

DAFTAR PUSTAKA

- Abdurrahman, *et al.* (2011). *Implementasi Pembelajaran Berbasis Multi Representasi Untuk Peningkatan Penguasaan Konsep Fisika Kuantum*. Cakrawala Pendidikan, Februari 2011, Th. XXX, No. 1
- Agina, T.N. (2005). *The Relevance of Instructional Materials in Teaching and Learning in Robert-Okah*. I & Uzoeshi, K.C. (Ed). *Theories are Practice of Teaching*, Port Harcourt: Harey Publication
- Aina. (2013). *Instructional Materials and Improvisation in Physics Class: Implications for Teaching and Learning*. *IOSR Journal of Research & Method in Education (IOSR-JRME)*. Volume 2, Issue 5
- Ainsworth, S. (1999). *The functions of multiple representations*. *Computers & Education*, 33(2-3), 131-152
- Akbar, S. (2011). *Pengembangan Kurikulum dan Pembelajaran Ilmu Pengetahuan Sosial*. Yogyakarta: Cipta Media.
- Akinmoyewa J.O. (1997). *Educational Teaching Onitsha*: Lincel Publishers
- Alonso & Finn. (2000). *Dasar-dasar Fisika Universitas* (alih bahasa: Lea Prasetyo dan Kusnul Hadi). Jakarta: Penerbit Erlangga
- Altan, M, (2014). *Effectiveness of Multiple Representations for Learning Energy Concepts: Case of Turkey*. *Procedia* Volume 116
- Amit, M & Fried, M.N. (2005). *Multiple Representations in 8th Grade Algebra Lesson: Are Learners Getting in*. *Proceedings of the 29th Conference of International Group for the Psychology of Mathematic Education*
- Amodu, (2014). *Towards Effective Teaching of Physics Through the Use of Relevant Instructional Materials*. *International Journal Of Multidisciplinary Sciences And Engineering*, Vol. 5, No. 3
- Anderson. W. L and Krathwohl. R. D. (2001). *A Taxonomi for Learning, Teaching and Aesessing. A Revision of Bloom's Taxonomy of Educational Objectives*. USA: Addison Wesley Longman
- Angell, C. O, Guttersrud, dan Henriksen, E. (2007). *"Multiple representations as a framework for a modelling approach to physics education"*. Department of Physics, University of Oslo, NORWAY, and Per Morten Kind, School of Education, Durham University, UK
- Anwar, S. (2014). *Pengolahan Bahan Ajar. Bandung: Program Pasca Sarjana Universitas Pendidikan Indonesia*

- Arifin, M. (1984). *Pengembangan Program Pengajaran Bidang Studi Kimia*. Surabaya: Airlangga Press
- Arikunto, S (2002). *Prosedur Penelitian, Suatu Pendekatan Praktek*. Jakarta: PT Rineka Cipta
- Arikunto, S. (2013). *Dasar-Dasar Evaluasi Pendidikan*. Jakarta: Bumi Aksara
- Baharuddin. (1982). *Peranan Kemampuan Dasar Intelektual Sikap dan Pemahaman dalam Fisika terhadap Kemampuan Siswa di Sulawesi Selatan Membangun Model Mental*. Disertasi Doktor FPS IKIP Bandung, IKIP Bandung
- Benny, A. (2009). *Desain Pembelajaran*. Jakarta
- Borg & Gall. (2010). *Appling Educational Research*. Pearson: USA
- Buhari, B. (2010). *Four-D Model (Model Pengembangan Perangkat Pembelajaran Thiagarajan)*
- Chambliss, M.J, & Calfae, R.C. (1989). *Designing Science Textbook to Enhance Student Understanding*. Educational Psychologist
- Chingos, M. M dan Whitehurst, G. J. (2012). *Choosing Blindly Instructional Materials, Teacher Effectiveness, And The Common Core*: Brown Centre
- Cote, D. L, (2010). *Increasing skill performances of problem-solving in students with intellectual disabilities*. Dissertation University of Nevada
- Dabutar, J. (2007). *Pengaruh Media Pembelajaran terhadap Hasil Belajar*. UPI
- Dahar, R.W. (2011). *Teori-teori Belajar*. Jakarta. Erlangga
- Degeng, S. N. (1998). *Teori Pembelajaran 2: Terapan*. Program. Magister Manajemen Pendidikan Universitas Terbuka
- Djamarah, dkk. (2002). *Strategi Belajar Mengajar*. Jakarta: PT. Rineka Cipta
- Ellison, J. G, (2009). *Increasing Problem Solving Skills in Fifth Grade Advanced Mathematics Students*. Journal of Curriculum and Instruction Volume 3 Number 1
- Emmanuel. (2015). *Influence of Improvisedteaching Instructional Materials on Chemistry Students' Performance in Senior Secondary Schools in*

Vandeikya Local Government Area of Benue State, Nigeria. International Research in Education Vol. 3, No. 1

Eniayeju, I. E. (2005). *Improvisation of Effective Learning of Physics: The Asaba Education Technical and Science Education Journal*, 1 (1), 92-93

Fitri, dkk. (2007). pengembangan modul fisika berbasis domain pengetahuan sains untuk mengoptimalkan minds-on siswa SMA. Tesis. UPI

Fraenkel, J.R & Wallen, N.E. (1990). *How to Design and Evaluate Research in Education*. New York. Mc. Grow Hill Pub Co

Gagne, dkk. (1987). *Principles of Instructional Design (5th ed.)*. Belmont: Wadsworth/Cengage Learning

Gerace, W.J, *et al.* (2005). *Teaching vs. Learning: Changing Perspectives on Problem Solving in Physics Instruction*

Gobert, J. D., & Clement, J. J. (1999). *Effects of student-generated diagrams versus student-generated summaries on conceptual understanding of causal and dynamic knowledge in plate tectonics*. Journal of Research in Science Teaching, 36(1), 39–53

Gok. T & Silay. I. (2010). “*The Effects Of Problem Solving Strategies On Students Achievement, Attitude and Motivation*”. International Journal Science and Mathematic Education

Gulo. W. (2002). *Metode Penelitian*. Jakarta: PT. Grasindo

Hake, R.R. (1998). *Interactive-engagement vs traditional method: A six-thousand students survey of mechanic test data for introductory physics course*. American Journal of Physics, 66, 64-74

Haryanto. (2006). *Pengembangan Bahan Ajar Untuk Peningkatan Kualitas Pembelajaran Program Pendidikan Pembelajaran Sekolah Dasar*. Tesis

Heller, et al (1992). *Teaching Problem Solving Through Cooperative Grouping*. American Journal of Physics

Henny. (2014). *Penerapan Pembelajaran Generatif dengan Strategi Problem Solving untuk Meningkatkan Pemahaman Konsep dan Kemampuan Pemecahan Masalah Siswa SMA pada Materi Fluida Statis*. Tesis Pendidikan IPA Pascasarjana UPI

Hidayati, (2009). *Pengembangan modul pembelajaran kimia SMA/MA Kelas x semester 1 pada pokok bahasan ikatan kimia Model learning cycle 5-e sebagai penunjang kurikulum tingkat satuan pendidikan*. Skripsi. Jurusan

- Hudoyo, Herman. (1979). *Teori Dasar Belajar Mengajar*. Jakarta: Depdikbud
- Ibrahim, M dan Nur, M. (2005). *Pengajaran Berdasarkan Masalah*. Surabaya: University Press.
- Igwe, I. O., Arop, B. A. & Ibe, J. O. (2013). *Problems of Improvising Instructional Materials for the Teaching and Learning of Chemistry*. STAN Annual Conference
- Ilyas, (2007). *Model Pembelajaran Berbasis Inkuiri untuk Meningkatkan Pemahaman Konsep dan Kemampuan Pemecahan Masalah pada Konsep Listrik dinamis*. Tesis Pendidikan IPA Pascasarjana UPI
- Intan, W.I. (2009). *Pendekatan Pemecahan Masalah pada Pembelajaran Larutan Penyangga untuk Meningkatkan Keterampilan Berpikir Kritis Siswa SMA*. Tesis. UPI
- Irwandani (2014). *Multi Representasi Sebagai Alternatif Pembelajaran Dalam Fisika*. Disertasi IAIN Raden Intan Lampung
- Isola, O.M. (2010). *Effects of Standardized and Improvised Instructional Materials Students' Academic Achievements in Seconadry School Physics*. M. Ed Thesis, University of Ibadan, Ibadan
- Joni, R. (1984). *Pengukuran dan penilaian pendidikan*. Surabaya : Karya Anda
- Joseph, S. F., & Gayle, N. (1998). *Integrating multiple teaching methods into a general chemistry classroom*. *Journal of Chemical Education*, 75(2), 210–213
- Kesidou, S., & Roseman, J. E. (2002). *How well do middle school science programs measure up? Findings from Project 2061's curriculum review*. *Journal of Research in Science Teaching*, 39(6)
- Kohl, P.B., D. Rosengrant and ND. Finkelstein. (2007). *“Strongly and weakly directed approaches to teaching multiple representation use in physics”*. *Physical Review Special Topics-Physics Education Research* 3, 010108.
- Kollofel, B. (2012). *Exploring The Relation Between Visualizer–Verbalizer Cognitive Styles And Performance With Visual Or Verbal Learning Material*. Elsevier, Computer and Education

- Komalasari, K. 2010. *Pembelajaran Kontekstual: Konsep dan Aplikasi*. Bandung: Refika Aditama
- Lemke, J. (1998). *Multiplying meaning: Visual and verbal semiotics in scientific text*. In J. R. Martin & R. Veel (Eds.), *Reading science* (pp. 87–113). London: Routledge
- Lestari, I. 2013. *Pengembangan Bahan Ajar Berbasis Kompetensi*. Jakarta: Akademia Permata
- Loorbach, N. (2015). *Validation of the Instructional Materials Motivation Survey (IMMS) in a self-directed instructional setting aimed at working with technology*. *British Journal of Educational Technology* Vol 46 No 1
- Mboto, F. A., Ndem, N. U. & Stephen, U. (2011). *Effects of Improvised materials on Student's Achievement and Retention of the Concept of Radioactivity*. *African Research Review, An International Multi-Disciplinary Journal*, Ethiopia, 5(1), 342-348
- Megbo, (2015). *Evaluation of Modern Development in Teaching and Learning Process through Instructional Materials Utilization*. *International Journal of Multidisciplinary Research and Development*. Volume: 2, Issue: 9
- Meriza, N. (2015). *Pengembangan Bahan Ajar IPA Terpadu dengan Tema Gerak Benda Angkasa Menggunakan Four Step Teaching Material Development untuk Meningkatkan Literasi Sains*. Tesis. Universitas Pendidikan Indonesia
- Moronfola, B. (2002). *Effects of Instruction Resources on the Academic Achievements of Secondary School Students in Ilorin Local Government of Kwara State*. Thesis
- Muhaimin dkk, 2009. *Pengembangan model Kurikulum Tingkat Satuan Pendidikan (KTSP) pada Sekolah dan Madrasah*. Raja wali press. Jakarta
- Nguyen, D.H., E. Gire, and N.S. Rebello. (2009). *“Facilitating students problem solving across multiple representations in introductory mechanics”*. Department of Physics, 116 Cardwell Hall, Kansas State University, Manhattan
- Nurhadi. 2002. *Pendekatan Kontekstual. (Contextual Teaching and Learning CTL)*. Departemen Pendidikan nasional
- Oladejo, M. A., Olosunde, G. R., Ojebisi, A. O. & Isola, O. M. (2011). *Instructional Materials and Student Academic Achievement in Physics*,

Some Policy Implications. European Journal of Humanities and Social Science, 2(1), 187-190

- Omosowo, I.A. (1980). *Vocational Education in Nigeria, Lagos*. Longman Publication
- Onasanya. (2011). *Selection and Utilization of Instructional Media for Effective Practice Teaching*. Instit. Stud. Edu
- Osarizalsyam. (2006). *Penerapan Model Pembelajaran Kooperatif Tipe Two Stay Two Stray pada Konsep Komponen Ekosistem, Peran, dan Interaksinya untuk Meningkatkan Kemampuan Pemecahan Masalah Siswa SMP*. Tesis PPs UPI Bandung
- Plomp, T. (1997). *Educational and Training System Design*. Enschede, The Netherlands: University of Twente.
- Prastowo, A. (2011). *Panduan Kreatif Membuat Bahan Ajar Inovatif*. Jakarta: Diva Press
- Pribadi, B. A. (2011). *Model Desain Sistem Pembelajaran*. Jakarta: Dian Rakyat
- Redhana, I. W & Sastra Widana. (2003). *Pembelajaran Generatif dengan Strategi Pemecahan Masalah untuk Meningkatkan Kualitas Pembelajaran Kimia Dasar II*. Jurnal Pendidikan IKIP Singaraja
- Reif, F. (1995). Millikan Lecture 1994: “*Understanding and Teaching Important Scientific Thought Processes*”. American Journal Physics
- Reigeluth. (1987). *Instructional Theories in Action*. Hillsdale. New Jersey: Lawrence Erlbaum Associates
- Rosengrant, D., E. Etkina, and A.V. Heuvelen. (2005). in *Proceedings of the 2005 PERC*. AIP Conference :Proceedings
- Sahat, S. (2014). *The Improving of Problem Solving Ability and Students' Creativity Mathematical by Using Problem Based Learning in SMP Negeri 2 Siantar*. Journal of Education and Practice Vol.5, No.35, 2014
- Sahyudin. (2014). *Meningkatkan Kemampuan Pemecahan Masalah Matematis dan Berpikir Kreatif Melalui Pembelajaran Diskursus Multi Representasi*. Tesis Pendidikan Matematika Pascasarjana UPI
- Santrock, J.W. (2010). *Psikologi Pendidikan*. Jakarta: Kencana
- Sari, A. (2015). *Pembelajaran dengan Multi Representasi untuk meningkatkan Penguasaan Konsep dan Kemampuan Pemecahan Masalah Siswa SMA pada Materi Hukum II Newton*. Universitas Negeri Malang. Tesis

- Setyosari. (2010). *Metode Penelitian Pendidikan dan Pengembangan*. Malang: Kencana
- Sinaga, et al. (2014). *Improving the Ability of Writing Teaching Materials and Self-Regulation of Pre-Service Physics Teachers through Representational Approac*. International Journal of Sciences: Basic and Applied Research (IJSBAR)
- Snetinova, M. (2012). *Students' Difficulties in Solving Physics Problems*. WDS'12 Proceedings of Contributed Papers, Part III
- Sudjana, N. (1990), *Media Pengajaran*. Bandung: Sinar Baru
- Sudjimat, D.A. (1995). *Pembelajaran Pemecahan Masalah*. Tinjauan Singkat Berdasarkan Kognitif. Jurnal Pendidikan Matematika dan Ilmu Pengetahuan Alam. IKIP Malang
- Sugiarto. (2011). *Landasan Pengembangan Bahan Ajar*. Materi Workshop Penyusunan Buku Ajar Bagi Dosen Politeknik Kesehatan Kemenkes Semarang
- Sugiyoyo. (2015). *Skripsi, Tesis dan Disertasi*. Bandung: Alfabeta
- Sugiyoyo. (2009). *Statistika untuk Penelitian*. Bandung: Alfabeta
- Sugiyoyo. (2010). *Metode Penelitian Pendidikan*. Bandung: Alfabeta
- Sumaji, et al. (1998). *Pendidikan Sains yang Humanistis*. Yogyakarta: Kanisius
- Tarigan, D & Tarigan. (1986). *Teknik Pengajaran Keterampilan Berbahasa*. Bandung: Angkasa
- Thiagarajan, S. Dkk. (1974). *Instructional Development for Training Teachers of Exeptional Children: A Sourcebook*. Indiana: Indiana University
- Toharudin, U. (2005). *Kompetensi Guru Dalam Strategi Ajar*. Online Tersedia pada <http://www.pikiranrakyat.com/cetak/2005/1005/24/0803.htm> [diakses 20 November 2015]
- Utibe, (2015). *Problems Of Improvising Instructional Materials For The Teaching And Learning Of Physics In Akwa Ibom State Secondary Schools, Nigeria*. British Journal of Education Vol.3, No.3
- Waldrip, B, dkk. (2010). *Using Multi-Modal Representations to Improve Learning In Junior Secondary Science*. International Journal of Science Education 40: 65-80

- Widianingtyas, dkk (2015). *Pengaruh Pendekatan Multi Representasi Dalam Pembelajaran Fisika Terhadap Kemampuan Kognitif Siswa Sma*. JPPPF ISSN 2461-0933
- Woods, D.R. (1996). *Problem-based Learning especially in the Context of Large Classes*. Tersedia:<http://www.chemeng.mcmaster.ca/pbl/pbl.htm>.
- Wospakrik, H.J. dan Hendrajaya, L. (1993). *Dasar-dasar Matematika untuk Fisika*. Jakarta : Ditjen Dikti Depdikbud RI Proyek Pembinaan Tenaga Kependidikan Pendidikan Tinggi
- Yuliati, dkk. (2010). *Workshop Guru SMP MGMP IPA untuk Pengembangan Bahan Ajar Berbasis "Weblog Wordpress"*