

## DAFTAR PUSTAKA

- Abidin, M.J.Z. & Riswanto. (2012). *Collaborative strategic reading (CSR) within cognitive and metacognitiv strategis perspectives*. European Journal of Business and Management, vol. 4 no. 1.
- Ainsworth, S. (1999). *The functions of multiple representations*. Computers and Education,33, 131-152.
- Alvermann, Phelps, & Ridgeway. (2007). *Content area reading and literacy; succeeding in today's diverse classrooms*. Boston, MA: pearson Education, Inc.
- Alyousef, H.S. (2005). *Teaching reading comprehension to ESL/EFL learners*. The Reading Matrix, vol 5 No.2.
- Anderson, C.W. (1999). *In scription and science learning*. Journal of Research in Science Teaching.
- Anderson, L. & Krathwol, D. (2010). *Kerangka landasan untuk pembelajaran, pengajaran, dan asesmen revisi taksonomi pendidikan bloom*. Yogyakarta : Pustaka Pelajar
- Anwar, S. (2015). *Pengolahan bahan ajar (4 step teaching material development..* Bandung: SPS UPI - Tidak Diterbitkan.
- Arikunto, S. (1997). *Dasar-dasar evaluasi pendidikan. cet. ketiga belas*. Jakarta: Bumi Aksara.
- Arikunto, S. (2010). *Prosedur penelitian, suatu pendekatan praktik. Cet. Kesebelas*. Jakarta: Rineka Cipta
- Armstrong, T. (2013). *Kecerdasan multipel di dalam kelas*. Jakarta: PT. Indeks.
- Asyhari, A. dan Risa H. (2015). *Profil peningkatan kemampuan literasi sains siswa melalui pembelajaran saintifik*. Jurnal Ilmiah Pendidikan Fisika: Al Biruni 04 (2).
- Aunurrahman. (2014). *Belajar dan pembelajaran*. Bandung: Penerbit Alfabeta.
- Baker, D., et al. (2009). *The communication in science inquiry project (cisip): a project to enhance scientific literacy through the creation of science classroom discourse communities*. IJESSE, vol. 4, No. 3.
- Boersma, K., et al., (2011). *The feasibility of systems thinking in biology education*.

- Journal Of Biological Education, 45 (4), 190-197.
- Borg & Gall (1983). *Educational research: an introduction*. London: Longman
- BSNP (2010). *Paradigma pendidikan nasional abad xxi, versi 1,0*.
- Burton, R.S. (2014). *Readability, logodiversity, and the effectiveness of college science textbooks*. Department of Biology, Alverno College, Milwaukee.
- Campbell, N. A., dkk. (2011). *Biology, 9th edition*. San Francisco : Pearson Education, Inc.
- Cansiz, A., & Turker, N. (2011). *Scientific literacy investigation in science curricula: the case of turkey*. Western Anatolia Journal of Educational Science, 359-366.
- Chan, C. (2009). *Assessment: concept map, assessment resources @HKU*, University of Hong Kong [<http://ar.cetl.hku.hk>].
- Chingos, M. (2012). *Choosing blindly instructional material, teacher effectiveness and the common core*. Brown Center Education Policy at Brookings
- Coe, R. (2000). *What is an effect size?. A Guide for User*. Draft version.
- Cohen, J. (1969). *Statistical power analysis for the behavioral sciences*. NY: Academic Press in.
- Constantinide, K. et al. (2014). *Development of an instrument to measure children's systems thinking*. [Online]. [https://www.esera.org/media/eBook\\_2013/strand%2011/Kyriake\\_Constantinide\\_13Mar2014.pdf](https://www.esera.org/media/eBook_2013/strand%2011/Kyriake_Constantinide_13Mar2014.pdf)
- Dahar, R.W. (1996). *Teori-teori belajar, cet. kedua*. Jakarta: penerbit Erlangga.
- Depag RI. (2005). *Mushaf Al-Quran Terjemah, Al Huda*. Depok: Gema Insani Press.
- Depdiknas. (2008). *Panduan pengembangan bahan ajar*. Jakarta: Direktorat Pembinaan Sekolah Menengah Atas, Direktorat Jenderal Manajemen Pendidikan Dasar dan Menengah.
- Depdiknas. (2013). *Panduan penilaian analisis buku*. Jakarta: Depdikbud
- DFID. (2011). *Guidance note; learning and teaching materials, policy and practice for provision*. HDRC.
- Dunst, C.J., et al. (2004). *Guidelines for calculating effect sizes for practicebased research syntheses*. Centerscope. Vol. 3 No. 1

- Ekohariadi. (2009). *Faktor-faktor yang mempengaruhi literasi sains siswa indonesia berusia 15 tahun*. Jurnal pendidikan dasar, vol. 10. NO. 1
- Fleisher, P. (2011). *Weatherwise, vapor, rain, and snow*. Mineapolis, USA: Lerner Publications Company
- Fogarty, R. (1991). *10 ways to integrate the curriculum*. In educational Leadership.
- Fogarty, R. (1991). *The mindfull school, how to integrate the curricula*. Illionis: IRI/Skylight Publishing Inc.
- Gillis V.G. & McDougall, G. (2007). *Reading to learn science as an active process*. Wilson Education Abstract.
- Glencoe Science, (2008). *Science level green, national geographic*. Ohio; The McGraw-Hill Companies, Inc.
- Glencoe, (2002). *Chemistry; concept and application*. Ohio; The McGraw-Hill Companies, Inc.
- Glynn, S.M. & Muth, K.D. (1994). *Reading and writing to learn science: achieving scientific literacy*. Journal of Research in Science Teaching.
- Hake, R. (1999). *Analyzing change/gain scores*[Online]. Tersedia: <http://lists.asu.edu/cgi-bin/wa?A2=ind9903&L=aera-d&P=R6855>
- Hale, S. (2003). *Concept mapping handout: Handout from Georgia parimeter college*. <http://facstaff.gpc.edu/~shale /composition / handout /concept.html>
- Hayes, J. & Flower,L. (1980). *Identifying the organization of writing processes*. In: Gregg, L. and Steinberg, E. (Eds.). *Cognitive Processes in Writing*, 3-30. Hillsdale, NJ: Lawrence Erlbaum
- Hodson, D. (2008). *Towards scientific literacy; a teachers' guide to the history, philosophy and sociology of science*. Rotterdam/Taipei: Sense Publisher.
- Holbrook, J. & Rannikmae, M. (2009). *Special issue on scientific literacy; the meaning of scientific literacy*. IJESE; vol. 4 No. 3 ISSN 1306-3065.
- Hoppers, Wim. (2004). *Pengembangan orientasi pendidikan dasar*. Paris: Unesco
- Kemendikbud. (2013). *Pedoman kegiatan pendampingan implementasi kurikulum 2013 bagi pengawas sekolah, kepala sekolah dan guru inti*. Jakarta: Pusbang Tendik.
- Klinger, J.K., et al. (2004). *Collaborative strategic reading: "Real-world" lessons from classroom teachers*. Remedial and Special Education, 25(5), 291-302.

Wisconsin: Department of Public Instruction

- Lawshe, C. (1975). *A quantitative approach to content validity*. *Personnel Psychology*, 567.
- Maturradiyah, N. (2015). *Analisis buku ajar fisika sma kelas XII di kabupaten pati berdasarkan muatan literasi sains*. UPEJ: UNES Physics Education program.
- Miller, J.D. (1983). *Scientific literacy: aconceptual and empirical review*. *Journal of the American Academy or Arts and Science*.
- Murray, R. (2002). *How to write a thesis*. Maidenhead: Open University Press.
- NAE and NRC (National Academy of Engineering and National Research Council). (2002). *Technically speaking: why all americans need to know more about technology*. Washington, D.C.: National Academy Press. 373-376).
- NGSS (2013). *States next generation science standards: for states, by states. volume 1: the standards-arranged by disciplinary core ideas and by topics*. Washington, D.C.: National Academy Press.
- Novak, J.D., & Gowin, D.B. (1984). *Learning how to learn*. New York: Cambridge University Press.
- NRC. (1991). *Opportunities in the hydrologic sciences*. Washington, DC: National Academy Press.
- Nussifera, L. dkk. (2017). The use of multimodal representation in the physics learning material development to promote student's cognitive and critical thinking competences. *Impact Journal*.
- Nwike, M C, (2013). *Effects of use of instructional materials on students cognitive achievement in agricultural science*. *Journal of Educational and Social Research*, Vol. 3 (5) August 2013
- OECD. (2009). *Top the class; high performers in science in pisa 2006*.
- OECD. (2010). *PISA 2009 result: learning trends, changes in student performance since 2000 (volume v)*.
- OECD. (2010). *PISA 2009 result: over coming social background, equity in learning opportunities and outcomes (volume v)*.
- OECD. (2013). *PISA 2015 draft science framework*.
- OECD. (2014). *PISA 2012 result in focus, What 15-year-olds know*

*and what they can do with what they know.*

- OECD. (2016a). *PISA 2015, result in focus*.
- OECD. (2016b). *PISA 2015, result in focus: country note, indonesia*.
- OECD. (2016c). *PISA 2015 assessment and analytical framework: Science, Reading, Mathematic and Financial Literacy*, PISA, OECD Publishing, Paris.
- Permatasari, O. (2014). *Developing science learning materials for junior high school based way of investigating to improve scientific literacy*.
- Permen LH NO. 12 Tahun 2009 tentang Pemanfaatan air Hujan
- Permendikbud (2016). *Lampiran Peraturan menteri pendidikan dan kebudayaan No. 24, tentang KI dan KD Pelajaran pada kurikulum 2013 pada Pendidikan Dasar dan Menengah*
- Plate, R. & Monroe, M. (2014). *A astructure for assessing systems thinking*. The Creative Learning Exchange. 23 (1). hlm. 1-12.
- Raved, L. & Yarden, A. (2014). *Developing seventh grade student's systems thinking skills in the context of the human circulatory system*. Original Research Article, 2 (260), hlm. 1-11.
- Rizqiana et al. (2015). *Pengaruh pembelajaran fisika model problem based learning (pbl) terhadap kemampuan literasi sains siswa ditinjau dari kemampuan awal*. Prosiding. Pertemuan Ilmiah XXIX HFI Jateng & DIY, Yogyakarta 25 April 2015 ISSN : 0853-0823
- Rosengrant, D., et al. (2005) edited by Heron. P, McCullough. L and Marx. J, (2005). *Physics education research conference proceedings, salt lake city, ut, 49-52*.
- Savage, A. & Mayer, P. (2005). *Effective academic writing 2: the short essay*. NewYork: Oxford University Press
- SCCAO-STAO. (2005). *Literacy through science and technology (k-8) and science (9-12)*. Ontario.
- Sinaga, P. (2014a). *Pengembangan program perkuliahan fisika sekolah iii untuk meningkatkan kompetensi menulis materi ajar calon guru menggunakan multi modus representasi*. (Disertasi). Sekolah Pascasarjana, Universitas Pendidikan Indonesia.
- Sinaga, P., et al. (2014b). *Improving the ability of writing teaching materias and self-regulation of pre-service physics teachers through representational*

*approach*. International Journal of Science: Basics and Applied Research

- Sinaga, P. (2015). *Model proses menulis materi ajar (instructional materials) sains*. (Jurnal Ilmiah). Sekolah Pascasarjana, Universitas Pendidikan Indonesia.
- Steitner, C.M., et al. (2007). *Concept mapping as a means to build e-learning*. in *buzetto-more, n.a (ed), advanced principles of effective e-learning (59-111)*. Santa Rosa: California.Information Science Press.
- Sternberg, R. J. (1988). *The psychologist's companion: A guide to scientific writing for students and researchers*. Leichester: Cambridge University Press.
- Sudjana, (2002). *Metoda statistika*. Bandung: Tarsito
- Sudjana, N. (2010). *Penilaian hasil belajar mengajar, cet. ketujuh*. Bandung: Remaja Rosda Karya.
- Sugiyono (2016). *Metode penelitian dan pengembangan, research and development; untuk bidang pendidikan, manajemen, sosial, teknik. cet. kedua*. Bandung: Alfabeta.
- Sugiyono. (2014). *Metode penelitian pendidikan (pendekatan kuantitatif, kualitatif, dan R&D)*. Bandung: Alfabeta.
- Tawil, M. & Liliyasi. (2014). *Keterampilan-keterampilan sains dan implementasinya dalam pembelajaran IPA*. Makassar: Badan Penerbit UNM.
- Tjasyono, B. (2003). *Geosain*. Bandung: Penerbit ITB
- Tjasyono, B. (2004). *Klimatologi*. Bandung: Penerbit ITB
- Tjasyono, B. (2006). *Meteorologi indonesia 1; karakteristik dan sirkulasi atmosfer*. Jakarta: BMG
- Tjasyono, B. (2006). *Meteorologi Indonesia 2; Awan dan Hujan Monsun*. Jakarta: BMG
- Tjasyono, B. (2014). *Keajaiban planet bumi dalam perspektif sains dan islam*. Bandung: Remaja Rosdakarya
- Tjasyono, B. (2016). *Ilmu kebumihan dan antariksa, cet. Ke-6*. Bandung: Remaja Rosdakarya
- Toharudin, U. (2011). *Membangun literasi sains peserta didik*. Bandung:

Humaniora.

Trilling, B. (2009). *21st century skills, learning for life in our times*. San Francisco, Jossey – Bass.

Undang-undang Republik Indonesia No. 20 tahun 2003. Sitem Pendidikan Nasional

US-EPA, Clean Air Markets Division (2008). *Learning about acid rain, a teacher's guide for grad 6 through 8*. Washington D.C.: Clean Air Markets Division

Vaughn, S. & Klinger, J.K. (1999). *Teaching reading comprehension through collaborative strategic reading*. Pearson Education.

Verhoeff, R. (2003). *Towards systems thinking in cell biology education*. (Disertasi). Center for Science and Mathematics Education, Department of Biology Education, Universiteit Utrecht, Utrecht, The Netherlands.

Wahyudin, Y. (2017). *The strategy to make themes and develop teaching materials of integrated science in junior high school*. Preceeding UGM-UII, The 3 International Indonesian Forum for Asian Studies.

Zakiya, H., dkk. (2015). *Review bahan ajar fisika sma berdasarkan cakupan literasi sains dan penggunaan multirepresentasi*. Prosiding SiNaFI.

Zakiya, H. (2016). *Pengembangan buku ajar menggunakan multimodus representasi untuk pembelajaran Fisika yang berorientasi pada pembekalan kemampuan literasi sains*. (tesis). Sekolah Pascasarjana, Universitas Pendidikan Indonesia, Bandung