

DAFTAR PUSTAKA

- Adams, R. S., Turns, J., & Atman, C.J. (2003). Educating effective engineering designers: The role of reflective practice. *Design Studies*, 24 (3), 275–294.
- Al-ali, S. And Ahmed, A. (2015). E-textbooks in ESL classrooms: are learners on board?. *Learning & Teaching in Higher Education: Gulf Perspectives*.
- Anderson, L.S., & Gilbride, K.A. (2003). Preuniversity outreach: encouraging students to consider engineering careers. *Global Journal of Engineering Education*. 7 (1), 87–93.
- Anderson, L. W. & Krathwohl, D. R. (Ed). (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. A bridged edition. New York: Longman.
- Anderson. (2007). *J. Heavy School Bags Linked to Back Problems: T hree Students Lobbying for Relief*. *Ergonomics Today* April 9, 2007. Diakses dari <http://www.ergoweb.com/news/detail.cfm?id=1716>.
- Anglin, G., Towers, R., & Moore, K. (1997). The effect of dynamic and static visuals on the recall and comprehension of information using computer-based instruction. *Journal of Visual Literacy*, 17 (2), 25-37.
- Arikunto, S. (2013). *Dasar-dasar Evaluasi Pendidikan, Edisi 2*. Jakarta: Bumi Aksara.
- Barret, B.S., Moran, A.L., & Woods, J.E. (2014). Meteorology meets engineering: an interdisciplinary STEM instructional material for middle secondary school students. *International Journal of STEM Education*. 1 (6), 5-6.
- Barret, B.S., Moran, A.L., & Woods, J.E. (2014). Meteorology meets engineering: an interdisciplinary STEM instructional material for middle secondary school students. *International Journal of STEM Education*. 1 (6), 5-6.
- Becker, K. & Park, K. (2011). Effects of integrative approaches among science, technology, engineering, and mathematics (STEM) subjects on students' learning: A preliminary meta-analysis. *Journal of STEM Education*. 12 (6), 23-37.
- Beneze, J.L. (2010). Promoting student-led science and technology projects in elementary teacher education: Entry into core pedagogical practices through technological design. *International Journal of Technology and Design Education*. 20 (1), 43-62.

- Berry, R., dkk. (2004). STEM initiatives: Stimulating students to improve science and mathematics achievement. *The Technology Teacher*. 64 (4), 23-29.
- Brohpy, S. (2008). Advancing Engineering Education in P-12 Classrooms. *Journal of Engineering Education*. 28 (3), 369-372.
- Byar, N. A. (1998). *Technological Literacy Classes: The State of the Art*. Department of Engineering Technology, University of North Carolina, Charlotte.
- Bybee, R. W. (2010). Advancing STEM education: A 2020 vision. *Tecnology and Engineering Teacher*, 70 (1), 30-35.
- Chandra, D.T., & Rustaman, N. (2009). Perkembangan Pendidikan Teknologi Sebagai Suatu Inovasi Pembelajaran pada Pendidikan Dasar di Indonesia. *Jurnal Pengajaran Matematika dan Ilmu Pengetahuan Alam*. 14 (2), 5-11.
- Dahar, R. W. (2006). *Teori-teori Belajar dan Pembelajaran*. Jakarta: Erlangga.
- David, R. (2011). What Are The Advantages Of e-Book Readers Over Print Books? Diakses dari <http://www.itrainharder.com/what-are-the-disadvantages-of-ebook-over-print-books>.
- Dimiyati & Mudjiono. (2006). *Belajar dan Pembelajaran*. Jakarta: Rineka Cipta.
- Dorval, M. & Pepin, M. (1986). Effect of playing a video game on a measure of spatial visualization. *Journal of Perceptual and Motor Skills*. 62, 159-162.
- Dugger, W. E (2001). Standards for Technologycal Literacy. *Phi Delta Kappan*. 82 (7), 513-517.
- Dugger, W. E. (2010). *Evolution of STEM in the United States*. International Technology an Engineering Asosiation. 1-8.
- Dym, C. dkk. (2005). Engineering design thinking, teaching, and learning. *Journal of Engineering Education*, 94 (1), 103-120.
- Ejiwale, J. A. (2012). Facilitating teaching and learning across STEM fields. *Journal of STEM Education*, 13 (3), 87-94.
- Embong, A. M. dkk. (2012). *E-Books as textbooks in the classroom*. *Procedia - Social and Behavioral Sciences*. 47, 1802 – 1809.
- English, L. D., & King, D.T. (2015). STEM learning through engineering design: fourth-grade students' investigations in aerospace. *International Journal of STEM Education*, 2 (14), 18-23.

- Firman, H. (2015). *Pendidikan Sains berbasis STEM: Konsep, Pengembangan, dan Peranan Riset Pascasarjana*. Seminar Nasional Pendidikan IPA: Bogor.
- Foasberg, N. M. (2011). Adoption of E-Book Readers among College Students: A Survey. *Information Technology and Libraries*. 30 (3), 108-128.
- Fojtik, R. (2015). Ebooks and mobile devices in education. *Procedia - Social and Behavioral Sciences*. 182, 742 – 745.
- Fraenkel, J. R. & Wallen, N. E. (2007). *How to Design and Evaluate Research in Education*. New York: McGraw-Hill.
- Figliano, F. (2007). *Strategies For Integrating STEM Content: A Pilot Case Study* (thesis). Virginia: Faculty of Virginia Polytechnic Institute and State University, Blacksburg,.
- Gallant, D. (2011). *Science, Technology, Engineering, and Mathematics (STEM) Education*. School of Education Policy and Leadership The Ohio State University.
- Garmire, E. & Pearson, G. (2006). *Tech Tally: Aproach to Asessing Technological Literacy*. National Academy of Science: Washington DC.
- Gueval, J. Tarnow, K., and Kumm, S. (2015). Implementing e-books: Faculty and student Experiences 1. *Teaching and Learning in Nursing*. 10, 181–185.
- Hake, Richard R. 1998. “Interactive-engagement vs traditional methods: A six-thousandstudent survey of mechanics test data for introductory physics courses”. *American Journal of Physics*. 66 (1) : 64-74
- Hashim. (1999). Quality Teaching Needs Quality Learning: A Consideration of What is Possible. *Issues in Education*. 22 ,1999.
- Hellman, E (2010) e-Book Summit Preview: Should Kids Get e-Books in School?. *Library Journal*. 12 (2), 1-20.
- Herschbach, D. R. (2011). The STEM initiative: Constraints and challenges. *Journal of Stem Teacher Education*. 48 (1), 96-122.
- Hey, j. H. G. dkk. (2007). Designing Mobile Digital Library Services for Pre-engineering and Technology Literacy. *International Journal of Engineering Education*. 23 (3), 441-453.
- Hirschhorn, J. S. (1947). Engineering and Nonengineering Student Attitudes Toward Technology. *Science Education*. 58 (1), 29-33.
- Honey, M., Greg, P., & Heidi, S. (2014). *STEM Integration in K-12 Education*. The National Academy of Science: Washington DC.

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

- Huang, S. (2015). High School Physics: An Interactive Instructional Approach that Meets the Next Generation Science Standards. *Journal of STEM Education*. 16 (1), 31-40.
- Hurley, M. (2001). Reviewing integrated science and mathematics: The search for evidence and definitions from new perspectives. *School Science and Mathematics*. 101 (1), 259–26.
- International Technology and Engineering Assosiation. (2010). Prss Release: *ITEA officially Becomes ITEEA*. Diakses dari www.itea.org/AboutITEEA/NameChange.pdf.
- ITEA. (2010). *Standards for Technological Literacy : Students Assesment, Professional Development, And Program Standards*, Reston, VA: Author.
- Jin, C. (2014). Adoption of e-book among College Students: The perspective of an integrated TAM. *Computers in Human Behavior*: 14, 471–477.
- Kang, Y. Y., Wang, M. J. J., and Lin, R. (2009). Usability evaluation of E-books. *Displays*. 30 (2), 49–52.
- Kemenakertrans. (2012) Kualitas Tenaga Kerja RI Rendah (2015, October 27). *Kualitas Tenaga Kerja RI Rendah*. Kementerian Perindustrian Republik Indonesia. Diakses dari <http://www.kemenperin.go.id/artikel/8161/Kualitas-Tenaga-Kerja-RI-Rendah>.
- Kemendikbud. (2013). *Lampiran Peraturan menteri pendidikan dan kebudayaan Nomor 68 Tahum 2013 tentang Kerangka dasar dan struktur kurikulum sekolah menengah pertama/madrasah tsanawiyah*. Jakarta : Kemendikbud.
- Kirkwood, M. (2000). Infusing higher-order thinking and learning to learn into content instruction: a case study of secondary computing studies in Scotland. *Journal of Curriculum Studies*. 32 (4), 509-535.
- Kolodner, L. (2002). Facilitating the learning of design practices: lessons from an inquiry into science education. *Journal of Industrial Teacher Education*, 39 (3), 9–40.
- Kor, H., Aksoy, H., & Erbay, H. (2014). Comparison of the Proficiency Level of the Course Materials (Animations, Videos, Simulations, E-Books) Used In Distance Education. *Procedia - Social and Behavioral Sciences*.14, 854 – 860.
- Krajcik, J. & Delen, I. (2016). How to Support Learners in Developing Usable and Lasting Knowledge of STEM. *International Journal of Education in Mathematics, Science and Technology*. 5 (1), 21-28.

- Kuenzi, J. J. (2006). *Science, Technology, Engineering, and Mathematics (STEM) Education Issues and Legislative Options*. Congressional Research Service: Washington DC.
- Lee, K. H. Guttenberg, N., & McCrary, V. (2002). Standardization aspects of eBook content formats. *Computer Standards & Interfaces*. 24 (3), 227 - 239.
- Lord, T. (1985). Enhancing the visuo-spatial aptitude of students. *Journal of Research in Science Teaching*, 22 (5), 395-405.
- Maccoby, E. & Jacklin, C. (1974). *The Psychology of Sex Differences*. The Stanford Press.
- Majid, A. (2014). *Implementasi Kurikulum 2013 Kajian teoritis dan Praktis*. Bandung: Interes Media.
- McCracken, T. (2005). *Black's Concise Atlas Of Human Anatomy*. London: A&C Black Publisher Ltd.
- McCuiston, P. (1990). Static vs. dynamic visuals in computer assisted instruction. *ASEE Annual Conference Proceedings*. 143-147.
- Meltzer, David E. 2002. "The Relationship between mathematics preparation and conceptual learning gain in physics: A possible "hidden variable" in diagnostic pretest scores". *American Journal of Physics*. 70 (12):1259-1268
- Mohler, J. L. (2001). *Using interactive multimedia technologies to improve Student understanding of spatially-dependent engineering Concepts*. Departement of Computer Graphics: Purdue University
- Morenou, T., Blanche, C., Tobin, L., and Gueguen N. (2003). The emergence of the contextual role of the e-book in cognitive processes through an ecological and functional analysis. *International Journal Human-Computer Studies*. 62 (3), 329 - 348.
- Mulholland, E. And Bates, J. (2014). Use and Perceptions of E-books by Academic Staff in Further Education. *The Journal of Academic Librarianship*. 40 (5), 492-499.
- Mundilarto. (2014). *IPA Terpadu 2 untuk SMP Kelas VIII*. Jakarta Selatan: Quadra.
- National Research Council. (2009). *Engineering In K-12 Education: Understanding The Status And Improving The Prospects*. Washington, DC: National Academies Press.

- National Assesment of Educational Progress. (2014). *2014 Abridged Technology and Engineering Literacy Framework*. National Assesment Governing Board.
- Newlin, C. W. (1979). The total concept of graphics and design in the engineering curriculum. *Engineering Design Graphics Journal*. 43 (2), 21-22.
- NGSS. (2013). *Next Generation Science Standards for States, By States*. Washinton DC: Archiver, Inc. 2013. Diakses dari <http://www.nextgenscience.org/>.
- Park, O. (1998). Visual displays and contextual presentations in computer-based instruction. *Educational Technology Research and Development*.46 (3), 37-50.
- Purwanto, B. (2012). *Eksplorasi Ilmu Alam untuk Kelas VIII SMP dan MTs*. Jakarta: PT Tiga Serangkai Pustaka Mandiri.
- Quinn, H., Heidi, S., & Thimas, K. (2012). *A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas*. Washington DC: The National Academies Press.
- Roberts, A. (2012) A justification for STEM education . *Technology and Engineering Teacher*, May/June.
- Rusman. (2009). *Teknologi Informasi dan Komunikasi dalam Pembelajaran*. Bandung: Universitas Pendidikan Indonesia.
- Rustaman. (2011). Pendidikan dan Penelitian Sains dalam Mengembangkan Keterampilan Berpikir Tingkat Tinggi untuk Pembangunan Karakter. *Seminar Nasional VIII Pendidikan Biologi*. Bandung: Universitas Pendidikan Indonesia.
- Sagala, S. (2013). *Konsep dan Makna Pebelajaran*. Bandung: Alfabeta.
- Sanders, M. E. (2009). Integrative STEM: Primer [in some places titled STEM, STEM Education, STEMmania]. *The Technology Teacher*, 68 (4), 20-26).
- Sanjaya, w. (2014). *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta: Prenada Media.
- Schnittka, C, and Bell, R. (2011). Engineering design and conceptual change in science: addressing thermal energy and heat transfer in eighth grade. *International Journal of Science Education*, 33 (13), 1861–1887.
- Setiawan, w. (2010). *Teori, Paradigma, Prinsip, dan Pendekatan Pembelajaran MIPA dalam Konteks Indonesia*. Bandung: Fakultas Pendidikan

Matematika dan Ilmu Pengetahuan Alam Universitas Pendidikan Indonesia.

- Small, M. & Morton, M. (1983). Spatial visualization training improves performance in organic chemistry. *Journal of College Science Teaching*. 12, 41-43.
- Sohn, W. S. dkk (2002). Standardization of eBook documents in the Korean industry. *Computer Standard & Interface*. 24 (1), 45-60.
- Stinson, K. dkk. (2009). Mathematics and science integration: models and characterizations. *School Science and Mathematics*. 109 (3), 153-16.
- Sukmadinata, S. N. (1997). *Pengembangan Kurikulum*. Bandung : Remaja Rosda Karya.
- Surapranata, S. (2006). *Analisis, Validitas, Reliabilitas dan Interpretasi Hasil Tes*. Bandung: PT Remaja Rosdakarya.
- Surpiadi, D. (2015). *Pendalaman Buku Teks Fisika 2 SMP Kelas VIII*. Bandung: Yudhistira.
- Suwarma, I. R., Astuti, P., & Endah, N. R. (2015). Balloon Powered Car” sebagai Media Pembelajaran IPA berbasis STEM (Science, Technology, Engineering, and Mathematics). *Prosiding Simposium Nasional Inovasi dan Pembelajaran Sains 2015*. Bandung: SNIPS.
- Talley, L. (1973). The use of three-dimensional visualization as a moderator in the higher cognitive learning of concepts in college level chemistry. *Journal of Research in Science Teaching*. 12, 41-43.
- Tan, O. and Khan, S (2011). Protection in Malaysia and the End Users Perspective in E-Book. *International Journal of e-Education, e-Business*. 1 (2), 121-125.
- Tortora, G. J. & Bryan, D. (2011). *Principle of Anatomy & Physiology Organization, Support and Movement, and Control System of the Human Body 13th Edition*. United States: John Wiley & Sons, Inc.
- UNESCO. (2008). *The global literacy challenge: A profile of youth and adult literacy at the mid-point of the United Nations literacy decade 2003–2012*. Paris: Author.
- Wesserman, N. H. and Rosi, D. (2015). Mathematics and Science Teachers’ Use of and Confidence in Empirical Reasoning: Implications for STEM Teacher Preparation. *School Science and Mathematics*. 115 (1), 22-34.

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

- Wiebe, E. (1993). Visualization of three-dimensional form: A discussion of theoretical models of internal representation. *The Engineering Design Graphics Journal*. 57 (1), 18-28.
- Wiley, S. E. (1989). Advocating the development of visual perception as a dominant goal of technical graphic curricula. *Engineering Design Graphics Journal*. 53 (1), 1-11.
- Wiley, S. E. (1990). Computer graphics and the development of visual perception in engineering graphics curricula. *Engineering Design Graphics Journal*. 54 (2), 39-43.
- Wonacott, M. E. (2001). *Technological Literacy*. United States: Center on Engineering and Training for Employment.
- Zhang, Y. and Kudva, S. (2013). Ebooks vs. Print Books: Readers' Choices and Preferences Across Contexts. *Journal of the Association for Information Science and Technology*. 65 (8), 1695–1706.