

DAFTAR PUSTAKA

- Arikunto, S. (2013). *Dasar-dasar Evaluasi Pendidikan Jilid 2*. Jakarta: Bumi Aksara.
- Baddeley, A. (1992). Working memory. *Science*, 255, 556–559. Dalam Scharfenberg, F.-J., & Bogner, F. X. (2010). A new two-step approach for hands-on teaching of gene technology: effects on students' activities during experimentation in an outreach gene technology lab. *Research in Science Education*, 41, 505–523.
- Brunken, R., Seufert, T., & Paas, F. (2010). Measuring Cognitive Load. Dalam Plass J. L. Moreno R., & Brunken, R. (eds.). *Cognitive Load Theory*. Cambridge: Cambridge University Press.
- Bryce, T., & Robertson, I. (1985). What can they do? A review of practical assessment in science. *Studies in Science Education*, 12,1-24
- Campbell, Reece, Mitchell. (2004). *Biologi Edisi Kelima Jilid 3*. Jakarta: Erlangga.
- De Jong, T. (2010). Cognitive load theory, educational research, and instructional design: some food for thought. *International Science*. 38(2): 105-134.
- Euler, M. (2004). The role of experiments in the teaching and learning of physics. In E. Redish & M. Vicentini (Eds.) Dalam Scharfenberg, F.-J., & Bogner, F. X. (2012). Instructional Efficiency of Tutoring in an Outreach Gene Technology Laboratory. *Research in Science Education*, 43, hlm. 1267–1288.
- Hamzah, B. (2011). *Belajar Dengan Pendekatan Paikem : Pembelajaran, Aktif, Inovatif, Lingkungan, Kreatif, Menarik*. Jakarta: Bumi Aksara.
- Hindriana, A, F. (2014). *Pembelajaran Fisiologi Tumbuhan Terintegrasi Struktur Tumbuhan Berbasis Kerangka Instruksional Marzano untuk Menurunkan Beban Kognitif Mahasiswa*. Thesis, Sekolah Pascasarjana, Universitas Pendidikan Indonesia.
- Hilbert, T. S., & Renkl, A. (2009). Learning how to use a computer-based concept-mapping tool: selfexplaining examples helps. *Computers in Human Behavior*, 25, 267–274.
- Hofstein, A., & Lunetta, V. N. (2004). The laboratory in science education: Foundations for the twenty-first century. Dalam Scharfenberg, F.-J., & Bogner, F. X. (2010). A new two-step approach for hands-on teaching of gene technology: effects on students' activities during experimentation in an outreach gene technology lab. *Research in Science Education*, 41, 505–523.

- Johnstone, A., & Wham, A. (1982). The demands of practical work. Dalam Scharfenberg, F.-J., & Bogner, F. X. (2010). A new two-step approach for hands-on teaching of gene technology: effects on students' activities during experimentation in an outreach gene technology lab. *Research in Science Education*, 41, 505–523.
- Kalyuga, S. (2011). Cognitive Load Theory: How Many Types of Load Does It Really Need? *Educ Psychol Rev*, 23:1-19.
- Kementrian Pendidikan dan Kebudayaan. (2013). *Salinan Lampiran Peraturan Menteri Pendidikan Dan Kebudayaan Nomor 69 Tahun 2013 Tentang Kerangka Dasar Dan Struktur Kurikulum Sekolah Menengah Atas/Madrasah Aliyah*. Jakarta: Kemdikbud.
- Marzano, R. J. (2013). *The Art and Science of Teaching the Common Core State Standards: Learning Sciences* Marzano Center
- Meissner, B., & Bogner, F. X. (2013). Towards Cognitive Load Theory as Guideline for Instructional Design in Science Education. Dalam Rahmat, A., Soesy, A. S., Rifka, F., Susanti, W., Yati, S., Heni, R. (2014) Beban Kognitif siswa SMA Pada Pembelajaran Biologi Interdisiplin Berbasis Dimensi Belajar. *Prosiding Mathematics and Sciences Forum 2014*, hlm. 475-480
- Moreno R., & Park, B. (2010). Cognitive Load Theory: Historical Development and Relation to Other Theories. *Cognitive Load Theory*. Cambridge: Cambridge University Press.
- Paas, F., & Van Merriënboer, J. (1994). Variability of worked examples and transfer of geometrical problemsolving skills: a cognitive-load approach. Dalam Scharfenberg, F.-J., & Bogner, F. X. (2011). Teaching Gene Technology in an Outreach Lab: Students' Assigned Cognitive Load Clusters and the Clusters' Relationships to Learner Characteristics, Laboratory Variables, and Cognitive Achievement. *Research in Science Education*, 43, hlm. 141–161.
- Paas, F., Tuovinen, J.E., Tabbers, H., Gerven, P. W. M. V. (2003). Cognitive Load Measurement as a Means to Advance Cognitive Load Theory. *Educational Psychologist* 28 (1): 63-71. Dalam Scharfenberg, F.-J., & Bogner, F. X. (2012). Instructional Efficiency of Tutoring in an Outreach Gene Technology Laboratory. *Research in Science Education*, 43, hlm. 1267–1288.
- Paas, Fred & Ayres, Paul. (2008). Interdisciplinary Perspectives Inspiring a New Generation of Cognitive Load Research. *Educ Psychol Rev*, 21:1-9
- Paas, Fred & Ayres, Paul. (2014). Cognitive Load Theory: A Broader View on the Role of Memory in Learning and Education. *Educ Psychol Rev*, 26:191–195.

- Plass J. L. Moreno R., & Brunken, R. (2010). *Cognitive Load Theory*. Cambridge: Cambridge University Press.
- Rahmat, A., Soesy, A. S., Rifka, F., Susanti, W., Yati, S., Heni, R. (2014) Beban Kognitif siswa SMA Pada Pembelajaran Biologi Interdisiplin Berbasis Dimensi Belajar. *Prosiding Mathematics and Sciences Forum 2014*, hlm. 475-480
- Rustaman, N. Y. dan Pramadi, A (1996). *Pengelolaan Laboratorium Biologi*. Bandung: Jur.Pend. Biologi FPMIPA IKIP Bandung.
- Scharfenberg, F.-J., & Bogner, F. X. (2010). A new two-step approach for hands-on teaching of gene technology: effects on students' activities during experimentation in an outreach gene technology lab. *Research in Science Education*, 41, 505–523.
- Scharfenberg, F.-J., & Bogner, F. X. (2011). Teaching Gene Technology in an Outreach Lab: Students'Assigned Cognitive Load Clusters and the Clusters' Relationships to Learner Characteristics, Laboratory Variables, and Cognitive Achievement. *Research in Science Education*, 43, hlm. 141–161.
- Scharfenberg, F.-J., & Bogner, F. X. (2012). Instructional Efficiency of Tutoring in an Outreach Gene Technology Laboratory. *Research in Science Education*, 43, hlm. 1267–1288.
- Sternberg, R.J. (2008). *Psikologi Kognitif* edisi keempat. Yogyakarta : Pustaka Pelajar
- Sudjana. (2005). *Metoda Statistika*. Bandung: Penerbit PT. Tarsito
- Sweller, J. (1988). Cognitive Load during Problem Solving: Effects on Learning. Dalam Rahmat, A., Soesy, A. S., Rifka, F., Susanti, W., Yati, S., Heni, R. (2014) Beban Kognitif siswa SMA Pada Pembelajaran Biologi Interdisiplin Berbasis Dimensi Belajar. *Prosiding Mathematics and Sciences Forum 2014*, hlm. 475-480
- Sweller, J. (1994). Cognitive Load Theory: Learning Difficulty and Instructional Design. *Journal of Learning and Instruction*. 4: 295-312. Dalam Rahmat, A., Soesy, A. S., Rifka, F., Susanti, W., Yati, S., Heni, R. (2014) Beban Kognitif siswa SMA Pada Pembelajaran Biologi Interdisiplin Berbasis Dimensi Belajar. *Prosiding Mathematics and Sciences Forum 2014*, hlm. 475-480
- Van Merriënboer, J. J. G. & Aryes, Paul. (2005). Research on Cognitive Load Theory and Its Design Implications for E-Learning. *ETR&D*. 53(3): 5-13