DAFTAR PUSTAKA

Adolphus., *et al.* (2012). Improving Scientific Literacy among Secondary School Students through Integration of Information and Communication Technology. *ARPN Journal of Science and Technology, 2*(5), hlm. 444-448.

Ainswoth, S. (1999). The Functions of Multiple Representations. *Computer and Education*, 33, hlm. 131-152.

Akgul, E. M. (2004). Teaching Scientific Literacy Through A Science Technology And Society Course: Prospective Elementary Science Teachers' Case. *The Turkish Online Journal of Educational Technology*, *3*(8).

Akker, V. D. (1999). *Principles and Method of Development Research*. London. Dlm. Van Den Akker, *et al.* (Eds) *Design Approaches and Tools in Educational and Training*. Dordrecht: Kluwer Academic Publisher.

Ali, M. (1993). *Strategi Penelitian Pendidikan.* Bandung: Angkasa.

Al-Rsa'i, M. S. (2013). Promoting Scientific Literacy by Using ICT in Science Teaching. *International Education Studies*, *6*(9), hlm. 175-186. DOI:10.5539/ies.v6n9p175.

Anwar, S. (2014). *Pengolahan Bahan Ajar: Bahan Perkuliahan SPs UPI.* Bandung: Tidak Diterbitkan.

Arifin, Z. (2011). *Evaluasi Pembelajaran: Prinsip, Teknik, Prosedur*. Bandung: Remaja Rosdakarya.

Asyhari, A., & Hartati, R. (2015). Profil Peningkatan Kemampuan Literasi Sains Siswa melalui Pembelajaran Saintifik. *Jurnal Ilmiah Pendidikan Fisika "Al Biruni"*, *4*(2).

Bao, L. (2006). Theoretical Comparisons of Average Normalized Gain Calculations. *American Association of Physics Teachers.* 74(10), hlm. 917-922.

Barton, M. L., & Jordan, D. L. (2001). *Teaching Reading in Science A Supplement to Teaching Reading in the Content Areas: If Not Me, Then Who? 2nd Edition.* Colorado: McREL.

Betts, E. A. (1946). *Foundations of Reading Instruction with Emphasis on Differentiated Guidance*. New York, NY: American Book Company.

Borg, W. R., & Gall, M. D. (1979). *Educational Research: An Introduction Third Edition.* New York: Longman Inc.

Cervetti, G. N., *et al.* (2015). Factors That Influence the Difficulty of Science Words. *Journal of Literacy Research*. hlm. 1-33. DOI: 10.1177/1086296X15615363.

Chiapetta, E.L., Sethna, G.H., & Fillman, D.A. (1993). Do Middle School Life Science Textbooks Provide a Balance of Scientific Literacy Themes?. *Journal of Research in Science Teaching, 30*(7), hlm. 787–797.

Chingos, M. M., & Whitehurst, G. J. (2012). *Choosing Blindly Instructional Material, Teacher Effectiveness and The Common Core.* Brookings: Brown Center Education Policy.

Christensen, L. B. (1988). *Experimental methodology* (4th Edition). Boston: Allyn and Bacon Inc.

Clifford, G. J. (1978). Words for Schools: The Applications in Education of the Vocabulary Researches of Edward L. Thorndike. In P. Suppes (Ed.), *Impact of research on education: Some case studies*, hlm. 107-198. Washington DC: National Academy of Education.

Coil, D., *et al.* (2010). Teaching the Process of Science: Faculty Perceptions and an Effective Methodology. CBE Life Sci Educ *9*, hlm. 524–535.

Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (3th Ed). Boston: Pearson.

Dani, D. (2009). Scientific Literacy and Purposes for Teaching Science : A Case Study of Lebanese Private School Teachers. *International Journal of Environmental & Science Education. 4*(3), hlm. 289–299.

Depdiknas.(2008). *Panduan Pengembangan Bahan Ajar.* Jakarta: Depdiknas.

Emory, C. W. (1985). *Business Research Method.* Richard D. Irwin Inc.

Espinosa, J. M. R. (2005). The Importance of Scientific literacy in Our Society. *Proc. JENAM Distant Worlds*, Liege (Belgium), hlm. 28-31.

Fraenkel, *et al.* (2012). *How to Design and Evaluate Research in Education 8th edition*. New York: McGraw-Hill.

Glynn, S. M., & Muth, K. D. (1994). Reading and Writing to Learn Science : Achieving Scientific Literacy. *Journal of research in science teaching, 31*(9),

hlm. 1057–1073.

Hake, R. R. (1998). Interactive-Engangement Versus Traditional Methods: A Six-Thousand Student Survey of Mechanics Test Data for Introductory Physics Courses. *American Journal of Physics. 66(1)*, hlm. 64-74.

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; August 2002.

Haladyna, T. M. (2004). *Developing and Validating Multiple-Choice Test Items Third edition.* New Jersey: Lawrence Erlbaum Associates, Inc.

Hand, B. G., & Ulu, M. C. (2009). Sequencing Embedded Multimodal Representations in a Writing to Learn Approach to the Teaching of Electricity. *Journal of Research in Science Teaching. 46*(3), hlm. 225-247.

Herber, H. (1978). *Teaching Reading in the Content Areas*. (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Hodder Education GCSE Science Literacy and Scientific Enquiry Skills. (t.t). *Section 1: Literacy Skills in Science.*

Holbrook, J., & Rannikmae, M. (2009). The Meaning of Scientific Literacy. *International Journal of Environmental & Science Education, 4*(3), hlm. 275-288.

Hughes, A. (2003). *Testing for Language Teachers*. Cambridge: Cambridge University Press.

Ilhan, N., Yildirim, A., & Yilmaz, S. S. (2016). The Effect of Context-Based Chemical Equilibrium on Grade 11 Students' Learning, Motivation and Constructivist Learning Environment. *International Journal of Environmental & Science Education, 11*(9), hlm. 3117-3137. DOI: 10.12973/ijese.2016.919a.

Kemendiknas. (2010). *Juknis Pengembangan Bahan Ajar SMA*. Jakarta : Direktorat Pembinaan SMA.

Keskin, S. (2006). Comparison of Several Univariate Normality Tests Regarding Type I Error Rate and Power of the Test in Simulation Based Small Samples. *Journal of Applied Science Research, 2*(5), hlm. 296-300.

Lang, M., & Olson, J. (2000). Integrated Science Teaching as a Challenge for Teachers to Develop New Conceptual Structures. *Research in Science Education, 30(2),* hlm. *213-224.* doi: 10.1007/BF02461629.

Laugksch, R. C. (2000). Scientific Literacy: A Conceptual Overview. *Science Education Journal*, John Wiley & Sons, Inc. Sci. Ed 84, hlm. 71-94.

Lestari, K. E., & Yudhanegara, M. R. (2015). *Penelitian Pendidikan Matematika*. Bandung: Refika Aditama.

Liu, X. (2009). Beyond Science Literacy : Science and the Public. *International Journal of Environmental & Science Education, 4*(3), hlm. 301–311.

Matlin, M. W. (2005). *Cognition*. USA: John Wiley & Sons, Inc.

Mayuri, N. S. (2013). *Pengaruh Model Pembelajaran Inquiry Lab terhadap Peningkatan Literasi Sains dan Sikap Ilmiah Siswa SMP pada Materi Gerak pada Tumbuhan.*Skripsi [tidak diterbitkan]. Bandung: FMIPA UPI.

Meinwald, J., & Hildebrand J. G. (eds.). (2010). Science and the Educated American: A Core Component of Liberal Education. Cambridge: American Academy of Arts and Sciences.

Mendes, M., & Pala, A. (2003). Type I error rate and power of three normality tests. *Pakistan Journal of Information and Technology, 2*(2), hlm. 135-139.

Merino, C., & Sanmarti, N. (2008). How Young Children Model Chemical Change. *Chem. Educ. Res. Pract*. 9, hlm. 196–207.

National Research Council. (1996). *National Science Education Standards*. USA: The National Academy Press.

Nieveen, N. (2006). *Educational Design Research in Educational Design Research*. New York: Routledge.

Nurhadi (2002). Pendekatan Kontekstual. Jakarta: Depdiknas.

OECD. (2013). *PISA 2015: Draft Science Framework.* [Online]. Tersedia: http://www.oecd.org/pisa/pisaproducts/Draft%20PISA%202015%20Science%20Framework. [11 Juni 2016]

OECD. (2016). *PISA 2015: PISA Results in Focus.* Paris: OECD

Ozdilek Z., & Ozkan, M. (2009) The Effect of Applying Elements of Instructional Design on Teaching Material for the Subject of Classification of Matter. *The Turkish Online Journal of Educational Technology.* ISSN: 1303-6521 volume 8 issue 1 article 9.

Peraturan Menteri Pendidikan dan Kebudayaan. (2016). Salinan Lampiran Peraturan Menteri Pendidikan dan Kebudayaan Nomor 20 Tahun 2016 tentang Standar Kompetensi Lulusan Pendidikan Dasar dan Menengah.

Permatasari, Obimita Ika., Rusilowati, A., dan Masturi (2014). Developing Science Learning Materials for Junior High School Based on Way of Investigating to Imporve Scientific Literacy. *ICMSE 2014.*

Phopham, W. J., & Sirotnik, K. J. (1973). *Educational Statistic: Use and Interpretation.* New York: Harper & Row Publisher.

Poedjiadi, A. (2005). *Sains Teknologi Masyarakat.* Bandung: Remaja Rosdakarya.

Rankin, E.F., & Culhane, J.W. (1969). Comparable Cloze and Multiple-Choise Comprehension Test Scores. *Journal of Reading, 3*(3), hlm. 93-198.

Razali, N. M., & Wah, Y. B. (2011). Power comparisons of shapiro-wilk, kolmogorov-smirnov, lilliefors and anderson-darling tests. *Journal of Statistical Modeling and Analytics,2*(1), hlm. 21-33.

Rizqiana, N. (2015). Pengaruh Pembelajaran Fisika Model Problem Based Learning (PBL) terhadap Kemampuan Literasi Sains Siswa Ditinjau dari KemampuanAwal. *Prosiding Pertemuan Ilmiah XXIX HFI Jateng & DIY*, ISSN : 0853-0823

Rohayati, T. (2013). *Pengaruh Pembelajaran Interactive Demonstration terhadap Peningkatan Kemampuan Literasi Sains dan Sikap Ilmiah Siswa SMP pada Materi Transportasi pada Tumbuhan.* Skripsi [tidak diterbitkan]. Bandung: FMIPA UPI.

Rusilowati, A. (2014). Analisis Buku Ajar Ipa yang Digunakan di Semarang Berdasarkan Muatan Literasi Sains. *Proceeding Seminar Nasional Konservasi dan Kualitas Pendidikan*. ISBN: 978-602-14696-1-3 [Online]

Diperoleh dari http://lib.unnes.ac.id/23402/1/Ani_Rusilowati.pdf pada [7 Februari 2017]

Sardiman. (2011). *Interaksi dan Motivasi Belajar Mengajar*. Jakarta: Rajawlai Press.

Shwartz, Y., Ben-zvi, R., & Hofstein, A. (2006). The Use of Scientific Literacy Taxonomy For Assessing The Development of Chemical Literacy Among High-School Students. *Chem. Educ. Res. Pract, 7*(4), hlm. 203–225.

Sinaga, P. (2014). Pengembangan Program Perkuliahan Fisika Sekolah III untuk Meningkatkan Kompetensi Menulis Materi Ajar Calon Guru Menggunakan Multi Modus Representasi. *Disertasi tidak diterbitkan.* Universitas Pendidikan Indonesia.

Sinaga, P. (2016). Model Proses Menulis Materi Ajar *(Instructional Materials)* Sains. Departemen Pendidikan Fisika FPMIPA UPI.

Stephen, S., & Abasi, U. (2015). Problem of Improvising Instructional Materials for the Teaching and Learning of Physics in Akwa Ibom State Secondary Schools, Nigeria. *British Journal of Education. 3*(3), hlm. 27-35.

Symeonidis, V., & Schwarz, J. F. (2016). Phenomenon-Based Teaching and Learning through the Pedagogical Lenses of Phenomenology: The Recent Curriculum Reform in Finland. *Forum Oświatowe,* 28(2), hlm. 31–47.

Sugiyono. (2014). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.

Suherman, E., dkk. (2003). *Strategi pembelajaran matematika kontemporer*. Bandung: JICA Fakultas Pendidikan Matematika dan Ilmu Pengetahuan Alam, Universitas Pendidikan Indonesia.

Sumarmo, U., & Hendriana, H. (2014). *Penilaian Pembelajaran Matematika.* Bandung: Refika Aditama.

Taniredja, T., & Mustafida, H. (2012). *Penelitian kuantitatif (sebuah pengantar)*. Bandung: Alfabeta.

Temitayo. (2013). *Fostering Scientific Literacy in the Classroom.The European Conference on Education 2013*.

Tierney, R. J., & Cunningham, J. W. (1980). *Center for the Study of Reading. Research on Teaching Reading Comprehension*. Cambridge: Hbolt Beranek and Newman Inc.

Toharudin, U., dkk. (2011). *Membangun Literasi Sains Peserta Didik.* Bandung: Humaniora.

Trianto. (2010). *Model Pembelajaran Terpadu*. Jakarta: Bumi Aksara.

Vacca, R. T., & Vacca, J. L. (2005). *Content Area Reading: Literacy and learning Across the Curriculum* (8th ed.). Boston: Allyn & Bacon.

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.* ISSN: 2355–7109. [Online] Tersedia: *ejournal.unsri.ac.id/index.php/jipf/article/download/3837/1987*

Wati, F., Sinaga, P., dan Priyandoko, D. (2017). Science Literacy: How Do High School Students Solve PISA Test Items?. *Disampaikan pada International Conference on Mathematics and Science Education pada 24 Mei 2017 di Bandung.*

Wilkinson, J. 1999. A Quantitive Analysis of Physics Textbooks for Scientific Literacy Themes. *Journal of Research in Science Education, 29*(3), hlm. 385-399.

Yusuf, S., dkk. (1993). *Dasar-dasar Pembinaan Kemampuan Proses Belajar Mengajar*. Bandung: Andira.