

## DAFTAR PUSTAKA

- Amalia, E., (2012), *Pengaruh Penggunaan Media benda Virtual Dan Media benda Real Terhadap Sikap Ilmiah Dan Hasil Belajar Kimia Siswa SMA Pada Pokok Bahasan Larutan Penyangga*. Tesis. PPS Unimed, Medan.
- Arends, (2008), *Learning to Teach*, Pustaka Pelajar, Jogjakarta
- Arsyand, A., (2005), *Media Pembelajaran*, Raja Grafindo Persada, Jakarta
- Arikunto, S., (2008), *Dasar-dasar Evaluasi Pendidikan*, Bumi Aksara, Jakarta
- Awang, H., and Ramly, I., (2008), Creative Thinking Skill Approach Through Problem-Based Learning: Pedagogy and Practice in the Engineering Classroom, *International Journal of Human Sciences*, **3(1)**: 18-23
- Baser, M., and Durmus, S., (2009), The effectiveness of Computer Supported Versus Real Laboratory Inquiry Learning Environments on the Understanding of Direct Current Electricity among Pre-Service Elementary School Teachers, *Eurasia Journal Of Mathematics, Science and Technology Education*, **6(1)** : 47-61
- Beerman, K., (1996), Computer-base Multimedia : New Directions in Teaching and Learning, *Special Article*,**(28)**: 15-18
- Charif, M., (2010), *The Effects of Problem Base Lerning in Chemistry Education on Middle School Students Academic Achivement and Attitude*, Thesis, Lebanese American University, NewYork
- Dirckinck, L., and Holmfeld, (2009), Inovation of Problem Base Learning Through ITC : Linking Local and Global Experience, *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, **5(1)** : 3-12
- Djamarah, B. dan Zain, A., (1997), *Strategi Belajar Mengajar*, Rineka Cipta, Jakarta.
- Donnell, C., Connor, C., and Seery, M., (2007), Developing practical chemistry skills by means of student-driven problem base learning mini-projects, *Chemistry Education Research and Practice*, **8(2)**: 130-139
- Fogarty, R., (1997), *Problem-based learning and other curriculum models for the multiple intelligences classroom*. Arlington Heights, Illionis: Sky Light.
- Girault, I., (2011), Characterizing the experimental procedure in science laboratories : a preliminary step toward students experimental design, *International Journal of Education*, 1-60
- Graaff, D., and Kolmos, A., (2003), Characteristics of Problem-Based learning, *International Journal Enggineering Education*, **0(00)**: 1-5

- Hamalik, O., (2003), *Kurikulum dan pembelajaran*, Bumi Aksara, Jakarta
- Heinich, R., and Molenda, M., (2002), *Instructional Media and The New Technologies of Instruction*. New York: Mcmillan Publishing Company.
- Hofstein, A., (2004), The Laboratory in Chemistry Education : Thirty years of Experience with Developments, Implementation, and Reaserch, *Chemistry Education : Reaserch and Practice*, **5(3)** : 247-265.
- Joyce, B., Weil, M., and Calhoun, E., (2009), *Models of Teaching*, Pustaka Pelajar, Jogjakarta
- Kaya, E., and Cetin, P., (2012), Investigation of Preservice Chemistry Teacher's Chemistry Laboratory Anxiety Levels, *International Journal on New Trends in Education and Their Implications*, **3(3)**: 9
- Kuang, Y., and Liao, C., (2004), Effects of Computer-assisted instruction on students achievement in Taiwan : A meta-analysis, *Computer and Education Journal* (**48**): 216-233
- Liao, M., Lo, S., Oyuki, M., and Li, K., (2003), Authoring Tool for Multiple Instructional Strategies : Advance organizer, Concept Mapping and Collaborative Learning, *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education*, 2269-2272.
- Lin, H., Kidwai, K., Swain, J., Ausman, B., and Dweyer, F., (2005), The Effect of Verbal Advance Organizers in Completing Animated Instruction, *Journal of Visual Literacy*, **25(2)**: 237-248.
- Morgil, I., Seyhan, H., and Secken, N., (2008), Investigating the Effects Of Project –Oriented Chemistry Experiments on Some Affective and Cognitive Field Components, *Journal of Turkish Science Education*, **6(1)** : 89-107.
- Morgil I., Erokten, S., Yavuz, S., and Oskay, O., (2004), Computerized Application on Complexation in Chemical education, *The Turkis Online Journal of Education Technology (TOJET)*, **3(4)** :1
- Mappa, S., (1994), *Teori Belajar Orang Dewasa*, Departemen Pendidikan dan Kebudayaan, Jakarta.
- Mulyasa, (2005), *Implementasi Kurikulum*, Rosdakarya, Bandung.
- Mulyasa, (2007), *Menjadi guru Profesional*, Rosdakarya, Bandung
- Munandar (2009), *Belajar dan pembelajaran*, Bumi Aksara, Jakarta
- Nasution, S.R., (2007), *Pembuatan Media interaktif Berbasis Komputer dan Pengaruhnya Terhadap Hasil Belajar Kimia SMA*, Tesis Tidak di terbitkan, PPS Unimed, Medan

- Ngatino, (2011), *Penerapan Model Pembelajaran Berbasis Masalah yang Diintegrasikan dengan Media Animasi dalam Meningkatkan Motivasi dan Hasil Belajar Siswa*, Tesis Tidak di terbitkan, PPS Unimed, Medan
- Nugraha, W. A., (2006), *Penerapan Model Media benda riil Semi Riset Pada Media benda riil Kimia Fisika 2*, Laporan Hasil Penelitian, Jurusan Kimia FPMIPA Universitas Negeri Medan
- Nugroho, A. Y., (2011), *Olah Data Dengan SPSS*, Skripta, Yogyakarta
- Onkol, F., Zembat, R., and Balat, G., (2010), Computer use attitudes, knowledge and skill, habits and methods of preschool teachers, *Procedia Computer Science*, (3): 343-351
- Pawson, E., Fournier, E., Haigh, M., Miniz, O., Trafford, J., and Vajoczki, S., (2006), Problem Base Lernaning in Geography : Towards a Critical Assesment of its Purpose, Benefits and Risk, *Journal Of Geography in higer Education*, 30(1) : 103-116
- Pramesti, G., (2011), *Aplikasi SPSS Dalam Penelitian*, PT. Elek Media Komputindo, Surakarta
- Rusman, 2012, *Belajar dan Pembelajaran Berbasis Komputer*, Alfabeta, Bandung.
- Riduwan, Rusyana, E., dan Enas, (2011), *Cara Mudah Belajar SPSS-17 dan Aplikasi Statistik Penelitian*, Alfabeta, Bandung
- Sanjaya, W., (2008). *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*, Kencana Prenada Media Group, Jakarta
- Saragih, R., (2012), Evektivitas Pembelajaran Inquiri dan Problem Base Learning dengan Media Berbasis Komputer dan Praktikum terhadap Aktivitas dan Hasil BElajar Siswa pada Materi Kelarutan dan Hasil Kali Kelarutan, Tesis Tidak di terbitkan, PPS Unimed, Medan
- Sembiring, M., (2008), *Pengaruh Metode Media benda riil Menggunakan Media Komputer pada Motivasi Belajar dan Hasil Belajar Kimia SMA Negeri 2 Lubuk Pakam*, Tesis tidak di Terbitkan, PPS Unimed, Medan
- Shihuha, H., and Keraro, F., (2009), Using Advance Organizer to Enhance Students' Motivation in Learning Biology, *Eurasia Journal Of Mathematics, Science and Technology Education*, 5(4): 413-420
- So, H., and Kim, B., (2009), Learning about problem base learning : Student teachers integrating technology and content knowledge, *Australian Journal of Education Technology*, 25(1): 101-116
- Sudjana, (2004), *Dasar-dasar Proses Belajar Mengajar*, Algensindo, Bandung.

- Sulistiyowati, E., (2012), *Implementasi Kurikulum Pendidikan Karakter*, PT. Citra Aji Parama, Jogjakarta.
- Suyatno, (2009), *Menjelajah Pembelajaran Inovatif*. Surabaya: Masmedia Buana Pustaka.
- Syafriani, Dewi., (2012), Pengembangan Model Pembelajaran Dalam Upaya Membentuk Kepribadian yang Berkarakter Mulia dan Hasil Belajar yang Tinggi pada Materi Larutan Penyangga, Tesis Tidak di terbitkan, PPS Unimed, Medan
- Tseng, C., Wang, W., Lin, Y., and Hung, P., (2002), Effects of Computerized Advance Organizer on Elementary School Mathematics Learning, *Proceeding of the international Conference on Computer in Education* :838
- Uno, H., (2007), *Model Pembelajaran*, Bumi Aksara, Jakarta.
- Winkel, W.S., (2004), Psikologi Pengajaran, Media Abadi, Jogjakarta.
- Zebua, S., (2010), *Pengaruh Media eXe Learning dalam Pembelajaran Berbasis Masalah Terhadap Hasil Belajar Siswa pada Pokok Bahasan Laju Reaksi*, Tesis Tidak di terbitkan, PPS Unimed, Medan.