

## DAFTAR PUSTAKA

- Alkan, F and Kocak, K., (2015). Chemistry laboratory applications supported with simulation. *Procedia - Social and Behavioral Sciences*, **176**: 970 – 976.
- Anggraini, F., (2016). *Pengembangan Penuntun Praktikum SMA yang Inovatif Dan Interaktif Terintegrasi Discovery Learning (Pembelajaran Penemuan) Pada Materi Kimia Unsur*. Tesis, Program Pascasarjana Universitas Negeri.
- Anza, M., Bibiso, M., Mohammad, A., Kuma, B., (2016). Assessment of Factors Influencing Practical Work in Chemistry: A Case of Secondary Schools in Wolaita Zone, Ethiopia. *I.J. Education and Management Engineering*, **6**: 53-63.
- Asan, A dan Haliloglu, Z. 2005. Implementing Project Based Learning In Computer Classroom. *The Turkish Online Journal of Educational Technology – TOJET*, **4(3)**.
- Azwar, S. (2010). *Metode Penelitian*. Yogyakarta: Pustaka Pelajar.
- Borg and Gall., (1983). *Educational Research; An Introduction*. Longman Inc, New York & London.
- Bryce, T.G.K., J. McCall, J. MacGregor, I.J. Robertson, & R.A.J. Weston. (1990). *Techniques for Assesing Process Skills in Practical Science: Teacher's Guide*. Oxford: Heinemann Educational Books.
- Bybee R & Rodger W. (1992). *Becoming a Scondary School Science Teacher*. Ohio: Merrill Publishing Company
- Can, Sendil., (2013). Pre-service science teachers' concerns about chemistry laboratory (case of mugla University-Turkey). *Procedia - Social and Behavioral Sciences*, **106**: 2102-2111.
- Christianto, Heru., (2016). *Analisis dan pengembangan Penuntun Praktikum Interaktif Berbasis Multimedia Untuk Materi Kimia SMA*. Tesis. Pascasarjana Universitas Negeri Medan.
- Copriady, J., (2015). Practical Implementation of Practical Among Secondary School Teachers, *Asian Journal of Scientific Research*, **8(1)**: 22-40.

- Cossa, E.F.R and Uamusse, A.A., (2015).Effects of an In-service Program on Biology and Chemistry Teachers' Perception of the Role of Laboratory Work.*Procedia - Social and Behavioral Sciences*, **167**: 152 – 160.
- Darsana, I.W., Sadia, I.W., Tika, I.N., (2014).Analisis Standar Kebutuhan Laboratorium Kimia dalam Implementasi Kurikulum 2013 Pada SMA Negeri Di Kabupaten Bangli.*e-Journal Program Pascasarjana Universitas Pendidikan Ganesha*, **4**.
- Doppelt, Y. (2003). Implementation and assessment of project-basd learning in flexible environment. *Instructional Journal of Technology and Design Education*. **13**. 255-272.
- Eko. (2010). Penggunaan Bahan Kimia Berumah Tangga untuk Eksperimen Kimia (Sebagai Alternatif Praktikum Kimia di SMA). *Jurnal Program Studi Kimia UNY*, 2(2).
- Hanum, A.Y., (2014). *Pengembangan Penuntun Praktikum Kimia Inovatif Untuk SMA/MA Kelas XII Sesuai Kurikulum 2013*. Tesis. Pascasarjana Universitas Negeri Medan.
- Hidayat, Sholeh. (2013). *Pengembangan Kurikulum Baru*. Bandung: PT Remaja Rosdakarya.
- Hosler, J. & Boomer, K.B.. (2011).Are Comic Books an Effective Way to Engage Nonmajors in Learning and Appreciating Science.*CBE-Life Science Educational*, **10**: 309-317.
- Kaya, E and Geban, O., (2011).The effect of conceptual change based instruction on students' attitudes toward chemistry.*Procedia Social and Behavioral Sciences*, **15**: 515–519.
- Lee, A. D., Green, B. N., Johnson, C. D. danNyquist, J., (2010). How to Write A Scholarly Book Review for Publication in a Peer-Reviewed Journal a Review of The Literature. *The Journal of Chiropractic Education*, **24(1)**: 57-59.
- Lubis, M. (1993). *Pengelolaan Laboratorium IPA*. Jakarta: Universitas Terbuka.

- Menteri Pendidikan dan Kebudayaan Republik Indonesia. (2013). *Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 69 Tahun 2013 tentang Kerangka Dasar dan Struktur Kurikulum Sekolah Menengah Atas/Madrasah Aliyah*. Jakarta.
- Menteri Pendidikan dan Kebudayaan Republik Indonesia. (2013). *Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 103 Tahun 2013 Tentang Pembelajaran Pada Pendidikan Dasar dan Menengah*. Jakarta.
- Mukhtar, Z., Emiliya, R., Silaban, R., (2015). Pengembangan Penuntun Praktikum Model Discovery Dan Project Based Learning Pada Pembelajaran Asam Dan Basa Di Sma Kelas Xi. *Jurnal Tabularasa*, **12(3)**.
- Mulyasa, E. (2013). *Pengembangan dan Implementasi Kurikulum 2013*. Bandung: PT Remaja Rosdakarya.
- Nurohman, S. (2008). Peningkatan thinking skills melalui pembelajaran ipa berbasis konstruktivisme di sekolah alam. *Jurnal Pendidikan dan Kebudayaan* **11(1)**: 121-136.
- Ojelade, I.A., (2015). Impacts of Integrating Practical Classes into the Teaching of Chemistry in Senior Secondary Schools. *Advances in Social Sciences Research Journal*, **2(3)**: 140-146.
- Okam, C.C and Zakari, I.I., (2017). Impact of Laboratory-Based Teaching Strategy on Students' Attitudes and Mastery of Chemistry in Katsina Metropolis", Katsina State, Nigeria. *International Journal Of Innovative Research & Development*, **6(1)**:112-121.
- Olorudare, A.S. (2011). "Advancement of the theory and practices in science education within the content of the Nigerian educational system", *Lead Paper Presented at 1st Annual International Conference on Education at Osun State University Ipetu-Ijesa*, **1(8)**:7-10.
- Peraturan Pemerintah. (2013). *Peraturan Pemerintah No. 32 Tahun 2013 tentang Perubahan Atas Peraturan Pemerintah No. 19 Tahun 2005 tentang Standar Nasional Pendidikan*. Jakarta.

- Rusdinawati, D & Sukarmin.(2017). Pengembangan Kit Pratikum Sebagai Media Pembelajaran Untuk Melatihkan Keterampilan Proses Sains Berbasis Inkuiri Pada Materi Kesetimbangan Kimia Kelas XI. *Unesa Journal of Chemical Education*, **6(2)**, 308-314.
- Rustaman N. (2003). *Media Pengajaran*. Bandung: Sinar Baru
- Sardiman. (2007). *Interaksi dan Motivasi Belajar Mengajar*. Jakarta: PT. Raja Grafindo Persada.
- Sawitri S. (2008). Model Pengembangan Buku Petunjuk Praktek Mata Kuliah Draping. *Jurnal Penelitian Pendidikan*, **24(1)**: 23-24.
- Situmorang, M., (2013). Pengembangan Buku Ajar Kimia SMA Melalui Inovasi Pembelajaran Dan Integrasi Pendidikan Karakter Untuk Meningkatkan Hasil Belajar Siswa.*Prosiding Semirata FMIPA Universitas Lampung 2013*.
- Sugiyono. (2012). *Metode Penelitian Kuantitatif, Kualitatif, dan R & D*. Bandung: Alfabeta.
- Syahriah, A., (2016). *Pengembangan Penuntun Praktikum Kimia SMA Pada Materi Kimia Unsur Terintegrasi Model Pembelajaran Berbasis Proyek*. Tesis. Pascasarjana Universitas Negeri Medan.
- Tatli, Z & Ayas, A., (2010).Virtual laboratory applications in chemistry education.*Procedia Social and Behavioral Sciences*, **9**: 938–942.
- Tatli, Z., & Ayas, A. (2013). Effect of a Virtual Chemistry Laboratory on Students' Achievement.*Educational Technology & Society*, **16(1)**: 159–170.
- Trianto., (2010). *Model Pembelajaran terpadu*. Bumi Aksara. Jakarta.
- Turgut, Halil. (2008). Prospective Science Teachers' Conceptualizations About Project Based Learning. *International Journal of Instruction*. **1(2)**. 61-79.
- Tuysuz, C., (2010). The Effect of the virtual laboratory on students' achievement and attitude in chemistry.*International Online Journal of Educational Sciences*,**2(1)**: 37-53.

Uchegbu, R.I., Oguoma, C.C., Elenwoke, U.E., Ogbuagu, O.E., (2016). Perception of Difficult Topics in Chemistry Curriculum by Senior Secondary School (II) Students in Imo State. *AASCIT Journal of Education*, **2(3)**: 18-23.

Undang – Undang No. 20 Tahun 2003 tentang Sistem Pendidikan Nasional.

Watoni, A.H dan Juniasti, M., (2015), *Buku guru Kimia untuk SMA/MA Kelas XII*, Yrama Widya, Bandung.

Wulandari, L., (2017). *Analisis dan Pengembangan Penuntun Praktikum Kimia Berbasis Pendidikan Karakter Untuk Kelas XI SMA/MA Semester 1 Sesuai Kurikulum 2013*, Tesis, Pascasarjana Universitas Negeri Medan.

Xu, H. & Talanguer, V. (2013). Effect of The Level of Inquiry of Lab Experiments on General Chemistry Students Written Reflections. *Journal of Chemical Education*, **90**: 21-28.

UNIMED  
UNIVERSITAS NEGERI MEDAN

THE  
Character Building  
UNIVERSITY