

DAFTAR PUSTAKA

- Akinbobola, A.O., & Afolabi, F. (2010). Analysis of Science Process Skills in West African Senior Secondary School Certificate Physics Practical Examinations in Nigeria. *Bulgarian Journal of Science and Education Policy*, 4 (1), 32-47.
- Anggraini, D.P., & Sani, A.R. (2015). Analisis Model Pembelajaran Scientific Inquiry dan Kemampuan Berpikir Kreatif terhadap Keterampilan Proses Sains Peserta didik SMA. Jurusan Pendidikan Fisika Program Pascasarjana UNIMED. *Jurnal Pendidikan Fisika*, 4 (2), 47-54.
- Arends, R.I. (2008). *Learning to Teach*. (Helly Prajitno Soetjipto & Sri Mulyantini Soetjipto, Trans). Yogyakarta: Pustaka Pelajar. (Original work published 2007).
- Arends, R.I. (2013). *Learning To Teach Ninth Edition*. New York: The McGraw Hill Companies.
- Arikunto, Suharsimi. (1999). *Prosedur Penelitian Suatu Pendekatan Praktis*. Rineka Cipta. Jakarta.
- Aslan, O. (2015). How Do Turkish Middle School Science Coursebooks Present the Science Process Skills. *International Journal of Environmental & Science Education*, 10 (6), 829-843.
- Bahtiar, Wasis., & Rahayu. (2016). A Problem Based Learning Approach-Based Physics Practice Model To Improve Students' Critical Thinking Skill. *International Conference on Education (IECO)*, 1, 96-108.
- Bensley, D. A., & Spero, R. A. (2014). Improving critical thinking skills and metacognitive monitoring through direct infusion. *Thinking Skills and Creativity*, 12, 55–68.
- Dahar, R. (1991). *Teori-Teori Belajar*. Jakarta : Penerbit Erlangga.
- Daryanto. (2014). *Pendekatan Pembelajaran Saintifik Kurikulum 2013*. Yogyakarta : Gava Media.
- Djamarah, B. S. (2000). *Guru dan Anak Didik dalam Interaksi Edukatif*. Jakarta : PT Rineka Cipta.
- Duran, M., & Dokme. (2016). The Effect Of Problem Based Learning On Student's Critical-Thinking Skills. *Eurasia Journal of Mathematics, Science & Technology Education*, 12 (12), 1-22.

- Ennis, R. H. (2011). *Critical Thinking*. Upper Saddle River, NJ: Prentice-Hall.
- Ergul & Remziye. (2011). The Effects Of Problem Based learning Science Teaching On Elementary School Students' Science Process Skills and Science Attitudes. *Bulgarian Journal of Science and Education Plicy (BJSEP)*, 5 (1), 48-67.
- Facione, P. A. (1990). *Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction-Executive Summary: The Delphi Report*. California: The California Academic Press.
- Fisher, A. (2009). *Berpikir Kritis: Sebuah Pengantar*. Jakarta: Erlangga.
- Foster, J.S., & Lemus, J.D. (2016). Developing the Critical Thinking Skillsof Astrobiology Students through Creativeand Scientific Inquiry. *Astrobiology*, 15, 89-99.
- Fuad, N. N., Zubaidah, S., Mahana, S. E., & Suarsini, E. (2017). Improving Juior High Schools Critical Thinking Skills Based on Test Three Different Models Of Learning. *International Journal Of Instruction*, 10 (1), 101-116.
- Harlen, W., & Elstgeest, J. (1994). *A Workshop Approach to Teacher Education*. Unesco: Printed In France.
- Herlina. (2015). Improving Creative Thinking Skillsand Scientific Attitudethrough Problem-Based Learning In Basic Biology Lecture Toward Students Of Biology Education. *Jpbi (Jurnal Pendidikan Biologi Indonesia*. 4(1), 23-28
- Hofstein, A., & Lunetta. V. N. (2003). The Laboratory in Science Education: Foundations for the Twenty-First Century, *Science Education*, 88 (1), 28-54.
- Husamah., Fatmawati, D., & Setyawan, D. (2018). OIDDE Learning Model : Improving Highre Order Thinking Skills Of Biology Teacher Candidates. *Internatiional Journal of Instruction*, 11 (2), 249-264.
- Hussain, A., & Shakoor. (2011). Physics Teaching Methods: Problem Based Learning vs Tradisional Lecture. *International Journal of Humanities and Social Science*, 1 (19), 269-276.
- Hutahaean, R., Harahap, M. B., & Derlina. (2017). The Effect of Problem Based Learning Model Using Macromedia Flash on Student's Concept Understandingand Science Process Skillsin Senior High School: *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 7, 29-37.

- Iswatun (2017). Penerapan model pembelajaran inkuiiri terbimbing untuk meningkatkan KPS dan hasil belajar peserta didik SMP kelas VII, *Jurnal Inovasi Pendidikan IPA*, 3 (2) , 150-160.
- Joyce, B., & Weil, M. (2003). *Models Of Teaching (5th Ed)*. New Delhi: Privite Limited.
- Karsli, F. A. (2014). Developing a Laboratory Activity by Using 5e Learning Model on Student Learning of Factors Affecting the Reaction Rate and Improving Scientific Process Skills. *Social and Behavioral Sciences*. 143, 663-668.
- Lederman, N. G., Ledrman, J.S., & Antink, A. (2013). Nature of science and problem based learning as contexts for the study of science and achievement of scientific literacy. *International Journal of Education in Mathematics, Science and Technology*, 1 (3), 138-147.
- Madhuria. (2012). Promoting higher order thinking skills using problem-based learning. *European Journal of Engineering Education*, 37, 117-123.
- Melialala, et al (2018). *The Effect Of Problem based Learning Model Using On Student's Concept Knowledge, And Science Process Skills In Senior High School*. Jurnal Pendidikan Indonesia. 8 (1), 79-84.
- Monhardt, L. & Monhardt, R. (2006). *Creating A Context for The Learning of Science Process Skills Through Picture Books*. Early Childhood Education Journal, 34 (1), 67-71.
- Muhlisin, A., Susilo, H., Amin, M., & Rohman, F. (2016). Improving critical thinking skills of college students through RMS model for learning basic concepts in science. *Asia-Pacific Forum on Science Learning and Teaching*, 17 (1), 1–24.
- National R C. (1996). *National Science Education Standards*. Washington DC: National Academy Press.
- National Research Council. (2000). *Inquiry and the National Science Education Standards: A guide for teaching and learning*. Washington DC: National Academy Press
- Pluck, G & Johnson, H. (2011). Stimulating Curiosity to Enhance Learning: *Education Science and Psychology*. 2 (19), 24-31
- Putri, M. (2017). Efek Model Scientific Inquiry dan Agumentasi Ilmiah Terhadap Keterampilan Proses Sains Peserta didik SMA. *Jurnal Pendidikan Fisika*, 6 (1), 20-26

- Razali, N.M dan Wah, B.Y. (2011). Power Comparisons of Shapiro-wilk, Klomogorov Smirnov, Lilliefors And Anderson Darling-Tests. *Journal of Statistical Modeling and Analytics aculty of Computer and Mathematical Science*, University Teknologi MARA, 2 (1), 21-33.
- Safarati, N, Harahap, M.,B., Sinulingga, K., (2017), Pengaruh Model Scientific Inquiry Menggunakan Media PhET Terhadap Keterampilan Proses Sains Ditinjau dari Keterampilan Berpikir Kritis *Jurnal Pendidikan Fisika*, 6 (1), 30 – 38
- Sagala, S. (2012). *Konsep dan Makna Pembelajaran*. Bandung: Alfabeta.
- Sahyar., & Hastini, F. (2017). *The Effect of Scientific Inquiry Learning Model Based on Conceptual Change on Physics Cognitive Competence and Science Process Skill (SPS) of Students at Senior High School*. 8 (5), 120-126.
- Sanjaya, W. (2009). *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta: Kencana Prenada Media Group.
- Schneider, R., Krajcik, J., Marx, R., & Soloway, E. (2002). Performances Of Students In Project-Based Science Classrooms On A National Measure Of Science Acchievment. *Journal of Teacher Education*, 60 (1), 20-37.
- Scriven, M., & Paul, R. (2007). *Defining Critical Thinking. The Critical Thinking Community*: Foundation for Critical Thinking. [Online]. Tersedia di: http://www.criticalthinking.org/aboutCT/define_critical_thinking.cfm
- Simsek, P., & Kabapinar, F. (2010). The Effects of Problem Bases Learning on Elementary Students' Conceptual Understanding of Matter, Scientific Process Skills and Science Attitudes. *Procedia Social and Behavioral Sciences Journal*, (online), (2) 1190-1194.
- Soltis, et al. (2015). Process-Oriented Problem Based Learning Strategy Enhances Students' Higher Level Thinking Skills in a Pharmaceutical Sciences Course. *American Journal of Pharmaceutical Education*, 79 (11), 1-8.
- Suardana, I. N., Redhana, I. W., Sudiatmika, I. A. R., & Selamat, I. N. (2018). Students' critical thinking skills in chemistry learning using local culture-based 7e learning cycle model. *International Journal of Instruction*, 11 (2), 399–412.
- Sudjana. (2005). *Metoda Statistika*. Bandung : PT Tarsito.
- Sugiyono. (2017). *Metode Penelitian dan Pengembangan*. Bandung: Alfabeta.

- Sullivan, F. R. (2008). Robotics and Science Literacy: Thinking Skills, Science Process Skills and Systems Understanding. *Journal of Research in Science Teaching*, 45 (3), 373—394
- Suryani, W., Harahap, M., B., Sinulingga, K. (2017). The Effect of Problem Based Learning Model Using Mind Mapping and Critical Thinking Ability toward Student's Science Process Skills in Senior High School, *IOSR Journal of Research & Method in Education (IOSR-JRME)* 7 (5), 21-26.
- Tek, O.E. & Ruthven, K. (2005). Acquisition of Science Process Skills Amongst Form 3 Students in Malaysian Smart and Mainstream Schools. *Journal of Science and Mathematics Education in S.E. Asia*, 28 (1), 103 - 124.
- Turiman, P., Omar, J., Daud, A.M. & Osman, K. (2012). Fostering the 21st century skills through scientific literacy and science process skills. *Procedia - Social and Behavioral Sciences*, 59, 110 – 116.
- Yager, R.E. & Akçay, H. (2010). *The Advantages of an Problem Based Learning Approach for Science Instruction in Middle Grades*. School Science & Mathematics, 110, 5-12.
- Zaini, M. (2016). A Problem Based Learning on the Concept of Ecosystem Toward Learning Outcomes and Critical Thinking Skills of High School Students. *IOSR Journal of Research and Method in Education*, 6, 50-55.