. (2014). Survey of classroom use of representations: development, field test and multilevel analysis. *Learning Environments Research*, 3(17), 401-422.
- Pesman, H., & Eryilmaz, A. (2010). Development of a tree-tier test to assess misconceptions about simple electric circuits. *Journal of Educational Reserch*, 103 (3), 208-222. <https://doi.org/10.1080/00220670903383002>
- Prain, V & Waldrip, B. (2006). An exploratory study of teachers' and students' use of multi-modal representations of concepts in primary science. *International Journal of Science Education*, 1843-1866. Diambil dari <https://doi.org/10.1080/09500690600718294>
- Prain, V & Waldrip, B. (2010). *Representing Science Literacies: An Introduction*. Research in Science Education, Vol. 40 (1), pp 1-3.
- Putri, H. N. P. A., Niela W, R., Fitriana, A., & Kusairi, S. (2020). The Comparison of High School Students ' Understanding of Kinematic Materials : Case of Question Representations. *Jurnal Ilmiah Pendidikan Fisika Al - BiRuNi*, 241-249.
- Rahmawati, A & Amar, S. (2017). *Evaluasi Pembelajaran Sejarah*. Lombok: Universitas Hamzanwadi Pess.
- Sa'adah, Risa N. (2022). *Metode Penelitian R&D (Research and Development)*. Malang: CV. Literasi Nusantara Abadi.

- Safitri G, Sitompul S. Shala & Hamdani. (2022). Analisis Miskonsepsi Peserta Didik pada Materi Listrik Statis Menggunakan *Four Tier Diagnostic*. *Jurnal Pendidikan Riset & Konseptual*. Vol. 6, No. 4
- Serway, R. A & Jewett, J.W. (2014). *Physics for Scientist and Engineering with Modern Physics (9th ed.)*. Amerika Serikat: Cengage Learning.
- Sinaga., Suhandi., & Liliyasi. (2014). The Effectiveness of Learning to Represent Physics Concept Approach: Preparing Pre-Service Physics Teachers to be Good Teachers. *Internasional Journal of Research in Applied*, Vol. Issue 4: 127-136.
- Stull, Andrew T & Hegarty, Mary. (2016). Model manipulation and learning: Fostering representational competence with virtual and concrete models. *Journal of Educational Psychology*, 509-527.
- Subana. (2017). Penilaian dalam Pembelajaran Pendekatan Taktik (Assesment in Teaching Games for Undeerstanding). Prosiding Seminar Nasional Pendidikan Jasmani. Sumedang: STKIP Sebelas April Sumedang.
- Sudjana, N. (2009). *Penilaian Hasil Proses Belajar Mengajar*. Bandung: Rosda.
- Sugiono (2013). *Metodologi Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
- Sukadi E & Sari I. Novita. (2013). Miskonsepsi Mahasiswa Pendidikan Fisika STKIP PGRI Pontianak pada Materi Listrik Statis. *Jurnal Pendidikan Informatika dan Sains*. Vol. 2, No. 2
- Treagust, David F & Duit, R. (2017). Multiple Representations in Physics Education (H. E. Fischer, Ed.). *C.E.P.S Journal*. Diambil kembali dari https://doi.org/10.1007/978-3-319-58914-5_7
- Trianto. (2010). *Mendesain Model Pembelajaran Inovatif-Progresif*. Jakarta: Prenada Media.
- Van, Heuvelen A. (1991). Learning to think like a physicist: A review of research-based instructional strategies. *American Journal of Physics*, 891-897.
- Wibowo, S & Cholifah. (2019). *Bahan Ajar Instrumen tes Tematik Terpadu*. Malang: Media Nusa Kreatif.
- Winarni, E. W. (2018). *Teori dan Praktik Penelitian Kuantitatif Kualitatif*. Jakarta: Bumi Aksara