

## DAFTAR PUSTAKA

- Abidin, Y. (2014). *Desain Sistem Pembelajaran dalam Konteks Kurikulum 2013*. Bandung: Refika Aditama.
- ACRL. (2000). *Information Literacy*. Diakses dari: <http://www.ala.org/acrl/>.
- ACRL. (2000). *Information Literacy Standards for Higher Education*. Chicago: ACRL.
- Adadan, E. (2012). Using Multiple Representations to Promote Grade 11 Students' Scientific Understanding of the Particle Theory of Matter. *Res Sci Educ Springer*, 43: 1079-1105.
- Aina dan Jacob, K. (2013). Instructional Material and Improvisation in Physics Class: Implications for Teaching and Learning. *Journal of Research & Method in Education*, 2(5): 38-42.
- Ainswoth, S. (1999). The Functions of Multiple Representations. *Computer and Education*. 33: 131-152.
- Anwar, S. (2014). *Bahan Perkuliahan: Pengolahan Bahan Ajar*. Bandung: Universitas Pendidikan Indonesia.
- Arikunto, S. (2013). *Dasar-dasar Evaluasi Pendidikan Edisi Kedua*. Jakarta: Bumi Aksara.
- Awolaju, B.A. (2016). Instructional Material as Correlates of Students' Academic Performance in Biology in Senior Secondary Schools in Osun State. *International Journal of Information and Education Technology*, 6(9): 705-708.
- Barker, V. (1999). Students' Reasoning about Chemical Reactions: What Changes Occur During a Context-based Post-16 Chemistry Course?. *International Journal of Science Education*, 21: 1171-1200.
- Bawden, D. (2001). Information and Digital Literacies: A Review of Concepts. *J.Doc*, 57(2): 218-259.

- Borg, W. R., & Gall, M. D. (1983). *Educational Research: An Introduction, Fifth Edition*. New York: Longman.
- Bruehl, M., Pan, D., & Ferrer-Vinent, I. J. (2015). Demystifying the Chemistry Literature: Building Information Literacy in First-Year Chemistry Students through Student-Centered Learning and Experiments Design. *Journal of Chemical Education*.
- Bundy, A. (2004). *Australian and New Zealand Information Literacy Framework Principles, Standards, and Practice*. Adelaide: Australian and New Zealand Institute Information Literacy.
- Candan, A., Türkmen, L., & Çardak, O. (2006). The Effects of Concept Mapping on Primary School Students' Understanding of The Concepts of Force and Motion. *Journal of Turkish Science Education*, 3(1).
- Chingos, M. M. & Whitehurst, G. J. (2012). *Choosing Blindly Instructional Material, Teacher Effectiveness and The Common Core*. Brookings: Brown Center Education Policy.
- Chu, S. K. W., Tse, S. K., & Chow, K. (2011). Using Collaborative Teaching and Inquiry Project-Based Learning to Help Primary School Students Develop Information Literacy and Information Skills. *Library and Information Science Research*, 33: 132-143.
- Çimer, A., Timuçin, M., & Kokoç, M. (2013). Critical Thinking Level of Biology Classroom Survey: Ctlobics. *The Online Journal of New Horizon in Education*, 3(1): 15-24
- Clifford, G.J. (1978). Words for Schools: The Applications in Education of Vocabulary Researches od Edward L. Thorndike. In P. Suppes (Ed.). *Impact of Research on Education: Some case studies*. 107-198.
- Daryanto. (2014). *Pembelajaran Tematik Terpadu*. Yogyakarta: Penerbit Gaya Media.
- Daryanto & Dwicahyono, A. (2014). *Pengembangan Perangkat Pembelajaran*. Yogyakarta: Penerbit Gaya Media.

- Demirbag, M., & Gunel, M. (2014). Integrating Argument-Based Science Inquiry with Modal Representations: Impact on Science Achievement, Argumentation, and Writing Skills. *Educational Sciences: Theory & Practice*, 14(1): 386-371.
- Departemen Pendidikan Nasional. (2010). *Juknis Pengembangan Bahan Ajar SMA*. Jakarta: Direktorat Pembinaan SMA.
- Dewantari dan Hariyatmi. (2015). *Identifikasi Kesulitan Guru IPA dalam Melaksanakan Pembelajaran Kurikulum 2013 di SMP Negeri 1 Wonogiri Tahun Pelajaran 2014/2015*. [Online]. Diakses dari: <http://eprints.ums.ac.id/34337/1/NASKAH%20PUBLIKASI.pdf>.
- Duran, M., & Dökme, İ. (2016). The Effect of The Inquiry-Based Learning Approach on Student's Critical-Thinking Skills. *Eurasia Journal of Mathematics, Science, and Technology Education*, 12(12): 2887-2908.
- Ennis, R. H. (1985). A Logical Basic for Measuring Critical Thinking Skills. *Educational Leadership*, 43(2): 44-48.
- Ennis, R. H. (1993). Critical Thinking Assessment. *Theory into Practice*, 32(3): 179-186.
- Fogarty, R. (1991). *How to Integrate The Curricula*. USA: Skylight Publishing.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to Design and Evaluate Research in Education 8<sup>th</sup> ed.* New York: McGraw-Hill Companies.
- Frijters, S., ten Dam, G., & Rijlaarsdam, G. (2008). Effects of Dialogic Learning on Value-loaded Critical Thinking. *Learning and Instruction*, 18(1): 66-82.
- Fuad, N. M., Zubaidah, S., Mahanal, S., & Suarsini, E. (2017). Improving Junior High Schools' Critical Thinking Skills Based on Test Three Different Models of Learning. *International Journal of Instruction*, 10(1): 101-116.
- Fung, D. (2014). Promoting Critical Thinking through Effective Group Work: A Teaching Intervention fo Hong Kong Primary School Students. *International Journal of Educational Research*, 66: 45-62.

- Graesser, A.C. & Olde, B.A. (2003). How Does One Know Whether a Person Understands a Device? The Quality of the Questions the Person Asks When the Device Breaks Down. *Journal of Educational Psychology*, 95(3): 524-536.
- Griffin, P., McGaw, B., & Care, E. (2012). *Assessment and Teaching of 21st Century Skills*. Dordrecht: Springer.
- Hake, R. R. (1999). *Analyzing Change/Gain Scores*. USA: Indiana University.
- Hake, R. R. (2002). “Relationship of Individual Student Normalized Learning Gains in Mechanics with Gender, High-School Physics, and Pretest Scores on Mathematics and Spatial Visualization”. *Physics Education Research Conference*; Boise, Idaho.
- Harrell, P. E. (2010). Teaching an Integrated Science Curriculum: Linking Teacher Knowledge and Teaching Assignment. *Issues in Teacher Education*, 19(1): 145-165.
- Hepworth, M. (2000). Approaches to Providing Information Literacy Training in Higher Education: Challenges for Librarians. *New Review of Academic Librarianship*, 6(1): 21-34.
- Inch, E. S., Warnick, B. H., & Endres, D. (2006). *Critical Thinking and Communication: The Use of Reason in Argument 5<sup>th</sup> ed.* Boston: Pearson Education Inc.
- Ikayanti, R., Suratno, S., & Wahyuni, D. (2017). Critical Thinking Skill in Science on Junior High School by Problem Based Learning Models. *Pancaran Pendidikan*, 6(3): 162-197.
- Kahveci, A. (2011). Quantitative Analysis of Science and Chemistry Textbooks for Indicator of Reform: A Complementary Perspective. *International Journal of Science Education*.
- Kementerian Pendidikan dan Kebudayaan. (2016). *Peringkat dan Capaian PISA Indonesia Mengalami Peningkatan*. [Online]. Diakses dari: <https://www.kemdikbud.go.id/main/blog/2016/12/peringkat-dan-capaian-pisa-indonesia-mengalami-peningkatan>

- Klucevsek, K. M. & Brungard, A. B. (2016). Information Literacy in Science Writing: How Students Find, Identify, and Use Scientific Literature. *International Journal of Science Education*, 38(17): 2573-2595.
- Kobzeva, N. (2015). Scrabble as a Tool for Engineering Students' Critical Thinking Skills Development. *Procedia – Social and Behavioral Sciences*, 182: 369-374.
- Kong, S. C. (2014). Developing Information Literacy and Critical Thinking Skills through Domain Knowledge Learning in Digital Classrooms: An Experience of Practicing Flipped Classroom Strategy. *Computers & Education*.
- Kozma, R. (2003). The Material Features of Multiple Representations and Their Cognitive and Social Affordances for Science Understanding. *Learning and Instruction*, 13: 205-226.
- Lang, M. & Olson, J. (2000). Integrated Science Teaching as a Challenge for Teachers to Develop New Conceptual Structures. *Research in Science Education*, 30(2): 213-224.
- Lau, J. (2006). Guidelines on Information Literacy for Lifelong Learning. IFLA, Veracruz.
- Mahanal, S., Zubaidah, S., Bahri, A., & Syahadatud, D. M. (2016). Improving Students' Critical Thinking Skills Through Remap NHT in Biology Classroom. *Asia-Pacific Forum on Science Learning and Teaching*, 17(2).
- Majid, A. (2007). *Perencanaan Pembelajaran*. Bandung: Remaja Rosdakarya.
- Martin, J. (2007). The 17 Great Challenges of The Twenty-First Century. *The Futurist*, 41(1): 20.
- Matlin, M. W. (2005). *Cognition*. New York: J. Wiley and Sons.
- Mayer, R. E. (2008). Elements of A Science of E-learning. *Journal of Educational Computing Research*, 29(3): 297-313.
- McDonald, S. D. (2017). Enhanced Critical Thinking Skills Through Problem-Solving Games in Secondary Schools. *Interdisciplinary Journal of e-Skills and Lifelong Learning*, 13: 79-76.

- Mery, Y., Newby, J., & Peng, K. (2011). Assessing The Reliability and Validity of Locally Developed Information Literacy Test Items. *Reference Services Review*, 39(1): 98-122.
- Muhafid, E.A., Dewi, N. R., & Widiyatmoko, A. (2013). Pengembangan Modul IPA Terpadu Berpendekatan Keterampilan Proses pada Tema Bunyi di SMP Kelas VIII. *Unnes Science Educational Journal*, 2(1): 140-148.
- Nixon, R.S., Smith, L. K., & Wimmer, J. J. (2015). Teaching Multiple Modes of Representation in Middle-School Science Classrooms: Impact on Student Learning and Multimodal Use. *School Science and Mathematics*, 115(4): 186-199.
- Novak & Gowin. (1984). *Learning How to Learn*. Cambridge: Cambridge University Press.
- Nussifera, L. (2017). *Pengembangan Buku Ajar Menggunakan Multimodus Representasi untuk Pembelajaran Fisika Berorientasi Kemampuan Kognitif dan Pembekalan Keterampilan Berpikir Kritis Siswa SMA*. (Tesis). Sekolah Pascasarjana, Universitas Pendidikan Indonesia, Bandung.
- Nwike, M.C. & Catherine, O. (2013). Effect of Use of Instructional Materials on Students Cognitive Achievement in Agricultural Science. *Journal of Educational and Social Research*, 3(5): 103-107.
- OECD. (2016). *PISA 2015: PISA Results in Focus*. Paris: OECD
- Oguz, A. & Saricam, H. (2016). The Relationship Between Critical Thinking Disposition and Locus Control in Pre-Service Teachers. *Journal of Education and Training Studies*, 4(2): 283-292.
- Olayinka, A. B. (2016). Effects of Instructional Materials on Secondary School Students' Academic Achievement in Social Studies in Ekiti State, Nigeria. *World Journal of Education*, 6(1): 32-39.
- Omosewo, E. O. & Anasanya, S.A (2011). Effect of Improvised and Standard Instructional Materials on Secondary School Teachers' Academic Performance in Physics in Ilorin, Nigeria. *Singapore Journal of Scientific Research*, 1(1): 68-76.

- Otor, E. E., Ogbeba, J., & Ityo, C. N. (2015). Influence of Improvised Teaching Instructional Materials on Chemistry Students' Performance in Senior Secondary School in Vandeikya Local Government Area of Benue State, Nigeria. *International Research in Education*, 3(1): 111-118.
- P21. (2011). *Framework for 21st Century Learning*. Washington DC: Partnership for 21st Century Skills.
- Peraturan Menteri Pendidikan dan Kebudayaan Nomor 81A Tahun 2013 tentang Implementasi Kurikulum.
- Peraturan Menteri Pendidikan dan Kebudayaan Nomor 20 Tahun 2016 tentang Standar Kompetensi Lulusan Pendidikan Dasar dan Menengah.
- Prastowo, A. (2011). *Panduan Kreatif Membuat Bahan Ajar Inovatif*. Yogyakarta: DIVA Press.
- Presseisen, B. Z. (1984). Thinking Skills: Meaning, Models, and Materials. Washington DC: *National Inst. Of Education*.
- Rahmawati, I., Hidayat, A., & Rahayu, Sri. (2016). "Analisis Keterampilan Berpikir Kritis Siswa SMP Pada Materi Gaya dan Penerapannya". *Prosiding Seminar Nasional Pend. IPA Pascasarjana UM*. Malang: Pascasarjana UM.
- Ranaweera, P. (2008). Importance of Information Literacy Skills for an Information Literate Society. in NACLIS 2008, Colombo, Sri Lanka. 96(1): 21-27
- Rankin, E. F. & Culhane, J. W. (1969). Comparable Cloze and Multiple-choice Comprehension Test Scores. *Journal of Reading*, 13(3): 193-198.
- Riduwan. (2012). *Skala Pengukuran Variabel-variabel Penelitian*. Bandung: Alfabeta.
- Rizqi, A. M., Parmin, P., & Nurhayati, S. (2013). Pengembangan Modul IPA Terpadu Berkarakter Tema Pemanasan Global untuk Siswa SMP/ MTs. *Unnes Science Education Journal*, 2(1): 203-208.
- Rosana, D. (2014). Pendekatan Saintifik dalam Pembelajaran IPA secara Terpadu. *Seminar Nasional Universitas Negeri Semarang*.

- Roseman, J.E., Stern, L., & Koppal, M. (2010). A Method for Analyzing the Coherence of High School Biology Textbooks. *Journal of Research in Science Teaching*, 47(1): 47-70.
- Ruggiero, V. R. (1996). *Becoming a critical thinker*. (Edisi kedua). Boston: Houghton Mifflin Co.
- Safrizal. (2016). *Efektivitas Bahan Ajar IPA Terpadu Tipe Connected pada Tema Tekanan untuk Meningkatkan Kemampuan Literasi Sains Siswa*. (Tesis). Sekolah Pascasarjana, Universitas Pendidikan Indonesia, Bandung.
- Sani, R. A. (2014). *Pembelajaran Saintifik untuk Implementasi Kurikulum 2013*. Bumi Aksara: Jakarta.
- Sari, F., Jufri, A. W., & Sridana. (2017). The Effectiveness of Science Instructional Material Based on SAVI Approach to Enhance Creativity of Junior High School Students SMPN 3 Mataram. *J.Pijar MIPA*, 12(2): 107-111.
- Schafersman, S. D. (1991). *An Introduction to Critical Thinking*.
- Sinaga, P. & Suhandi, A. (2014). Improving The Ability of Writing Teaching Materials and Self-regulation of Pre-service Physics Teachers Through Representational Approach. *International Journal of Science: Basics and Applied Research*, 15(1): 80-94.
- Sinaga, P. (2016). Penilaian Kualitas *Instructional Material*: Buku Ajar dan *Workbook/Worksheet*. Departemen Pendidikan Fisika FPMIPA UPI.
- Sinaga, P., Kaniawati, I., & Setiawan, A. (2017). Improving Secondary School Students' Scientific Literacy Ability Through The Design of Better Science Textbooks. *Journal of Turkish Science Education*, 14(4): 92-107.
- Sinprakob, S. & Songkram, N. (2015). A Proposed Model of Problem-Based Learning on Social Media in Cooperation with Searching Technique to Enhance Critical Thinking of Undergraduate Students. *Procedia – Science and Behavioral Sciences*, 174: 2027-2030.

- Society of Chief Librarians (SCL) (Wales). (2011). The Importance of Reading. Diakses dari <http://goscl.com/wp-content/uploads/ImportanceOfReadingSCLWales.pdf>.
- Sugiyono. (2014). *Metode Penelitian Pendidikan*. Bandung: CV Alfabeta.
- Sundin, O. (2008). Negotiations on Information-Seeking Expertise. *J.Doc*, 64(1): 24-44.
- Syukrimansyah, S., Hasan, M., & Safitri, R. (2017). Pengembangan Modul Praktikum Berbasis Pendekatan PACE (Planing, Activities, Class discussion, Exercise) untuk Meningkatkan Motivasi Belajar siswa pada Materi Listrik Dinamis kelas IX di SMP Negeri 10 Takengon Kabupaten Aceh Tengah. *Jurnal Penelitian Pendidikan Sains*, 6(2): 1317-1323.
- Thaiposri, P. & Wannapiroon, P. (2015). Enhancing Students' Critical Thinking Through Teaching and Learning by Inquiry-Based Learning Activities Using Social Network and Cloud Computing. *Procedia – Social and Behavioral Sciences*, 174: 2137-2144.
- The Dearing Report (1997). *Higher Education in the Learning Society*. HMSO: London.
- Thompson, C. (2011). Critical Thinking Across the Curriculum: Process over Output. *International Journal of Humanities and Social Science*, 1(9): 1-7.
- Toharudin, U., Hendrawati, S., & Rustaman, A. (2011). *Membangun Literasi Sains Peserta Didik*. Bandung: Humaniora.
- Tseng, S. S. (2015). Concept-Mapping Tools and the Development of Students' Critical-Thinking Skills. *Educational Technology*, 55(5): 39-43.
- Van Loon, J.E. & Lai, H.L. (2014). Information Literacy Skills as a Critical Thinking Framework in the Undergraduate Engineering Curriculum. *Library Scholarly Publications*. Paper 80.
- Wagner, T. (2010). *Overcoming The Global Achievement Gap*. [Online]. Diakses dari: <https://www.cosa.k12.or.us/downloads/profdev/Seaside%202009/Tony%20Wagner.pdf>

- Wahyu, E., Fathurohman, A., & Sardianto. (2016). Analisis Buku Siswa Mata Pelajaran IPA Kelas VIII SMP/MTs Berdasarkan Kategori Literasi Sains. *Jurnal Inovasi dan Pembelajaran Fisika*.
- Wallace, E. D. & Jefferson, R. N. (2015). Developing Critical Thinking Skills: Assessing The Effectiveness of Workbook Exercises. *Journal of College Teaching and Learning – Second Quarter*, 12(2):101-108.
- Wannapiroon, P. (2014). Development of Research-Based Blended Learning Model to Enhance Graduate Students' Research Competency and Critical Thinking Skills. *Procedia – Social and Behavioral Sciences*, 136: 486-490.
- Wati, F. (2017). *Pengembangan Bahan Ajar IPA Terpadu untuk Meningkatkan Literasi Sains Siswa SMP*. (Tesis). Sekolah Pascasarjana, Universitas Pendidikan Indonesia, Bandung.
- Watson, G. & Glaser, E. (2002). *Critical Thinking Appraisal – UK Edition*. London: Pearson Assessment.
- Widodo, C. & Jasmadi. (2008). *Buku Panduan Menyusun Bahan Ajar Berbasis Kompetensi*. Jakarta: Elex Media Kompetindo.
- Yuliati, L. (2013). Efektivitas Bahan Ajar IPA Terpadu Terhadap Kemampuan Berpikir Tingkat Tinggi Siswa SMP. *Jurnal Pendidikan Fisika Indonesia*, 9: 53-57.
- Zubaidah, S. (2016). Keterampilan Abad ke-21: Keterampilan yang Diajarkan Melalui Pembelajaran. *Seminar Nasional Pendidikan Prodi Pendidikan Biologi*. Sintang.