

DAFTAR PUSTAKA

- Anderson, L.W. and Krathwohl, D.R. (2001). *A Taxonomy for Learning, Teaching, and Assessing*. New York: Addison Wesley Longman, Inc
- Alexander, P. (1963). *Sensationalism and scientific explanation*.
- Ainsworth, S., Prain, V., & Tytler, R. (2011). *Drawing to learn in science*. *Science*, 333, 1096-1097.
- Arikunto, S. (2013). *Prosedur Penelitian: Suatu pendekatan praktik*. Jakarta, PT Rineka Cipta.
- Ashkenazi, G., & Weaver G.C., (2007). *Interactive Lecture Demonstrations As A Context For Classroom Discussion: Effective Design and Presentation*. *Chemistry Education Research and Practice*, **8**. 186-196.
- Ashkenazi, G., & Weaver, G. C. (2007). *Using lecture demonstrations to promote the refinement of concepts: the case of teaching solvent miscibility*. *Chemistry Education Research and Practice*, 8(2), 186-196.
- Atila, M. E., Gunel, M., & Buyukasap, E. (2010). *The Effect of Using Different Multi Modal Representations within Writing to Learn Activities on Learning Force and Motion Unit at the Middle School Setting*. *Journal of Turkish Science Education*, 7(4), 113.
- Atasoy, S. (2013). *Effect of Writing-to-Learn Strategy on Undergraduates' Conceptual Understanding of Electrostatics*. *The Asia-Pacific Education Researcher*, 22(4), 593-602.
- Baxter, G. P., Bass, K. M., & Glaser, R. (2000). *An Analysis of Notebook Writing in Elementary Science Classrooms*. CSE Technical Report.
- Bell, P., & Linn, M. C. (2000). *Scientific arguments as learning artifacts: Designing for learning from the web with KIE*. *International Journal of Science Education*, 22(8), 797-817.
- Bodner, G. M. (2001). *Why lecture demonstrations are 'exocharmic' for both students and their instructors*. *University Chemistry Education*, 5(1), 31-35.
- Braxton, E. (2010). *The implementation of Interactive Science Notebooks and the effect it has on students writing*.
- Braithwaite, R. B. (1953). *Scientific explanation: A study of the function of theory, probability and law in science*. CUP Archive.

Sri Sulastri, 2017

IMPLEMENTASI NON TRADITIONAL WRITING TASK YANG DISISIPKAN PADA MODEL INTERACTIVE LECTURE DEMONSTRATION UNTUK MENINGKATKAN KEMAMPUAN KOGNITIF, SCIENTIFIC EXPLANATION DAN KETERAMPILAN MENULIS SISWA MTS PADA TOPIK KALOR

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- Bereiter, C., & Scardamalia, M. (1987). *The psychology of written composition*. Hillsdale, NJ: Lawrence Erlbaum.
- Brewer, W. F., Chinn, C. A., & Samarapungavan, A. (1998). *Explanation in scientists and children*. *Minds and Machines*, 8(1), 119-136.
- Braaten, M., & Windschitl, M. (2011). *Working toward a stronger conceptualization of scientific explanation for science education*. *Science Education*, 95(4), 639-669.
- Bundu, P. (2006). *Penilaian Keterampilan Proses dan Sikap Ilmiah dalam Pembelajaran Sains di SD*. Jakarta: Depdiknas
- Cohen, J. (1977). *Statistical power analysis for the behavioural sciences (Rev. ed.)*. New York: Academic.
- Creswell, J.W. (2009). *Research Design : Qualitative, Quantitative and Mixed Method Approach, Third Edition*. California : SAGE Publication
- Chuang & Hung. (2011). *Enhancement of elementary school students's science learning by web-quest supported science writing*. *US China Education Review*. A 7, hlm.977-985
- Dixon-Krauss, L. (1996). *Vygotsky's sociohistorical perspective on learning and its application to western literacy instruction*. In L. Dixon-Krauss (Ed.), *Vygotsky in the classroom: Mediated literacy instruction and assessment* (pp. 7–24). White Plains, NY: Longman
- Driver, R., Newton, P., & Osborne, J. (2000). *Establishing the norms of scientific argumentation in classrooms*. *Science Education*, 84, 287–312.
- Dym, C. L., Agogino, A. M., Eris, O., & Frey, D. D., & Leifer, L. J. (2005). *Engineering design thinking, teaching, and learning*. *Journal of Engineering Education*, 94(1), 103-120.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (1993). *How to design and evaluate research in education (Vol. 7)*. New York: McGraw-Hill.
- Friedman, M. (1974). *Explanation and scientific understanding*. *The Journal of Philosophy*, 5-19.
- Fulwiver, R.B. (2007). *Writing in Science, How to Scaffold Instruction to Support Learning*. Heinemann :Portsmouth,NH.
- Galbraith, D. (1999). *Writing as a knowledge-constituting process*. In: D. Galbraith & M. Torrance (Eds.) *Knowing what to write: Conceptual processes in text production* (pp. 139–159). Amsterdam: Amsterdam University Press.

- Galbraith, D., & Torrance, M. (1999). *Knowing what to write: Conceptual processes in text production* (pp. 139– 159). Amsterdam: Amsterdam University Press.
- Gunel, M., Hand, B., & McDermott, M. A. (2009). *Writing for different audiences: Effects on high-school students' conceptual understanding of biology*. *Learning and instruction*, 19(4), 354-367.
- Hake, R. R. (1998). *Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses*. *American journal of Physics*, 66(1), 64-74.
- Hake, R. R. (1999). *Analyzing change/gain scores*. Unpublished.[online] URL: <http://www.physics.indiana.edu/~sdi/AnalyzingChange-Gain.pdf>.
- Hand, B., Lawrence, C., & Yore, L. D. (1999). *A writing in science framework designed to enhance science literacy*. *International journal of science education*, 21(10), 1021-1035.
- Hand, B., Norton-Meier, L., Staker, J., & Bintz, J. (2009). *Negotiating science: The critical role of argument in student inquiry, grades 5–10*. Portsmouth, NH: Heinemann.
- Hand, B., & Choi, A. (2010). *Examining the impact of student use of multiple modal representations in constructing arguments in organic chemistry laboratory classes*. *Research in Science Education*, 40, 29-44.
- Hempel, C. (2009). *Scientific Explanation*. *Philosophy of Science: An Historical Anthology*, 344.
- Hintikka, J. (1968). *The varieties of information and scientific explanation*. *Studies in Logic and the Foundations of Mathematics*, 52, 311-331.
- Holmes, F. L. (1987). *Scientific writing and scientific discovery*. *Isis*, 78(2), 220-235.
- Hohenshell, L. M., & Hand, B. (2006). *Writing-to-learn Strategies in Secondary School Cell Biology: A mixed method study*. *International Journal of Science Education*, 28(2-3), 261-289.
- Istiqlal, M.E. (2013). *Penerapan Strategi Literasi Pada Pembelajaran Bertema Ultrasound Untuk Meningkatkan Literasi Fisika Siswa SMP*. Bandung :UPI
- Jewett, S. (2000). *Fisika Untuk Sains dan Teknik (Buku 2, Edisi 6)*. Jakarta : Salemba Teknika

- Katherine L. M. (2008). *Inquiry and Scientific Explanations: Helping Students Use Evidence and Reasoning*. Boston College Joseph Krajcik University of Michigan
- Klein, P. (2006). *The challenges of scientific literacy: From the viewpoint of second-generation cognitive science*. *International Journal of Science Education*, 28, 143–178.
- Klein, P. D., & Rose, M. A. (2010). *Teaching argument and explanation to prepare junior students for writing to learn*. *Reading Research Quarterly*, 45(4), 433-461.
- Kingir, Sevgi. (2013). *Using Non-traditional Writing as a Tool in learning chemistry*. *Eurasia Journal of Mathematics, Science & Technology Education* 9.2, 101-114.
- Krathwohl, D. R., & Anderson, L. W. (2010). *Merlin C. Wittrock and the revision of Bloom's Taxonomy*. *Educational psychologist*, 45(1), 64-65.
- Kuhn, D. (1991). *The skills of argument*. Cambridge, England: Cambridge University Press.
- Kuhn, D. (1993). *Science as argument: Implications for teaching and learning scientific thinking*. *Science Education*, 77, 319–338.
- Kuswana, WS. (2012). *Taksonomi kognitif: Perkembangan ragam berpikir*. Bandung: PT Remaja Rosdakarya
- Mazzolini, A.P., Daniel, S., & Edward, T. (2012). *Using Interactive Lecture Demonstration to Improve Conceptual Understanding or Resonance in Electronics Course*. *Australasian Journal of Engineering Education*, 2012, 18 (1), 69-88.
- Mazzolini, A.P., Edward, T., O'Donoghue, Peter, Nopparatjamjomras. (2010). *Using Interactive Lecture Demonstration Student Learning in Electronics*. [Online]. *Proceeding AAEC Conference*, 2010, 417-422.
- McDermott, M. A., & Hand, B. (2010). *A secondary reanalysis of student perceptions of non-traditional writing tasks over a ten year period*. *Journal of Research in Science Teaching*, 47(5), 518-539.
- McDermott, M. A., & Kuhn, M. (2011). *Using writing for alternative audiences in a college integrated science course*. *Journal of College Science Teaching*, 41(1), 40-45.
- McDermott, M. A., & Hand, B. (2013). *The impact of embedding multiple modes of representation within writing tasks on high school students' chemistry understanding*. *Instructional Science*, 41(1), 217-246.

Sri Sulastri, 2017

IMPLEMENTASI NON TRADITIONAL WRITING TASK YANG DISISIPKAN PADA MODEL INTERACTIVE LECTURE DEMONSTRATION UNTUK MENINGKATKAN KEMAMPUAN KOGNITIF, SCIENTIFIC EXPLANATION DAN KETERAMPILAN MENULIS SISWA MTS PADA TOPIK KALOR

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- McGrath, M. B., & Brown, J. R. (2005). *Visual learning for science and engineering*. Computer Graphics and Applications, IEEE, 25(5), 56-63.
- McNeill, K. L., Lizotte, D. J., Krajcik, J., & Marx, R. W. (2006). *Supporting students' construction of scientific explanations by fading scaffolds in instructional materials*. The Journal of the Learning Sciences, 15(2), 153-191.
- McNeill, K. L., & Krajcik, J. (2008). *Scientific explanations: Characterizing and evaluating the effects of teachers' instructional practices on student learning*. Journal of research in science teaching, 45(1), 53-78..
- McNeill, K. L., & Krajcik, J. S. (2011). *Supporting Grade 5-8 Students in Constructing Explanations in Science: The Claim, Evidence, and Reasoning Framework for Talk and Writing*. Pearson
- Melida, H. N., Sinaga, P., & Feranie, S. (2016). *Implementasi Strategi Writing to Learn untuk Meningkatkan Kemampuan Kognitif dan Keterampilan Berpikir Kritis Siswa SMA pada Materi Hukum Newton*. JPPPF, 2(2), 31-38.
- Michigan Science Teacher Association and Office of School Improvement. (tt). *Writing across curriculum*. Michigan Science Teacher Association
- National Committee on Science Education Standards and Assessment, National Research Council.1996. ISBN: 0-309-54985-X, 272
- Norris, E., Mokhtari, K., & Reichard, C. (1998). *Children's use of drawing as a pre-writing strategy*. Journal of Research in Reading, 21(1), 69-74.
- Norris, S. P., Guilbert, S. M., Smith, M. L., Hakimelahi, S., & Phillips, L. M. (2005). *A theoretical framework for narrative explanation in science*. Science Education, 89(4), 535-563.
- Osborne, J. F., & Patterson, A. (2011). *Scientific argument and explanation: A necessary distinction?*. Science Education, 95(4), 627-638.
- Peterson, S., & Rochwerger, L. (2006). *Cross-curricular literacy: Writing for learning in a science program*.
- Prain, V., & Hand, B. (1996). *Writing and learning in secondary science: Rethinking practices*. Teacher and Teacher Education, 12, 609-626.
- Prain, V. (2007). *The role of language in science learning and literacy*. In C. S. Wallace, B. Hand, & V. Prain (Eds.), *Writing and learning in the science classroom* (pp. 33-45). Dordrecht, The Netherlands: Springer.

Sri Sulastri, 2017

IMPLEMENTASI NON TRADITIONAL WRITING TASK YANG DISISIPKAN PADA MODEL INTERACTIVE LECTURE DEMONSTRATION UNTUK MENINGKATKAN KEMAMPUAN KOGNITIF, SCIENTIFIC EXPLANATION DAN KETERAMPILAN MENULIS SISWA MTS PADA TOPIK KALOR

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- Prain, V., & Hand, B. (2006). Language, learning and science literacy.
- Ramage, K., & Stokes, L. (2012). *Helping Students Learn Science Through Writing and Writing Through Science*. Inverness Research
- Rivard, L. P., & Straw, S. B. (2000). *The effect of talk and writing on learning science: An exploratory study*. *Science Education*, 84, 566–593.
- Rogers, L., & Graham, S. (2008). *A meta-analysis of single subject design writing intervention research*. *Journal of Educational Psychology*, 100 (4), 879–906.
- Rohwer, W.D., & Sloane, K. (1994). *Psychological Perspectives*. In Anderson, L.W., & Sosiak, L.A (Eds), *Bloom's Taxonomy: A Forty-year Retrospective, Ninety-third Yearbook of the National Society for the Study*
- Rowell, P. M. (1997). Learning in school science: The promises and practices of writing.
- Ruiz-Primo, M. A., Li, M., Ayala, C., & Shavelson, R. J. (2004). *Evaluating students' science notebooks as an assessment tool*. *International Journal of Science Education*, 26(12), 1477-1506.
- Ruiz-Primo, M. A., Li, M., Tsai, S. P., & Schneider, J. (2010). *Testing one premise of scientific inquiry in science classrooms: Examining students' scientific explanations and student learning*. *Journal of Research in Science Teaching*, 47(5), 583-608.
- Sadler, T. D., Chambers, F. W., & Zeidler, D. L. (2004). *Student conceptualizations of the nature of science in response to a socioscientific issue*. *International Journal of Science Education*, 26(4), 387-409.
- Salmon, W. C. (1978, August). *Why ask, "Why?"? An inquiry concerning scientific explanation*. In *Proceedings and addresses of the American Philosophical Association* (Vol. 51, No. 6, pp. 683-705). American Philosophical Association.
- Salmon, W. C. (1984, January). *Scientific explanation: Three basic conceptions*. In *PSA: Proceedings of the biennial meeting of the philosophy of science association* (Vol. 1984, No. 2, pp. 293-305). Philosophy of Science Association.
- Salmon, W. C. (1985). *Conflicting conceptions of scientific explanation*. *The Journal of philosophy*, 82(11), 651-654.
- Sandoval, W. A., & Reiser, B. J. (2004). *Explanation-driven inquiry: Integrating conceptual and epistemic scaffolds for scientific inquiry*. *Science education*, 88(3), 345-372.

Sri Sulastri, 2017

IMPLEMENTASI NON TRADITIONAL WRITING TASK YANG DISISIPKAN PADA MODEL INTERACTIVE LECTURE DEMONSTRATION UNTUK MENINGKATKAN KEMAMPUAN KOGNITIF, SCIENTIFIC EXPLANATION DAN KETERAMPILAN MENULIS SISWA MTS PADA TOPIK KALOR

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- Sandoval, W. A., & Millwood, K. A. (2005). *The quality of students' use of evidence in written scientific explanations*. *Cognition and instruction*, 23(1), 23-55.
- Sinaga, P. (2014). Pengembangan Program Perkuliahan Fisika Sekolah III untuk Meningkatkan Kompetensi Menulis Materi Ajar Calon Guru Menggunakan Multi Modus Representasi. Disertasi Pendidikan IPA. Bandung : UPI
- Sinaga, P., & Feranie, S. (2017). *Enhancing Critical Thinking Skills and Writing Skills through the Variation in Non-Traditional Writing Task*. *International Journal of Instruction*, 10(2).
- Siswanto. (2014). *Penerapan Model Pembelajaran Pembangkit Argumen Menggunakan Metode Saintifik untuk Meningkatkan Kemampuan Kognitif dan Keterampilan Berargumentasi Siswa SMA*. Tesis Pendidikan Fisika. Bandung : UPI
- Šlekienė, V., & Ragulienė, L. (2010). *The learning physics impact of interactive lecture demonstrations*. *Problems of Education in the 21st Century*, 24, 120- 129.
- Sokoloff, D. R., & Thornton, R. K. (2004). *Interactive lecture demonstrations : active learning in introductory physics*. Hoboken, N.J.: Hoboken, N.J. : John Wiley.
- Sugiyono. (2015). *Metode Penelitian untuk Pendidikan*. Bandung : Alfabeta
- Sugiyono. (2015). *Statistika untuk Penelitian*. Bandung: Alfabeta
- Thalheimer, W., & Cook, S. (2002). *How to calculate effect sizes from published research: A simplified methodology*. *Work-Learning Research*, 1-9
- Trout, J. D. (2002). *Scientific explanation and the sense of understanding*. *Philosophy of Science*, 69(2), 212-233.
- Tsai, C. Y. (2015). *Improving students' PISA scientific competencies through online argumentation*. *International Journal of Science Education*, 37(2), 321-339.
- van Eemeren, F. H., Grootendorst, R., Henkemans, F. S., Blair, J. A., Johnson, R. H., Krabbe, E. C. W., et al. (1996). *Fundamentals of argumentation theory: A handbook of historical backgrounds and contemporary developments*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Wattanawasiwich, P., Khamcharean, C., Taleab, P., & Sharma, M. (2012). *Interactive Lecture Demonstration in Thermodynamics*. *Lat. Am. J. Phys. Educ.* Vol. 6, NO. 4. Dec. 2012.

Sri Sulastri, 2017

IMPLEMENTASI NON TRADITIONAL WRITING TASK YANG DISISIPKAN PADA MODEL INTERACTIVE LECTURE DEMONSTRATION UNTUK MENINGKATKAN KEMAMPUAN KOGNITIF, SCIENTIFIC EXPLANATION DAN KETERAMPILAN MENULIS SISWA MTS PADA TOPIK KALOR

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- Weber, E., Van Bouwel, J., & De Vreese, L. *Scientific Explanation*.
- Wist, Caroline C. (tt). *Putting it all together; Understanding the research behind interactive notebooks*. School of Education, Curriculum and Instruction Elementary
- Wulandari, N. (2015). *Implementasi Model Problem Based Learning pada Pembelajaran IPA Terpadu untuk Meningkatkan Literasi Sains dan Keterampilan Pemecahan Masalah Siswa SMP pada Materi Kalor*. Tesis Pendidikan IPA. Bandung : UPI
- Yore, L. D., Bisanz, G. L., & Hand, B. M. (2003). *Examining the literacy component of science literacy: 25 years of language arts and science research*. *International Journal of Science Education*, 25(6), 689-725.
- Yore, L., & Treagust, D. (2006). *Current realities and future possibilities: Language and science literacy– empowering research and informing instruction*. *International Journal of Science Education*, 28 (2), 291–314.
- Young, J. (2003). *Science interactive notebooks in the classroom*. *Science Scope*, 26(4), 44-57.
- Zimrot, R., & Askenazi, G. (2007). *Interactive Lecture Demonstrations: A Tool for Exploring and Enhancing Conceptual Change*. [Online]. *Chemistry Education Research and Practice*, 8 (2), 197-211.
- Zohar, A., & Nemet, F. (2002). *Fostering students' knowledge and argumentation skills through dilemmas in human genetics*. *Journal of research in science teaching*, 39(1), 35-62.