

REFERENCES

- Allen, L. R. (1973). *An evaluation of children's performance in certain cognitive, affective, and motivational aspects of the Systems and Subsystems unit of the Science Curriculum Improvement Study elementary science program.* Journal of Research in Science Teaching 10(2): 125-134
- Astin, Alexander W., (1984), *Student Involvement : A Developmental Theory for Higher*, Journal of College Student Development, University of California, Los Angeles.
- Arikunto, Suharsimi. 2010. *Dasar – Dasar Evaluasi Pendidikan , Edisi Revisi.* Jakarta: Bumi Aksara
- Bybee, R. W et al. 2006. *The BSCS 5E. instructional Model: Origins, Effectiveness and Applications.* Retrieved from <http://www.bscs.org/pdf/bscs5eexecsummary.pdf>
- Bybee, et al. 2006. . *The BSCS 5E instructional model: Origins and effectiveness. A report prepared for the Office of Science Education National Institutes of Health. BSCS.org.* Retrieved January 26, 2012 from [http://science.education.nih.gov/houseofreps.nsf/b82d55fa138783c2852572c9004f5566/\\$FILE/Appendix%20D.pdf](http://science.education.nih.gov/houseofreps.nsf/b82d55fa138783c2852572c9004f5566/$FILE/Appendix%20D.pdf)
- Campbell, A.N et al. 2006. *Biology concepts and Connections Fifth Edition.* New York: Benjamin – Cummings Publishing
- Calik, M., & Mehmet, A. K. (2008). *Using different conceptual change methods embedded within the 5E Model: A sample teaching for heat and temperature.* J. Phys. Tchr. Educ. Online, 5(1), 3-7.
- David et al. 1996. *Inquiry, the Learning Cycle, & the 5E Instructional Model.* Retrieved from <http://science.education.nih.gov>
- David, W. 2003. *Constructivism in the Processes of Teaching and Learning Mathematics. Paper presented in TheThird Arab Conference “Systemic Approach in Teaching and Learning”, Ain Shams University, 3 to 4 April, 2003.*
- Direktorat Tenaga Kependidikan Direktorat Jenderal Peningkatan Mutu Pendidik Dan Tenaga Kependidikan Departemen

Pendidikan Nasional. 2008. *Penulisan Modul*. Jakarta: Kompetensi Penelitian dan Pengembangan 05-A2

- Ergin, I, Kanli, U & Unsal, Y. (2008). *An example for the effect of the 5E model on the academic success and attitude levels of students': "Inclined projectile motion."* Journal of Turkish Science Education, 5, 47-59.
- Hamdani, (2011), *Strategi Belajar Mengajar*, CV. Pustaka Setia, Bandung.
- Hashim, Yusup. 1999. *Are Instructional Design Elements Being Used in Module Writing?*. British Journal of Educational Technology. 30: 341 – 348
- Herbart, J. (1901). *Outlines of Educational Doctrine*, trans. C. DeGarmo; ed. A. Lange. New York: Macmillan.
- Ibayati. Y. 2002. *Analisis Strategi Mengajar pada Topik Sistem Saraf di SMU*. Tesis. Program Pascasarjana. Universitas Pendidikan Indonesia. Bandung
- Lazarowitz. 1992. *High School Students' Difficulties in Learning Biology Concepts*. J. Biol. Educ, 26(3): 215 – 224
- Karmana, Oman. 2007. *Cerdas Belajar Biologi untuk Kelas XI*. Bandung: Erlangga
- Muammer and Urey. 2008. *Combining different conceptual change methods within 5E Model: A sample Teaching Design of „Cell" Concept and Its Organelles*. Asia – Pacific Forum on Science Learning and Teaching, Volume 9, Issue 2, Article 12
- Khataibah A 2005. *Science Education for All*. Al. Amman, Jordan: Maseerah for Publication and Distribution, and Printing.
- Muhibbinsyah. 2010. *Psikologi Pendidikan*. Bandung: Remaja Rosdakarya Offset
- Meltzer. 2002. *The Relationship Between Mathematics Preparation and Conceptual Learning Gain in Physics*, Hidden Variable in Diagnostic Present Scores American Journal Physics: 70 (12), (1259, 1267)
- Maulim, Pasar S. 2011. *Statistik Teori dan Aplikasi dalam Penelitian Edisi Pertama*. Medan: Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Negeri Medan

Qarareh, Ahmed. 2012. *The Effect of Using The Learning Cycle Method in Teaching Science On The Educational Achievement of The Sixth Graders*. Int J. Edu Sci, 4(2): 123 – 132

Race, P., (1994), *The Open Learning Handbook*, Kogan Page Ltd., London.

Rodger, W et al. 2006. *The BSCS 5E Instructional Model: Origins, Effectiveness, and Applications*. Colorado Springs: Mark Dabling Boulevard

Smaldino, S. E., (2011), *Teknologi Pembelajaran dan Media Untuk Belajar* 9th Edition, Penerbit Kencana, Jakarta.

Sudjana, N. 1989. *Penilaian Hasil Proses Belajar Mengajar*. Bandung: REMAJA ROSDAKARYA

Sudjana. N. 1996. *Metoda Statistik*. Tarsito: Bandung

Tekkaya et al. 2001. *Biology Concepts Perceived As Difficult by Turkish High School Students*. Hacettepe Univ. J. Educ, 21: 145 – 150

Tinto, Vincent, (2005), *Student Retention : What Next?*, Pell Institute for the Study of Opportunity in Higher Education, Syracuse University

Trianto (2009). *Mendesain Model Pembelajaran Inovatif-Progresif*. Jakarta: Kencana 2010

Wibowo, Ari et al. 2009. *Penerapan Model Pembelajaran Siklus Belajar (Learning Cycle) 5e Dalam Meningkatkan Hasil Belajar Siswa Pada Matapelajaran Teknologi Informasi Dan Komunikasi*. FMIPA. UPI