

DAFTAR PUSTAKA

- Abell, S.K., Anderson, G. dan Chezem, J. (2000). "Science As Argument and Explanation: Exploring Concepts of Sound in Third Grade" dalam *Inquiring into Inquiry Learning and Teaching in Science* (J. Minstrell dan E. H. van Zee. Eds). Washington : American Association for the Advance of Science.
- Adisendjaja, Y.H. (2008). Analisis Buku Ajar Biologi SMA Kelas X Di Kota Bandung Berdasarkan Literasi Sains. [Online] Tersedia: www.file.upi.edu/.../PENELITIAN_ANALISIS_BUKU. [2 Februari 2012].
- Agin, M.L. (1974). "Education for Scientific Literacy: A Conceptual Frame of Reference and Some Applications". *Science Education*, 58, (3), 403-415.
- 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 – TOJET*. 3, (4).56-61.
- Akmal, M. (2008). *Membelajarkan Siswa Melalui Teori Belajar Konstruktivisme*. [Online] Tersedia <http://202.152.33.84/index.php?option=comcontent&task=view&id=15766&Itemid=46>. [5 Oktober 2009].
- Albert, B. (2000). "Thoughts of a Scientist On Inquiry" dalam *Inquiring into Inquiry Learning and Teaching in Science* (J. Minstrell dan E. H. van Zee. Eds). Washington : American Association for the Advance of Science.
- Alberta. (2004). *Focus on Inquiry: A Teacher's Guide to Implementing Inquiry-based Learning teacher's Guide*. Canada: the Crown in Right of Alberta.
- Al-Naqbi, A.K. (2010). "The degree to which UAE primary science workbooks promote scientific inquiry". *Research in Science & Technological Education*. [Online], 28, (3), 227–247. Tersedia: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>. [5 Oktober 2010].
- American Architectural Foundation. (2009). Learning Environments: A 21st Century Skills, Implementation Guide. Tucson: Partnership for 21st Century Skills. [Online] Tersedia: <http://www.archfoundation.org/aaf/documents/report.designforlearning.pdf>. [20 Nopember 2012].
- American Association for the Advancement of Science/AAAS. (1993). *Benchmarks For Science Literacy*. Oxford: Oxford University Press.
- Anderson, O.W. dan Krathwohl, D.R. (2001). *A Taxonomy for Learning, Teaching, and Assessing*. New York : Long Man.

Anderson, R.D. (1996). *Study of Curriculum Reform*. Washington, DC: US Government Printing Office.

333

Arikunto, S. (2009). Dasar-Dasar E didikan (Edisi Revisi). Jakarta: Bumi Aksara.

Astin, A.W. (2001). *What Matters in College? Four Critical Years Revisited*. San Francisco: Jossey-Bass.

Astuti, W.P., Prasetyo, A.P.B. dan Rahayu, E.S. (2012). Pengembangan Instrumen Asesmen Autentik Berbasis Literasi Sains Pada Materi Sistem Ekskresi. *Lembaran Ilmu Kependidikan*. 41(1),39-43.

Baker, D.R., et al. (2009)."The Communication in Science Inquiry Project (CISIP): "A Project to Enhance Scientific Literacy Through the Creation of Science Classroom Discourse Communities". *International Journal of Environment & Science Education*. 4, (3), 259-274.

Baram-Tsabari, A. dan Yarden, A. (2005). "Text Genre as a Factor in the Formation of Scientific Literacy". *Journal of Research in Science Teaching* 42, (4): 403–428.

Barker, L.J. dan Garvin-Doxas, K. (2004). "Making Visible the Behaviors that Influence Learning Environment: A Qualitative Exploration of Computer Science Classrooms". *Computer Science Education*. 14, (2), 119–145.

Beese, J dan Liang, X. (2010). Do resources matter? PISA science achievement comparisons between students in the United States, Canada and Finland. *Improving Schools*. 13, (3), 266–279.

Bennett, J. (2007). *Teaching and Learning Science*. London : Continuum.

Bielaczyc, K. (2006). "Designing Social Infrastructure: Critical Issues in Creating Learning Environments With Technology". *The Journal of The Learning Science*, 15, (3), 301–329.

Bonney, R. et al. (2009). Citizen Science: A Developing Tool for Expanding Science Knowledge and Scientific Literacy. *BioScience* 59, 977–984.

Bransford, J.D., Brown, A.L., dan Cocking, R.R. (1999). *How people learn: Brain, mind, experience, and school*. Committee on Developments in the Science of Learning with additional material from the Committee on Learning Research and Educational Practice, National Research Council.

334

Dadi Setiadi, 2013

Pengembangan Model Pembelajaran Untuk Meningkatkan Kemampuan Literasi Sains Peserta Didik SMP

Universitas Pendidikan Indonesia | repository.upi.edu

- Washington, DC: National Academy Press. [Online]. Tersedia: <http://www.nap.edu/html/howpeople1/>. [24 Mei 2012].
- Brickman, P, et al. (2009) .Effects of Inquiry-based Learning on Students' Science Literacy Skills and Confidence *International Journal for the Scholarship of Teaching and Learning*. [Online] Tersedia: <http://www.georgiasouthern.edu/ijsotl>. 3(2),1-22. [2 Februari 2012].
- Briggs, A.R.J. dan Sommefeldt, D. (2002). *Managing Effective Learning and Teaching*. London : Paul Chapman Publishing.
- Brown, B.A., Reveles, J.M. dan Kelly, G.J. (2005). "Scientific Literacy and Discursive Identity: A Theoretical Framework for Understanding Science Learning". *Sci Ed*. 89 : 779– 802.
- Brown, P.L., et al. (2006). "College science teachers' views of classroom inquiry". *Science Education*, 90, (5), 784-902.
- Bruner, J.S. (1966). *On Knowing: Essays for the Left Hand*. New York, NY: Atheneum
- Bruner, J.S. (1977). *The Process of Education*. Cambridge : Havard University Press.
- Buxton, C. A. (2001). The electronic Journal of Literacy Through Science. [Online] , Vol 1 :1-36. Tersedia: <http://ejlts.ucdavis.edu/sites/ejlts.ucdavis.edu/files/articles/buxton.pdf>. [12 Feb 2011].
- Bybee, et al. (2006). *The BSCS 5E Instructional Model: Origins and Effectiveness*. Colorado : Office of Science Education National Institutes of Health.
- Bybee, R.W. (1997). *Achieving Scientific Literacy: From Purpose to Practices*. Portsmouth: Heinemann.
- Bybee, R.W. (2000) "Teaching Science as Inquiry", dalam *Inquiring into Inquiry Learning and Teaching in Science*. Washington DC.: American Association for the Advance of Science.
- Bybee, R.W. (2002). Scientific Inquiry, Student Learning, and the Science Curriculum. dalam *Learning Science and the Science of Learning*. Bybee R.W. (Ed). Virginia : NSTA Press.
- Bybee, R.W. (2009). *The BSCS 5E Instructional Model and 21ST Century Skills*. A Workshop Paper on Exploring the Intersection of Science Education and

- the Development of 21st Century Skills. [Online]. Tersedia http://www.performanceexpress.org/wp-content/uploads/2011/10/PFI47_4_25.pdf. [15 Desember 2012].
- Campbell, T., Abd-Hamid, N.H. dan Chapman, H. (2010). “Development of Instruments to Assess Teacher and Student Perceptions of Inquiry Experiences in Science Classrooms”. *J Sci Teacher Educ* 21, 13–30.
- Cavagnetto, A.R. et al. (2005). “Africa-America Institute-Iowa Math and Science Professional Development Workshop: A Distance Learning Approach for Math and Science Literacy in Africa”. *Bulletin of Science, Technology & Society*, 25, (5), 446-454.
- Cennamo, K.S., Abell, S.K., dan Chung, M-L. (1996). “A layers of negotiation model for designing constructivist learning materials”. *Educational Technology*36 (4), 39 -48.
- Chabalengula, V.M. Mumba, F. (2008). Curriculum and Instructional Validity of the Scientific Literacy Themes Covered in Zambian High School Biology Curriculum. *International Journal of Environmental & Science*. 3 (4), 207-220.
- Champagne, A.B., Kouba, V.L. dan Hurley, M. (2000). “Assessing Inquiry”, dalam *Inquiring into Inquiry Learning and Teaching in Science*. Washington: American Association for the Advance of Science.
- Chao, J. dan Parker, K.R. (2011). Developing an Interactive Social Media Based Learning Environment. Issues in Informing Science and Information Technology. Vol. 8, 323-334.
- Chen, F., Shi, Y., dan Xu, F. (2009) An Analysis of the Public Scientific Literacy Study in China. *Public Understanding of Sci*. [Online], 18, (5), 607–616. Tersedia:www.sagepublications.com. [27 Sept 2010].
- Cheung, D. (2007). “Facilitating chemistry teachers to implement inquiry-based laboratory work”. *International Journal of Science and Mathematics Education*. 6, 107–30.
- Coffman, T. (2009). *Engaging Students Through Inquiry-Oriented Learning and Technology*. Plymouth: A Division of Rowman & Littlefield Publishers, Inc.
- Colemen, H. (2009). *Are International Standard Schools Really a Respon to Globalization*. Paper presented at the seminar Responding to Global Education Challenges. Held at UNY, 9th May 2009.

- Collins, A. (1995). *Learning Communities*. Presentation at the annual conference for the American Educational Research Association, San Francisco, CA, April, 1995.
- Collins, A. (2001). *How Students Learn and How Teachers Teach*. Dalam Science Educators' Essay Collection Learning Science and The Science Learning (Rodger W. Bybee. Ed). Virginia: NSTA Press.
- Collins, A. (2002). "How Students Learn and How Teachers Teach", dalam Science Educators' Essay Collection Learning Science and The Science Learning (Rodger W. Bybee. Ed). Virginia: NSTA Press.
- Collins, A., Brown, J. S. dan Newman, S.E. (1989). *Cognitive apprenticeship: teaching the crafts of reading, writing and mathematics*. In L.B. Resnik (ed.) *Knowing, learning and instruction: Essays in honor of Robert Glaser*. Lawrence Erlbaum: , Hillsdale, NJ.
- Creswell, J.W. (2008). *Educational Research, Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. New Jersey : Pearson Education Inc.
- Dani, D. (2009). "Scientific Literacy and Purposes for Teaching Science: A Case Study of Lebanese Private School Teachers". *International Journal of Environment & Science Education*. 4, (3), 289-299.
- Deggs, D. (2009). Using Reflection To Evaluate Course Outcome. *Journal of College Teaching & Learning*. Vol. 6, (2), 41-48.
- Departemen Pendidikan Nasional. (2005). *Rencana Strategis Departemen Pendidikan Nasional Tahun 2005-2009, Menuju Pembangunan Pendidikan Nasional Jangka Panjang 2025*. Jakarta: Depdiknas.
- Devick-Fry, J. dan Le-Sage, T. (2010). "Science Literacy Circles: Big Ideas about Science". *Science Activities*. 47, 35–40.
- Dewey, J. (1916). *Democracy and Education*. Macmillan, New York: Henry Holt and Company. Inc..
- Dewey, J. (1938). *Logic the Theory of Inquiry*, New York : Henry Holt and Company. Inc.
- Dick, W. dan Carey, L. (1990). *The Systematic Design of Instruction 3rd Edition*. USA: Harper Collins Publisher.

- Dillon, J. (2009). "On Scientific Literacy and Curriculum Reform". *International Journal of Environment & Science Education*. 4, (3), 2001-213.
- Dunkin, M.J. dan Biddle, B.J. (1974). *The Study of Teaching*. New York : Holt Rixehorf and Wiston Inc.
- Dupigny-Giroux, L.L (2010). Exploring the Challenges of Climate Science Literacy: Lessons from Students, Teachers and Lifelong Learners. *Geography Compass* 4, (9), 1203–1217.
- Duschi, R.A., Schweingruber , H.A. dan Shouse, A.W. (2007). *Taking Science To School Learning and Teaching Science in Grades K-8*. New York: The National Academic Press.
- Dyasi, H.M. (2006). Vision of Inquiry : Science. In Linking Science & Literacy in the K-8 Classroom. R. Douglas, dkk. (Eds). Arlington : National Science Teacher Association Press. [Online] Tersedia: <http://depositfile.com/en/files/ivgemggmy> [12 April 2010].
- Echols, J.M. dan Shadily, H. (1989). *Kamus Inggris-Indonesia*. Jakarta: PT Gramedia
- Edelson, D.C., Gordin, D.N., dan Pea, R.D. (1999). "Addressing the Challenges of Inquiry-Based Learning Through Technology and Curriculum Design". *The Journal of The Learning Sciences*, 8 (3), 391-450.
- Eisenhart, M., Finkel, E. dan Marion, S.F. (1996). "Creating the Condition for Scientific Literacy ; A Re. Examination". *American Educational Research Journal*. 33, (2), 261-295.
- Eisenkraft, A. (2003). Expanding the 5E Model. *The Science Teacher*, 70, (6), 56-59.
- Eklund, J. et al. (2007). Promoting Student Scientific Literacy of Molecular Genetics and Genomics. Paper presented at the annual meeting of the National Association for Research in Science Teaching, April 2007, New Orleans.
- Ekohariadi. (2009). "Faktor-Faktor Yang Mempengaruhi Literasi Sains Sisa Indonesia Berusia 15 Tahun. *J. Pendidikan Dasar*. 10, (1). 28-41.
- Ellenbogen, K.M. (2006). *Informal Science Learning Environments: A Review of Research to Inform K-8 Schooling*. Washington: National Research Council Board on Science Education Science Learning K8.

- Ellis, S.S. (1979). Model of Teaching: Solution to the Teaching Style/Learning Style Dilemma. *J. Educator leadership*. January 1979, 274-279.
- Esler, W.K. dan Esler, M.K. (1996). *Teaching Elementary Science* (Seventh ed.). Boston : Wadsworth Publishing Company.
- Euler, D. (2006). *Revitalizing Ernst Mach's Popular Scientific Lectures*. Science & Education. London: Springer.
- Fang, Z. (2005). Scientific Literacy: A Systemic Functional Linguistics Perspective. *Sci Ed*. 89, 335–347.
- Fang, Z. dan Wei, Y. (2010). “Improving Middle School Students’ Science Literacy Through Reading Infusion”. *The Journal of Educational Research*, 103, 262–273.
- Fazio, X., Melville, W., dan Bartley, A. (2010). “The Problematic Nature of the Practicum: A Key Determinant of Pre-service Teachers’ Emerging Inquiry-Based Science Practices”. *J. Sci. Teacher Educ.* 21, 665–681.
- Fensham, P.J. (2002). “Science Content as Problematic Issues for Research”, dalam. *Research in Science Education Past, Present, and Future*. Helga Behrendt, Helmut Dahncke, Reinders Duit, Wolfgang Gräber, Michael Komorek, Angela Kross, Priit Reiska. (eds) New York : Kluwer Academic Publisher.
- Fensham, P.J., Gunstone, R.F., dan White, R.T. (1994). “Science Content and Constructivist Views of Learning and teaching”, dalam *The Content of Science A Constructivist Approach to its Teaching and Learning*. London: The Falmer Press.
- Fok, S., dan Watkins, D. (2005). Does a Critical Constructivist Learning Environment Encourage a Deeper Approach to Learning? The Asia Pacific Education Researcher Vol 16. No1. [Online] Tersedia: <http://www.natefac.org/JFCSE/v27Standards4/v27Standards4Fox.pdf>. [23 Nopember 2012].
- Fortner, R.W. (2002). “Cooperative Learning : A Basic Instructional Methodology For Global Science Literacy”, dalam *In Global Science Literacy*. Netherlands : Kluwer Academic Publisher. [Online] .Tersedia: <http://depositfile.com/en/files/iglbw9ds8>. [11 Maret 2010].
- Foster, J.S. dan Shiel-Rolle, N. (2011). Building scientific literacy through summer science camps: a strategy for design, implementation and

- assessment . *Science Education International*. 22, (2), 85-98.
- Fourez, G. (1997). "Scientific and Technological Literacy as a Social Practice". *Social Studies of Science*. [Online], 27, 903-936. Tersedia: <http://sss.sagepub.com/content/27/6/903>. [25 September 2010].
- Frank, T.H. (2006). Enhancing Supportive Learning Environments and Student Achievement through. ALERT Educator/Spring. [Online]. 06, 1- 6. http://daretodifferentiate.wikispaces.com/file/view/319_EnhancingSLE_and_SA.pdf. [20 Nopember 2012].
- Friedl, A.E . (1986). *Teaching Science to Children An Integrated Approach*. New York: Random House, Inc..
- Gage, N.L. (2009). *A Conception of Teaching*. New York : Springer.
- Gall, M.D., Gall, J.P. dan Borg, W.R. (2003). *Educational Research : An Introduction 7th Edition*. Boston : Allyn and Bacon.
- Gallagher, J.J. (2007). *Teaching Science For Understanding A Practical Guide for Middle and High School Teacher*. Ohio: Pearson Merrill Prentice Hall.
- Gengarely, L.M., dan Abrams, E.D . (2009). "Closing the Gap: Inquiry in Research and the Secondary Science Classroom". *J Sci Educ Technol* 18, 74–84
- Ghazali A.S. (2002). *Menerapkan Paradigma Konstruktivisme melalui Strategi Belajar Kooperatif*. Jurnal Pendidikan & Pembelajaran, Vol. 9, (2), 2002: 115-131.
- Gonzales, P. (2008). *Highlights from TIMSS 2007 : Mathematics and Science Achievement of US Fourth and Eighth-Grade Students in An International Context*. Institutes of Education Sciences.
- Good, R., dan Shymansky, J. (2001). "Nature-of-Science Literacy in Benchmarks and Standards: Post-Modern/Relativist or Modern/Realist?". *Science & Education*. 10, 173–185.
- Gräber, W., et al.. (2002). Scientific Literacy: From Theory to Practice. dalam *Research in Science Education –Past, Present, and Future*. Helga Behrendt, Helmut Dahncke, Reinders Duit, Wolfgang Gräber, Michael Komorek, Angela Kross, Priit Reiska. (eds). New York : Kluwer Academic Publisher

- Grandy, R.E. (2000). "On the Cognitive Analysis of Scientific Controversies" dalam *Scientific Controversies: Philosophical and Historical Perspectives*. Oxford: Oxford University Press.
- Haight, A.D. dan González-Espada, W.J. (2009). Scientific Literacy in Central Appalachia Through Contextually Relevant Experiences: The "Reading the River" Project. *International Journal of Environmental & Science Education*. 4, (3), 215-230.
- Halliday, M.A.K. (1998). "Things and relations: ReGrammaticising experience as technical knowledge", dalam *Reading science: Perspectives on discourses of science*. London: Routledge.
- Hammer, D.F. (2000). "Teacher Inquiry", dalam *Inquiring into Inquiry Learning and Teaching in Science*. Washington : American Association for the Advance of Science.
- Hand, B. et al. (2010). "Connecting Research in Science Literacy and Classroom Practice : A Review of Science Teaching Journals in Australia , the UK and the United State, 1998-2008 ". *Studies in Science Education*. 46, (1), 45-68.
- Hapgood S., Magnusson, S. J. dan Palincsar, A.S. (2004). "Teacher, Text, and Experience: A Case of Young Children's Scientific Inquiry". *The Journal of the Learning Sciences*, 13, (4), 455-505.
- Hardy, I., et al. (2006). Effects of Instructional Support Within Constructivist Learning Environments for Elementary School Students' Understanding of "Floating and Sinking". *Journal of Educational Psychology* . Vol. 98, (2), 307–326
- Harlen, W. (1999). The Assessment of Scientific Literacy Within The Pisa. [Online] Tersedia:www.pisa.oecd.org. [2 Juni 2009].
- Harlen, W. (2001). "The Assessment of Scientific Literacy in the OECD/PISA Project". *Studies in Science Education*. 36,79-104.
- Harlen, W. (2002). The OECD's Program for International Student Assessment (PISA) and Its Impact on School Science Curricula. [Online] Tersedia: www.pisa.oecd.org. [2 June 2009].
- Harwood, W.S. 2004. A New Model for Inquiry *Journal of College Science Teaching*, Vol. 33, No. 7, July/August 2004.1-5.

Haryana, K. (2008). *Sekolah Bertaraf Internasional* [Online] Tersedia: http://www.depdknas.go.id/publikasi/balitbang/jek2/jek2_08.pdf. [31 Desember 2009]

Hassard, J. (2005). The Art of Teaching Science, Inquiry and Innovation in Middle School and High School. New York : Oxford University Press. [Online]. Tersedia: http://avaxhome.ws/ebooks/eLearning_book/Art_Teaching_Science.html. [28 April 2010].

Hattie, J.A.C. (2009). *Visible Learning A synthesis of over 800 meta-analyses relating to achievement*. New York: Routledge.

Hawkins, R. (2000). "Science Beyond Labeling", dalam *Inquiring into Inquiry Learning and Teaching in Science*. Washington DC.: American Association for the Advance of Science.

Hinduan, A. (2007). "Sains dan Teknologi" dalam *Dalam Rujukan Filsafat, Teori dan Praksis Ilmu Pendidikan*. Bandung : UPI Press.

Hofstein, A., Kipni, M., dan Kind, P. (2008). "Learning in and from Science Laboratories: Enhancing Students' Meta-Cognition and Argumentation Skills". *J Sci Teacher Educ* 21: 329–349.

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

Holbrook, J. dan Rannikmae, M. (2007). "The Nature of Science Education for Enhancing Scientific Literacy". *International Journal of Science Education*. 29, 11, 1347–1362.

Holden, I.I. (2012) . Predictors of Students' Attitudes Toward Science Literacy. *Communications in Information Literacy*. 6, (1),107-123.

Hornby, A.S. dan Cowie, A.P. (1974). *Oxford Advanced Learner's Dictionary of Current English*. Oxford : Oxford University Press.

<http://siteresources.worldbank.org/INTINDONESIA/Resources/Publication/280016-1106130305439/617331-1110769011447/810296-1110769073153/education.pdf>. [Online] Tersedia: [27 Juni 2009]

<http://www.cals.ncsu.edu/agexed/leap/aee535/db.htm>. A Model for the Study of Classroom Teaching An Explanation. [Online] Tersedia: [12 Mei 2010].

- Hurd, P.D. dan Gallagher, J.J. (1966). "Goals Related to the Social Aspects of Science", dalam *Sequential Programs in Science for a Restructural Curriculum*. Cleveland: Educational Research Council.
- Jalmo, T. (2007). *Profile Of Science Teachers' Performances Of Junior High School In Bandar Lampung City In Anticipating Educational Standardization Era*. Proceeding of The First International Seminar on Science Education Indonesia University of Education.
- Jarman, R. dan McClune, B. (2007). *Developing Scientific Literacy Using News Media in the Classroom*. New York : Open University Press
- Jeong, H. dan Songer, N.B. (2008). Understanding Scientific Evidence and the Data Collection Process: Explorations of Why, Who, When, What, and How dalam *Science Education Issues and Developments*. Calvin L. Petroselli. (Ed) New York : Nova Science Publishers, Inc..
- Johnston, A. (2008). "Demythologizing or dehumanizing? A response to Settlage and the ideals of open inquiry". *Journal of Science Teacher Education*. 19, 11–13.
- Johnston, J.S. (2009). *Deweyan Inquiry From Education Theory to Practice*. New York : Suny Press. [Online], Tersedia:http://hotfile.com/dl/7628229/77f58a9/0791493555_.rar.html. [30 Desember, 2009].
- Joyce, B. dan Calhoun, E. (2009). Three Sides of Teaching: Styles, Models, and Diversity. dalam *International Handbook of Research on Teachers and Teaching Part One*. Lawrence J. Saha, dan A. Gary Dworkin (Eds). New York: Springer.
- Joyce, B. dan Weil, M. (1986). *Model of Teaching*. New Jersey : Ptentice-Hall Inc.
- Joyce, B., Weil, M., dan Calhoun, E. (2011). *Models of Teaching*. Boston: Pearson Education International.
- Judy, W. (2000). "How Does a Teacher Facilitate Conceptual Development in the Intermediate Classroom ?" dalam *Inquiring into Inquiry Learning and Teaching in Science* Washington: American Association for the Advance of Science.
- Kanasa,H. dan Nichols, K.. (2008). Addressing emerging science and technology issues: Raising scientific literacy skills of middle years students in Queensland schools. AARE Conference, Brisbane.

Kaniawati, I. (2007). *Increasing Physics Ability Pre-service Physics Teacher through Inquiry Base Learning Model at Introduction Physics*. Proceeding of The First International Seminar on Science Education. Indonesia University of Education.

Karagiorgi, Y., dan Symeou, L. (2005). Translating Constructivism into Instructional Design: Potential and Limitations. *Educational Technology & Society*, 8, (1), 17-27.

Keser, O.F. dan Akdeniz, A.R. (2010). Assessment of the constructivist physics learning Environments. Asia-Pacific Forum on Science Learning and Teaching, Volume 11, 1, 1-12. [Online] Tersedia: http://www.ied.edu.hk/apfslt/download/v11_issue1_files/keser.pdf. [20 Nopember 2012].

King, C. (2002). The Explanatory Stories Approach to A Curriculum For Global Science Literacy. *Dalam Global Science Literacy*, VJ Mayer (Ed). Netherlands : Kluwer Academic Publisher. [Online] Tersedia: <http://depositfile.com/en/files/iglbw9ds8>. [11 Maret 2010].

Knain, E. (2006). “Achieving Science Literacy Through Transformation of Multimodal Textual Resources”. *Sci Ed*. 90, 656– 659.

Krajcik, J. dan Czerniak, C. (2007). *Teaching Science in Elementary and Middle School, A Project-Based Approach*. London : Lawrence Elbaum Associates.

Krajcik, J., et al. (2000). “Instructional, Curricular, and Technological Supports for Inquiry in Science Classrooms”, dalam *Inquiring into Inquiry Learning and Teaching in Science*. Washington: American Association for the Advance of Science.

Krajcik, J., et al. (1998). “Middle school students initial attempts at inquiry in project-based science classrooms”. *The Journal of Learning Sciences*. 7, (3), 313-350.

Kuhlthau, C.C., Maniotes, L.K. dan Caspari, A.K. (2007). *Guided Inquiry Learning in the 21st Century*. London : Libraries.

Kwan, R. (2000). Tapping Into Children's Curiosity. Dalam Inquiring into Inquiry Learning and Teaching in Science (J. Minstrell dan E. H. van Zee. Eds). Washington DC.: American Association for the Advance of Science.

Lang, M., Drake, S. dan Olson, J. (2006). "Discourse and the New Didactics of Scientific Literacy". *J. Curriculum Studies*. 38, (2), 177-188.

Larrivee B dan Cooper, J.M. (2006). An Educator's Guide to Teacher Reflection. USA: Cengage Learning. [Online] Tersedia: <http://cengagesites.com/academic/assets/sites/4004/Education%20Modules/gd%20to%20teach%20refl.pdf> . [2 Desember 2012].

Laughksch, R.C. (2000). "Scientific Literacy: A Conceptual Overview". *Science Education*. [Online]. 84, 71–94. Tersedia : http://ci.unlv.edu/files/Laugksch_Scientific_Literacy.pdf [10 Januari 2010].

Lawless, K.Y.A. dan Brown, S.W. (1997). Multimedia learning environments: Issues of learner control and navigation. *Instructional Science* 25: 117–131.,

Lawson, A.E. (1996). *Science Teaching and The Development of Thinking*, California: Wadsworth Publishing Company.

Lawson, A.E. (1999) *Science Teaching and Development of Thinking*. California : Wadsworth Publishing Company.

Lay, D. (2000). "Science Inquiry Conference—A Better Way", dalam *Inquiring into Inquiry Learning and Teaching in Science*. Washington: American Association for the Advance of Science.

Lehrer, R., Carpenter, S., Schauble, L. dan Putz, A. (2000). *Designing Classrooms That Support Inquiry*. Dalam Inquiring into Inquiry Learning and Teaching in Science (J. Minstrell dan E. H. van Zee. Eds). Washington DC.: American Association for the Advance of Science.

Lima, A., et al. (2010). "Field Trip Activity in an Ancient Gold Mine : Scientific Literacy in Informal Education". *Pub. Understanding Sci.* 19, (3), 322-334.

Lina, H-S, Hong, Z-R dan Cheng, Y-Y (2009). The Interplay of the Classroom Learning Environment and Inquiry-based Activities. *International Journal of Science Education Vol. 31, No. 8, 15 May 2009, pp. 1013–1024.*

- Liu, X. (2009). "Beyond Science Literacy: Science and the Public". *International Journal of Environment & Science Education*. 4, (3), 301-311.
- Machamer, P., Pera, M., dan Baltas, A. (2000). *Scientific Controversies: Philosophical and Historical Perspectives*. Oxford: Oxford University Press.
- Magnus, A. (2006). Scientific Inquiry Dalam .Technology-based inquiry for middle school: Edwin P. Christmann (ed)Arlington: National Science Teachers Association Press.
- Mariati. (2007). *Menyoal Profil Sekolah Bertaraf Internasional*. [Online], Tersedia: http://www.depdknas.go.id/publikasi/balitbang/067/j67_04.pdf [31 Desember 2009].
- Marks, R. dan Eilks, I. (2009). "Promoting Scientific Literacy Using a Sociocritical and Problem-Oriented Approach to Chemistry Teaching: Concept, Examples, Experiences". *Internaional Journal of Environment & Science Education*. 4, (3), 231-245.
- Marshall, J.C., Smart, J. dan Horton, R. M. (2009). The Design And Validation of Equip: An Instrument to Assess Inquiry-Based Instruction. *International Journal of Science and Mathematics Education*. 8, 299-321.
- Martin, M.O., et al. (2004). TIMSS International Sconce Report. Boston : TIMSS & PIRLS International Study Center Lynch School of Education. [Online] Tersedia: http://timssandpirls.bc.edu/PDF/t03_download/T03INTLSCIRPT.pdf. [18 April 2011].
- Martin, M.O., et al. (2000). TIMSS International Sconce Report. Boston : The International Study Center Boston College. [Online] Tersedia: http://timssandpirls.bc.edu/timss_1999i/pdf/T99i_Sci_All.pdf. [18 April 2011].
- Martin, M.O., Mullis, I.V.S., dan Foy, P. (2008). TIMSS International Sconce Report. Boston : TIMSS & PIRLS International Study Center Lynch School of Education. [Online] Tersedia: http://timssandpirls.bc.edu/TIMSS2007/PDF/TIMSS2007_InternationalScienceReport.pdf. [18 April 2011].
- Mayaba N.N (2008). The Effect Of A Scientific Literacy Strategy On Grade 6 and 7 Learner's General Literacy Skills. Thesis. Faculty of Education at the Nelson Mandela Metropolitan University. [Online] Tersedia: <http://www.nmmu.ac.za/helpingteachers/GroupProjectWebb/NOKHANYO>

- %20 NOMAKHWEZI%20MAYABA%20MEd.pdf. [2 Februari 2012].
- Mayer, V.J. dan Tokuyama, A. (2002). Evolution of Global Science Literacy As a Curriculum Construct. dalam *Global Science Literacy*, VJ Mayer (Ed). Netherlands : Kluwer Academic Publisher. [Online] Tersedia: <http://depositfile.com/en/files/iglbw9ds8> [11 Maret 2010].
- Merrill, M.D. (2002). First Principles of Instruction. *J. ETR & D*, Vol. 50, (3), 43–59.
- Mezirow, J. (1998). On Critical Reflection. *Adult Education Quarterly* 48 (3). 185-198.
- Michael, R. S.I. 2002. Inquiry & Scientific Method Inquiry & Scientific Method. Fall 2002. 1-5.
- Millar, R. dan Osbone, J. (1998) . Beyond 2000 : Science Education For the Future. London : King College. [Online] Tersedia: <http://www.kcl.ac.uk/content/1/c6/01/32/03/b2000.pdf>. [2 Januari 2009].
- Minstrell, J. (2000). Implications for Teaching and Learning Inquiry: A Summary Inquiry. [Online] , Tersedia: http://hotfile.com/dl/7628229/77f58a9/0791493555_.rar.html. [30 Desember. 2009] .
- Mitman, A.L., et al. (1987). Instruction Addressing the Components of Scientific Literacy and Its Relation to Student Outcomes. *American Educational Research Journal*. [Online] 24: 611. Tersedia: : <http://aer.sagepub.com/content/24/4/611> . [25 September 2010].
- Modell, H.I. (1996). Preparing Students to Participate in an Active learning Environment. *Advances in Physiology Education*. 15, 1, S69-S77.
- Mullins, J.D.W. (1995). “The Science Literacy Crisis, Philosophical Issues, and The Origin Sciences”. *Origins of Life and Evolution of the Biosphere*. 25, 495-510.
- Mulyasa, E. (2008). *Kurikulum Tingkat Satuan Pendidikan*. Bandung : Rosda Karya.
- Murphy, C., et al. (2001). “National Curriculum : Compulsory School Science- Is It Improving Scientific Literacy ?”. *Education Research*. 43, (2), 189-199.

- Mutonyi, H., Nielsen, W. dan Nashon S. (2007). "Building Scientific Literacy in HIV/AIDS Education: A case study of Uganda". *International Journal of Science Education*. 29, (1), 1363–1385.
- Myers, R.J dan Botti, J.A (1997). Design, Development, and Implementation of an Inquiry-Based, Technology-Rich, Science Curriculum. Presentation to the Annual Meeting of the American Education Research Association. Chicago. [Online] Tersedia: <http://www.cet.edu/pdf/curriculum.pdf>. [12 Desember 2012].
- National Curriculum Board. (2009). Shape of the Australian Curriculum: Science. Barton : Commonwealth of Australia. [Online] Tersedia: http://www.acara.edu.au/verve/_resources/Australian_Curriculum_-Science.pdf [10 Desember 2012].
- National Research Council. (1996). *National Science Education Standards*. Washington : National Academic Press.
- National Research Council. (2000). *Inquiry and the National Science Education Standards: A Guide for Teaching and Learning*. Washington, DC: National Academy Press.
- National Research Council (NRC). (2005). *America's lab report: Investigations in high school science*. Washington, DC: National Academy Press.
- Nissley, C. (2000). Giving Children a Chance to Investigate According to Their Own Interests. dalam *Inquiring into Inquiry Learning and Teaching in Science* (J. Minstrell dan E. H. van Zee. Eds). Washington DC.: American Association for the Advance of Science.
- Norris, S., dan Phillips, L. (2003). "How Literacy in Its Fundamental Sense Is Central to Scientific Literacy". *Science Education*. 87, 224-240.
- Oliva, P.F. (1992) *Developing the Curriculum*, New York, HarperCollins Publisher.
- Olson, S. dan Loucks-Horsley, S. (2000). *Inquiry and the National Science Education Standards: A Guide for Teaching and Learning. Committee on the Development of an Addendum to the National Science Education Standards on Scientific Inquiry*. National Academies Press. [Online]. Tersedia:<http://www.nap.edu/catalog/9596.html> [21 Desember, 2009].

Omar, O. (2009). Teachers' Questioning Techniques and Their Potential in Heightening Pupils' Inquiry. International Conference on Primary Education. Hongkong, 25-27, 11, 2009.

Organization for Economic Co-operation and Development/OEC. (1998). *Making The Curriculum Work*. Danvers: OECD Publications. [Online] Tersedia <http://www.copyright.com/> [2 Juni 2009].

Organization for Economic Co-operation and Development/OECD. (1999). Measuring Student Knowledge and Skills. A New Framework for Assessment. 2000. Paris: OECD. [Online] Tersedia <http://www.oecd.org/dataoecd/45/32/33693997.pdf> [24 Maret 2011].

Organization for Economic Co-operation and Development/OECD. (2000). *Measuring student knowledge and skills: The PISA assessment of reading, mathematical and scientific literacy*. Paris: OECD.

Organization for Economic Co-operation and Development/OECD. (edt.). (2001). *Knowledge and Skills for Life. First Results from the OECD Program for International Student Assessment (PISA) 2000*. Paris: OECD.

Organization for Economic Co-operation and Development/OECD. (2003a). *Literacy Science*. [Online]. Tersedia: <http://www.oecd.org/ dataoecd/38/29/33707226. pdf> . [5 Januari 2010].

Organization for Economic Co-operation and Development/OECD. (2003b). *The PISA 2003 Assessment Framework-Mathematics, Reading, Science and Problem Solving Knowledge and Skill*. Paris : OECD.

Organization for Economic Co-operation and Development/OECD. (2006). *Assessing Scientific, Reading and Mathematical Literacy, A Framework for PISA 2006*. Paris : OECD Publications.

.Organization for Economic Co-operation and Development/OECD.(2007). *PISA 2006 Science Competencies for Tomorrow's World Volume 1 – Analysis*. Danvers: OECD Publishing. [Online]. Tersedia: <http://www.oecd.org/dataoecd/30/17/39703267.pdf>. [24 Maret 2011].

Organization for Economic Co-operation and Development/OECD. (2009). *PISA 2009 Assessment Framework, Key Competencies in Reading, Mathematics and Science* . Paris : OECD Publications.

Organization for Economic Co-operation and Development /OECD. (2010). *PISA 2009 Results: What Students Know and Can Do Student Performance in*

- Reading, Mathematics and Science* (Volume I). OECD publications. [Online]. Tersedia: <http://browse.oecdbookshop.org/oecd/pdfs/browseit/9810071E.PDF>. [24 Maret 2011].
- Padilla, M. (2010). “Inquiry, Process Skills, and Thinking in Science”. *Science and Children J.*.. [Online]. Tersedia: <http://proquest.umi.com.ezproxy2.library.usyd.edu.au/pqdweb?> [5 Oktober 2010].
- Parkinson, J. dan Adendorff, R. (2006). The use of popular science articles in teaching scientific literacy. [Online] Tersedia: http://eprints.ru.ac.za/457/1/The_use_of_popular_science_articles_in_teaching_scientific_literacy.pdf. [2 Februari 2012]
- Peraturan Menteri Pendidikan Nasional Republik Indonesia Nomor 22 Tahun 2006. *Tentang Standar Isi Untuk Satuan Pendidikan Dasar Dan Menengah*.
- Peraturan Menteri Pendidikan Nasional Republik Indonesia Nomor 41 Tahun 2007 .*Tentang Standar proses untuk Satuan Pendidikan dasar dan Menengah*
- Peters, E.E. (2010). .Shifting to a Student-Centered Science Classroom: An Exploration of Teacher and Student Changes in Perceptions and Practices. *J Sci. Teacher Educ.* 21:329–349.
- Plakitsi, K. (2010). “Collective Curriculum Design as a Tool for Rethinking Scientific Literacy”. *Cult Stud of Sci. Educ.* 5, 577–590.
- Poedjiadi, A. (1987). *Sejarah dan Filsafat Sains*. Bandung: Depdikbud, FPS IKIP Bandung.
- Poedjiadi, A. (1996). “Upaya Pendidikan Dalam Mengembangkan Literasi Sains dan Teknologi Bagi Masyarakat” . Makalah yang disajikan pada seminar Teknologi dan Masyarakat Untuk Meningkatkan Pemahaman dan Kepedulian Masyarakat Terhadap Lingkungan, Bandung.
- Poedjiadi, A. (2001). *Pengantar Filsafat Ilmu Bagi Pendidikan* . Bandung: Yayasan Cendrawasih.
- Poedjiadi, A. (2007). *Pendidikan Sains dan Teknologi*. Dalam Rujukan Filsafat, Teori dan Praksis Ilmu Pendidikan. Bandung : UPI Press.
- Popli, R. (1999). Scientific Literacy for All Citizen : Different Concept and Content. *Public Understanding of Science* 8:123-137. [Online]. Tersedia: <http://pus.sagepub.com/content/8/2/123>. [25 September 2010].

- Preczewski, P.J., Mittler, A. dan Tillotson. J.W. (2009). "Perspectives of German and US Students as They Make Meaning of Science in Their Everyday Lives". *Interntaional Journal of Environment & Science Education*. 4, (3), 247-258.
- Print, M. (1993). *Curriculum Development and Design* (2nd Edition). St Leonards : Allen & Unwin Pty Ltd.
- Pusat Kurikulum. (2007). *Naskah Akademik Kajian Kebijakan Kurikulum Mata Pelajaran IPA*. Jakarta: Puskur Balitbang Depdiknas.
- Puslitjaknov. (2008). *Metode Penelitian Pengembangan*. Jakarta : Pusat Penelitian Kebijakan dan Inovasi Pendidikan, Balitbang Depdiknas.
- Rascoe, B. (2010). "What Is Heat ? Inquiry Regarding the Science of Heat". *Science Activities*, 47, 109–114.
- Reed J. dan Koliba, C. (2003). Facilitating Reflection A Manual for Leaders and Educators. [Online]. Tersedia: http://www.uvm.edu/~dewey/reflection_manual/index.html. [2 Desember 2012].
- Richards, J.C. (1990). Towards Reflective Teaching. [Online] Tersedia: <http://www.tttjournal.co.uk>. [2 Desember 2012].
- Roth, K. dan Garnier, H. (2007). What Science Teaching Looks Like: An International Perspective Science in the Spotlight: Vol. 64, (4), 16-23.
- Roth, W.M. dan Barton, A.C. (2005). *Rethinking Scientific Literacy*. New York : Routledge Falmer.
- Roth, W.M., dan Lee, S. (2002). "Scientific Literacy as Collective Praxis". *Public Understanding of Science*. 11, 1 – 24.
- Roth, W.M., dan Lee, S. (2004). "Science Education as/for Participation in the Community". *Science Education*. 88, 263–291.
- Rustaman, N.Y. (2007). *Kemampuan Dasar Bekerja Ilmiah dalam Pendidikan Sains dan Asesmennya*. Proceeding of The First International Seminar on Science Education Indonesia University of Education. Bandung.
- Rustaman, N.Y. (2010).` Literasi Sains Anak Indonesia 2000 dan 2003. [Online] Tersedia: http://file.upi.edu/Direktori/SPS/PRODI_PENDIDIKAN_IPA/195012311979032-NURYANI_RUSTAMAN/MAKALAH_LITSAINS_2003_sep,06.pdf. 1-20. [1 Maret 2012].

- Rutherford, F.J., dan Ahlgren, A. (1991). *Science for all Americans*. New York: Oxford University Press.
- Schroeder, M. (2008). The Contribution of Trade Books to Early Science Literacy: In and Out of School. *Res Sci Educ*. 39,231–250.
- Schroeder, M., et al. (2009). “The Contribution of Trade Books to Early Science Literacy: In and Out of School”. *Res Sci Educ*. 39, 231–250.
- Severa, S., Yurumezoglua, K., Oguz-Unvera, A. (2010). Comparison Teaching Strategies of Videotaped and Demonstration Experiments in Inquiry-Based Science Education. *Procedia Social and Behavioral Sciences* 2: 5619–562.
- Shwartz, Y., Ben-Zvi, R. dan Hofstein, A. (2006). The use of scientific literacy taxonomy for assessing the development of chemical literacy among high-school students. *Chemistry Education Research and Practice*, 7, (4), 203-225.
- Simpson, D. (2000). Collaborative Conversations: Strategies for Engaging Students in Productive Dialogues. dalam *Inquiring into Inquiry Learning and Teaching in Science* (J. Minstrell dan E. H. van Zee. Eds). Washington DC.: American Association for the Advance of Science.
- Smith, M.H., Heck, K.E, dan Worker, S.A. (2012). 4-H boosts youth scientific literacy with ANR water education curriculum. *California agriculture*. 66, (4),158-163.
- Smith, P. dan Apple, D.K. (2005). Overview of Quality Learning Environments. [Online] Tersedia: http://www.facultyguidebook.com/3_1_1.pdf. [20 Nopember 2012]
- Somantrie, H. (2008). *Sekolah/Madrasah Bertaraf Internasional (Penyelenggaraan dan Penjaminan Mutu)* [Online]. Tersedia : http://www.depdiknas.go.id/publikasi/balitbang/jek1/jek1_01.pdf [31 December 2009].
- Sorden, S.D. (2005). “A Cognitive Approach to Instructional Design for Multimedia Learning”. *Informing Science Journal* .Vol. 8, 2005.
- Spronken-Smith, R., dan Walker, R. (2010). Can inquiry-based learning strengthen the links between teaching and disciplinary research? *Studies in Higher Education*. [Online] Vol. 35, 6, , 723–740. Tersedia:

<http://www.informaworld.com/smpp/title~content=t713445574>. [5 Oktober 2010].

Srbinovski, M., Erdogan, M. dan Ismaili, M. (2010). "Enviromnetal Literacy in the Science Education Curriculum in Macedonia and Turkey". [Online], *Procedia Social and Behavioral Science*. 2, 4528-4532. Tersedia: www.sciencedirect.com. [25 September 2010].

State Council of the People's Republic of China. (2006). *The Outline of the Action Plan for Improving Scientific Literacy for All (From 2006–2010 and then 2010–2020)*. Beijing: The People Press.

Sugiyono. (2008a). *Memahami Penelitian Kualitatif*. Bandung: CV Alfabeta.

Sugiyono. (2008b). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan RT & D*. Bandung : Alfabeta.

Sujanem, (2005). bahwa implementasi pendekatan STM dalam pembelajaran IPA di kelas IV SD No 6 Banjar Jawa Singaraja dapat meningkatkan kualitas literasi sains dan teknologi siswa yaitu dari kategori cukup. *Jurnal Pendidikan dan Pengajaran* IKIP Negeri Singaraja, Edisi Khusus TH. XXXVIII Desember 2005,783-807.

Sukmadinata, N. S. (2003). *Metode Penelitian Pendidikan*. Bandung: PT Remaja Rosdakarya.

Sumaji, et al. (1998). *Pendidikan Sains Yang Humanistis*. Yogyakarta: Kanisius.

Sungur, S. dan Gungoren, S. (2009). The Role of Classroom Environment Perceptions in Self-Regulated Learning and Science Achievement. *Elementary Education* [Online], 8, (3), 883-900. Tersedia: <http://ilkogretim-online.org.tr>. [23 Nop 2012].

Suparno, P. (1997). *Filsafat Konstruktivisme dalam Pendidikan*. Yogyakarta: Kanisius

Swafford, M.D. dan Dainty, H.T. (2009). Learning Environment: Respecting Diversity and Exceptionality. *Journal of Family and Consumer Sciences Education*, 27, (4), 45-59.

Taber, K.S. (2009). *Progressing Science Education, constructing the Scientific Research Program Into the Contingent Nature of Learning Science*. London : Springer. [Online], Tersedia: <http://depositfiles.com/en/files/zhgwpacs>. [12 Februari 2010].

- Tan, M. (2004). Nurturing Scientific and Technological Literacy through Environmental Education *Journal of International Cooperation in Education*, 7, (1),115-131.
- Tenenbaum, G. et al. (2001). Constructivist pedagogy in conventional on-campus and distance learning practice: An exploratory investigation. *Learning and Instruction* 11, 87-111.
- Tobin, K. (2010) . “Issues of our time: science, religion, and literacy”. *Cult Stud of Sci Educ.* 5, 1–4.
- Tseng, Y.H., et al. (2010). Mining Concept Maps from News Stories for Measuring Civic Scientific Literacy in Media. 55, 165-177. [Online], Tersedia: www.elsevier.com/locate/compedu. [25 September 2010].
- Undang Undang Dasar Republik Indonesia Tahun 1945.
- Unu, H.B. (2008). *Model Pembelajaran Menciptakan Proses Belajar Mengajar yang Kreatif dan Efektif*. Jakarta : Sinar Grafika Offset
- Van Hook, S.J., et al . (2011). Relationship Between Students’ Perceptions of Classroom Environment and Their Motivation in Learning English Language. *International Journal of Humanities and Social Science* Vol. 1, 21 [Special Issue - December 2011].
- Vygotsky, L.S. (1978). *Mind in Society, The Development of Higher Psychological Processes*. (Michael Cole, Vera John-Steiner, Sylvia Scribner dan Ellen Sourbeman, Eds) London: Harvard University Press.
- Webb, P. (2009). “Towards an Integrated Learning Strategies Approach to Promoting Scientific Literacy in the South African Context”. *Interntaional Journal of Environment & Science Education*. 4, (3), 313-334.
- Wee, B., et al. (2007). “Teaching and learning about inquiry: Insights and challenges in professional development”. *Journal of Science Teacher Education*, Vol. 18, (1), 63-89.
- Wei, L. S. dan Elias, H. (2011). Relationship Between Students’ Perceptions of Classroom Environment and Their Motivation in Learning English Language. *International Journal of Humanities and Social Science* Vol. 1 No. 21 [Special Issue - December 2011]
- Wheeler, G.F. (2000). The Three Faces of Inquiry dalam *Inquiring into Inquiry Learning and Teaching in Science* (J. Minstrell dan E. H. van Zee. Eds). Washington : American Association for the Advance of Science.

- White, B.Y. dan Frederiksen J.R. (2000). “Metacognitive Facilitation: An Approach to Making Scientific Inquiry Accessible to All” dalam *Inquiring into Inquiry Learning and Teaching in Science*. Washington: American Association for the Advance of Science.
- Widodo, A. (2004). *Constructivist Oriented Lessons The Learning Environments and the Teaching Sequences*. Frankfrut : Peter Lang Europascher verlag der Wissenschaften,
- Wiley, J. et al. (2009). “Source Evaluation, Comprehension, and Learning in Internet Science Inquiry Tasks. *American Educational Research Journal*. [Online] 46,(4), 1060–1106.. Tersedia: <http://aerj.aera.net>. [26 September 2010].
- Wilkens, H.J. (2011). Textbook approval systems and the Program for International Assessment (PISA) results: A preliminary analysis. *IARTEM e-Journal*. 4, (2), 63-74.
- Wong, S.L., et al. (2008). “Turning Crisis into Opportunity: Enhancing student-teachers’ understanding of nature of science and scientific inquiry through a case study of the scientific research in severe acute respiratory syndrome”. *International Journal of Science Education*. 30, (11), 1417–1439.
- Wright, J.M. (2008). “The Comparative Effects of Constructivist Versus Traditional Teaching Methods on the Environmental Literacy Postsecondary Nonscience Majors”. *Buletin of Science, technology & Society*. 25, 4, 324-337.
- Wu, Y-T .dan Tsai, C-C. (2005) Effects of constructivist oriented instruction on elementary school students’ cognitive structures. *Journal of Biological Education*, 39(3).113-118.
- Yore, L. et al. (2004). “Why do future scientists need to study the language arts” dalam *Crossing borders in literacy and science instruction: Perspectives on theory into practice*. Newark DE: International Reading Association.
- Yuenyong, C. dan Narjaikaew, P. (2009). “Scientific Literacy and Thailand Science Education”. *Interntaional Journal of Environment & Science Education*. 4, (3), 335-349.
- Zee, E.H. (2000). *Ways of Fostering Teachers’ Inquiries into Science Learning and Teaching*. dalam Inquiring into Inquiry Learning and Teaching in Science (J. Minstrell dan E. H. van Zee. Eds). Washington D.C.: American Association for the Advance of Science.

Zohar, A. (2000). "Inquiry Learning as Higher Order Thinking: Overcoming Cognitive Obstacles", dalam *Inquiring into Inquiry Learning and Teaching in Science*. Washington: American Association for the Advance of Science.

