

DAFTAR PUSTAKA

- Allamnakhrah, A. (2013). Learning Critical Thinking in Saudi Arabia: Student Perception of Secondary Pre-Service Teacher Education Programs. *Journal of Education and Learning*. 2 (1), 197-210.
- Andriani, Y. (2015). *Penggunaan Model Pembelajaran Argument-Drivent Inquiry Dalam Mengembangkan Kemampuan Argumentasi Ilmiah Dan Penguasaan Konsep Siswa Pada Pembelajaran IPA Terpadu Di SMP Kelas VII*. Tesis. Universitas Pendidikan Indonesia: Tidak Dipublikasi.
- Arikunto, S. (2010). *Dasar-Dasar Evaluasi Pendidikan*. Bandung: Bumi Aksara
- Bassham, G., Irwin, W., Nardone, H., dan Wallace, J.M. (2011). *Critical Thinking A Studen's Introduction Fourth Edition*. New York: McGraw-Hill inc.
- Bekiroglu, F. O. dan Eskin, H. (2012). Examination of the Relationship Between Engagement In Scientific Argumentation And Conceptual Knowledge. *International Journal of Science and Mathematics Education*, 10 (6), 1415-1443.
- Boucaud, D.W., Nabel, M., dan Eggers, C.H. (2013). Oxford-Style Debates in a Microbiology Course for Majors: A Method for Delivering Content and Engaging Critical Thinking Skills. *Journal of Microbiology & Biology Education*. 14 (1), 2-11.
- Bulgren, J.A., Ellis, J.D., dan Marquis, J.G. (2014). The Use and Effectiveness of an Argumentation and Evaluation Intervention in Science Classes. *Journal of Science Education and Technology*. 23 (1), 82-97.
- Butler, J.A dan Britt, M.A. (2011). Invstigating Instruction for Improving Revision of Argumentative Essay. *Written Communication*, 28 (1), 70-96.
- Chang, R. (2005). *Chemistry 8th Edition International Edition*. New York: McGraw-Hill.
- Chen, D., & Stroup, W. (1993). General system theory: Toward a conceptual framework for science and technology education for all. *Journal of Science Education and Technology*. 2 (3), 447–459.
- Choi, A., Hand, B., dan Meier, L.N. (2014). Grade 5 Students' Online Argumentation about Their In-Class Inquiry Investigation. *Research in Science Education*. 44 (1), 267-287.

- Costa, A.L. (1985). *Developing Minds A Resources and Curriculum Development*. Virginia: Association for Supervision and Curriculum Development.
- Crowell,A dan Kuhn,D. (2014). Development Dialogic Argumentation Skills: A 3-Year Intervention Study. *Journal of Cognition and Development*, 15 (2), 363-381.
- Dahar, R.W. (2006). *Teori-Teori Belajar*. Jakarta: Erlangga.
- Darland, D.C. dan Carmichael, J.S. (2012). Long-Term Retention of Knowledge and Critical Thinking Skills in Developing Biology. *Journal of Microbiology & Biology Education*. 13 (2), 125-132.
- Dawson, M.V dan Venville,G. (2010). Teaching Strategies for Developing Students' Argumentation Skills About Socioscientific Issues in High School Genetics. *Research in Science Education*, 40 (2), 133-148.
- Demircioglu,T dan Ucar,S. (2015). Investigating The Effect of Argument-Driven Inquiry in Laboratory Instruction. *Educational Sciences: Theory & Practice*. 15 (1), 267-283.
- Depdikbud. (2006). *Panduan Penyusunan Kurikulum Tingkat Satuan Pendidikan Jenjang Pendidikan Dasar dan Menengah*. Jakarta: Badan Standar Nasional Pendidikan.
- Depdiknas. (2006). *Panduan Pengembangan Pembelajaran IPA Terpadu SMP/MTs*. Jakarta: Pusat Kurikulum, Balitbang.
- Devlin dan Cochrane. (2006). *Science Links 2*. Australia: Heinemann.
- Dimyati & Mudjiono. (2009).*Belajar dan Pembelajaran*. Jakarta: Rineka Cipta.
- Dori, Y. J., Tal, R., T., dan Tsaushu, M. (2003). Teaching Biotechnology Through Case Studies—Can We Improve Higher Order Thinking Skills of Nonscience majors? *Science Education*. 87 (6), 767–793.
- Dori, Y.J. dan Herscovitz, O. (1999). Question-Possing Capability as an Alternative Evaluation Method: Analysis of Environmental Case Study. *Journal of Research in Science Teaching*. 36 (4), 411-430.
- Driver, R., Newton, P., dan Osborne, J. (1998). Establishing The Norms of Scientific Argumentation in Classroom. *Science Education*. 82 (2), 287-312.

- Edokpayi, J.N. dan Suleiman, M.A. (2011). Students Integrated Science Achievement As Predicator of Later Achievement in Chemistry: A Case Study Among Selected Secondary Schools in Zaria Metropolis. *Scholar Research Library*. 3 (4), 527-535.
- Epstein, R.L. dan Kernberger, C. (2005). *Critical Thinking Third Edition*. New York: Cengage Learning.
- Erduran S., Simon, S., dan Osborne, J. (2004). Tapping into Argumentation: Developments in The Application of Toulmin's Argument Pattern for Studying Science Discourse. *Science Education*. 88 (6), 915-933.
- Eskin, H dan Bekiroglu, F.O. (2013). Argumentation as a Strategy for Conceptual Learning of Dynamic. *Journal of Research in Science Education*. 43 (5), 1939-1956.
- Fisher, A. (2009). *Berpikir Kritis Sebuah Pengantar*. Jakarta; Erlangga
- Fogarty, R. (1991). *The Mindful School How to Integrate The Curricula*. Illionis: Skylight.
- Fraenkel, J. R. dan Wallen, N. E. (2009). *How to Design and Evaluate Research in Education*. New York: McGraw-Hill inc.
- Gasper, B.J. dan Gardner, S.M. (2013). Engaging Students in Authentic Microbiology Research in an Introductory Laboratory Course is Correlated with Gains in Student Understanding of The Nature of Authentic Research and Critical Thinking. *Journal of Microbiology & Biology Education*. 14 (1), 25-34.
- Hake, R. R.(1998). *Interactive Engagement versus Traditional Methods : A sixs Thousand Students Survey of Mechanics Test Data for Introductory Physics Courses*. Departement of Physics Indiana University. Bloomington: Indiana.
- Hamalik, O. (2003). *Proses Belajar Mengajar*. Jakarta: PT Bumi Aksara.
- Harlen, W. (1993). *The Teaching of Science*. Great Britain: David Fulton.
- Hasnunidah, N., Susilo, H., Irawati, M.H., dan Sutomo., H. (2015). Argument-Driven Inquiry with Scaffolding as Development Strategies of Argumentation and Critical Thinking Skill of Students in Lampung, Indonesia. *American Journal of Educational Research*. 3 (9), 1185 – 1192.

- Heftner, M.H., Berthold, K., Renkl, A., Riess, W., Schmid, S., dan Fries, S. (2014). Effects of a Training Intervention to Foster Argumentation Skills While Processing Conflicting Scientific Position. *Instructional Science*, 42 (6), 929-947.
- Herlina, A. (2015). *Pembelajaran IPA Terpadu Tipe Webbed Tema Tekanan Untuk Meningkatkan Keterampilan Berpikir Kritis dan Penggunaan Konsep Siswa SMP*. Tesis. Universitas Pendidikan Indonesia: Tidak Dipublikasi.
- Idowu, O.D. (2011). Developing Nigerian Integrated Science Curriculum. *Journal of Soil Science and Environmental Management*. 2 (8), 134-145.
- Igwebuike, T.B. dan Oriailo, S.O. (2014). Effect of a Constructivist Instructional Strategy on Affective Outcomes by Integrated Science Students. *International Review of Contemporary Learning Research*. 3 (1), 1-10.
- Inch, E.S. dan Warnick, B.H. (2006). *Critical Thinking and Communication The Use of Reason in Argument*. U.S.A: Pearson.
- Indrawati. (2015). *Metode Penelitian Manajemen Dan Bisnis Konvergensi Teknologi Komunikasi dan Informasi*. Bandung: Refika Aditama.
- Johnston, J.S. (2009). *Deweyan Inquiry from Education Theory Practice*. New York: State University of New York Press.
- Johnston, J. (2010). *Factor that Influence Language Development*. [Online]. Diakses dari <http://www.child-encyclopedia.com/sites/default/files/textes-experts/en/622/factors-that-influence-language-development.pdf>.
- Katchevich, D., Hofstein, A., dan Naaman, R.M. (2013). Argumentation in The Chemistry Laboratory: Inquiry and Confirmatory Experiments. *Research in Science Education*. 43 (1), 317-345.
- Khishfe, R. (2013). Explicit Nature of Science and Argumentation Instruction in the Context of Socioscientific Issues: An effect on student learning and transfer. *International Journal of Science Education*. 36 (6), 974-1016.
- Kim, H. dan Song, J. (2005) The Features of Peer Argumentation in Middle School Student's Scientific Inquiry. *Research in Science Education*. 36 (3), 211-233.
- Kurniawan, I.S. (2015). *Implementasi Problem Based Learning Open Ended Dalam Meningkatkan Penguasaan Konsep dan Kemampuan Berpikir*

- Kritis Siswa Pada Materi Sistem Sirkulasi Pada Sekolah Di Perkotaan dan Di Pedesaan.* Tesis. Universitas Pendidikan Indonesia: Tidak Dipublikasi.
- Lenisastri. (2000). *Penggunaan Metode Akumulasi Satuan Panas (Heat Unit) Sebagai Dasar Penelitian Umur Panen Sembilan Varietas Kacang Tanah (Arachis hypogaea L.).* Skripsi. Institut Pertanian Bogor:Tidak Dipublikasikan.
- Lin, S.S. dan Mintzes,J.J. (2010). Learning Argumentation Skills Through Instruction in Socioscientific Issues: The effect of Ability Level. *International Journal of Science and Mathematics Education*, 8 (6), 993-1017.
- Lin, S-S. (2014). Science and Non-Science Undergraduate Students' Critical Thinking and Argumentation Performance in Reading a Science News Report. *International Journal of Science and Mathematics Education*. 12 (5), 1023-1046.
- Lokasari, T.A. (2011). *Pengaruh Pemberian Pupuk Urea dan Dolomit Terhadap Perubahan pH Tanah, Serapan N dan P Serta Pertumbuhan Tanaman Jagung (Zea mays L.) Pada Ultisol.* Skripsi. Universitas Sumatera Utara:Tidak Dipublikasikan.
- Opara, J.A. (2011). Bajah's Model and of The Teaching and Learning of Integrated Science. *African Journal of Basic & Applied Science*. 3 (1), 1-5.
- Osborne, J., Erduran, S., dan Simon, S. (2004). Enhancing The Quality of Argumentation in School Science. *Journal of Research in Science Teaching*. 41 (10), 994-1020.
- Pintrich, P.R., Smith, D.A.F., Garcia, T., dan McKeachie, W.J. (1993). Reliability and Predictive Validity of The Motivated Strategies for Learning Questionnaire (MSLQ). *Educational and Psychological Measurement*. 53 (4), 801-813.
- Rasyid, H dan Mansur. (2007). *Penilaian Hasil Belajar.* Bandung: CV. Wacana Prima.
- Roshayanti, F. (2012). *Pengembangan Model Asesmen Argumentatif untuk Mengukur Keterampilan Argumentasi Mahasiswa pada Konsep Fisiologi Manusia.* Disertasi. Universitas Pendidikan Indonesia: Tidak Dipublikasi.
- Sagala, S. (2010). *Konsep dan Makna Pembelajaran.* Bandung:Alfabeta.

- Sampson, V. dan Clark, D.B. (2011). A Comparison of The Collaborative Scientific Argumentation Practice of Two High and Two Low Performing Group. *Research in Science Education*. 41 (1), 63-97.
- Sampson, V. dan Walker, J.P. (2013). Argument-Driven Inquiry: Using the laboratory to improve undergraduates science writing skills through meaningful science writing, peer-review and revisions. *The Journal of Chemical Education*, 90 (10), 1269-1274.
- Sampson, V., Grooms, J., dan Walker, J.P. (2010). Argument-Driven Inquiry as a Way to Help Students Learn How to Participate in Scientific Argumentation and Craft Written Arguments: An Exploratory Study. *Science Education*. 95 (2), 217-257.
- Sampson, V., Enderle, P., Grooms, J., dan Witte, S. (2013). Writing to Learn by Learning to Write During the School Science Laboratory: Helping Middle and High School Students Develop Argumentative Writing Skills as They Learn Core Ideas. *Science Education*, 97 (5), 643-670.
- Sandoval, W. A., dan Millwood, K. A. (2005). The quality of students' use of evidence in written scientific explanations. *Cognition and Instruction*, 23 (1), 23–55.
- Sarwono, J. (2012) *Metode Riset Skripsi Pendekatan Kuantitatif Menggunakan Prosedur SPSS*. Jakarta: PT. Elex Media Komputindo.
- Sihotang, K., Febiana, R.K., Molan, B., Ujan, A.A., dan Ristyantoro, R. (2012). *Critical Thinking: Membangun Pemikiran Logis*. Jakarta: Pustaka Sinar Harapan.
- Simon, S., Erduran, S., dan Osborne, J. (2006). Learning to Teach Argumentation: Research and Development in The Science Classroom. *International Journal of Science Education*. 28 (2), 235-260.
- Sugiyono. (2007). *Statistika Untuk Penelitian*. Bandung: Alfabeta
- Sugiyono. (2014). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.
- Sukmadinata, N.S. (2011). *Metode Penelitian Pendidikan*. Bandung: Remaja Rosdakarya.
- Tawil, M dan Liliyansari. (2013). *Berpikir Kompleks dan Implementasinya Dalam Pembelajaran IPA*. Makassar: Badan Penerbit UNM.

- Tawil, M dan Liliyansari. (2014). *Keterampilan-Keterampilan Sains dan Implementasinya Dalam Pembelajaran IPA*. Makassar: Badan Penerbit UNM.
- Thompson, C. (2011). Critical Thinking across The Curriculum: Process over Output. *International Journal of Humanities and Social Science*. 1 (9), 1-7.
- Trianto. (2011). *Mendesain Model Pembelajaran Inovatif-Progresif*. Jakarta: Kencana Prenada Media Group.
- Trianto. (2014). *Model Pembelajaran Terpadu*. Jakarta: PT Bumi Aksara.
- Varela, M.F., Lutnesky, M.F., dan Osgood, M.P. (2005). Assessment of Student Skills for Critiquing Published Primary Scientific Literature Using a Primary Trait Analysis Scale. *Journal of Microbiology & Biology Education*. 6 (1), 20-27.
- Venville,G dan Dawson, M.V. (2010). The Impact of a Classroom Intervention on Grade 10 Students' Argumentation Skills, Informal reasoning, and Conceptual Understanding of Science. *Journal of Research in Science Teaching*, 47 (8), 952-977.
- Walker, J.P dan Sampson, V. (2012). Argument-Driven Inquiry as a Way to Help Undergraduate Students Write to Learn by Learning to Write in Chemistry. *International Journal of Science Education*. 34 (10), 1443-1485.
- Walker, J.P., Sampson, V., dan Zimmerman, C.O. (2011). Argument-Driven Inquiry: An Introduction to a New Instructional Model for Use in Undergraduate Chemistry Labs. *Journal of Chemical Education*, 88 (8), 1048-1056.
- Walker, S.E. (2003). Active Learning Strategies to Promote Critical Thinking. *Journal of Athletic Training*. 38 (3), 263-267.
- Weast, D. (1996). Alternative Teaching Strategies: The Case of Critical Thinking. *Teaching Sociology*. 24 (2), 189-194.
- White, T.K. dan Whitaker, P. (2009). The Use of Interrupted Case Studies to Enhance Critical Thinking Skills in Biology. *Journal of Microbiology & Biology Education*.10 (1), 25-31.

- Winarsih, A., Nugroho, A., Sulistyoso, H.P., Zajuri, M., Supliyadi., dan Suyanto, S. (2008). *IPA Terpadu untuk SMP/MTs Kelas VII*. Jakarta: Pusat Perbukuan Departemen Pendidikan Nasional.
- Wu, Y-T., & Tsai, C-C. (2007). High school students' informal reasoning on a socioscientific issue: Qualitative and quantitative analyses. *International Journal of Science Education*. 29 (9), 1163–1187.
- Yerrick, R. K. (2000). Lower Track Science Students' Argumentation and Open Inquiry Instruction. *Journal of Research in Science Education*. 37 (8), 807–838.
- Yun, S dan Kim, H.B., (2014). Changes in Students' Participation and Small Group Norms in Scientific Argumentation. *Journal Science and Education*. 45 (3), 465-484.
- Zhou, Q., Huang, Q., dan Tian, H. (2013). Developing Students' Critical Thinking Skills by Task-Based Learning in Chemistry Experiment Teaching. *Creative Education*. 4 (12A), 40-45.
- Zohar, A dan Dori, Y. J. (2003). Higher Order Thinking Skills and Low-achieving Students: Are They Mutually Exclusive? *Journal of the Learning Sciences* 12 (2), 145–181.
- Zohar, A., Weinberger, Y., dan Tamir, P. (1994). The Effect of Biology Critical Thinking Project on The Development of Critical Thinking. *Journal of Research in Science Teaching*. 31 (2), 183-196.