DAFTAR PUSTAKA

Abulibdeh, E. S., & Syed Hasan, S. (2011). E-learning interactions, information technology self-efficacy and student achievement at the University of Sharjah, UAE. *Australasian Journal of Educational Technology, 27* (6), 1014–1025. https://doi.org/10.14742/ajet.926.

Adnan, F., Prasetyo, B., & Nuriman, N. (2017). Usability testing analysis on the bana game as education game design references on junior high school. *Jurnal Pendidikan IPA Indonesia, 6*(1), 88-94. https://doi.org/10.15294/jpii.v6i1.9597.

Amry, U. W., Rahayu, S., & Yahmin. (2017). Analisis miskonsepsi asam basa pada pembelajaran konvensional dan Dual Situated Learning Model (DSLM). *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan, 2*(3). 385-391. Retrieved from http://journal.um.ac.id/index.php/jptpp/.

Anderson, L. W. & Krathwohl, D. R. (2010). *Kerangka landasan untuk pembelajaran, pengajaran, dan asesmen revisi taksonomi pendidikan bloom*. (terjemahan Agung Prihantoro). Yogyakarta: Pustaka Pelajar. (Edisi asli diterbitkan tahun 2001 oleh: Addison Wesley Longman Inc. New York).

Anisa, F. & Yuliyanto, E. (2017). Analisis faktor yang mempengaruhi pembelajaran kimia di SMA Teuku Umar Semarang. *Makalah* disajikan dalam Seminar Nasional Pendidikan, Sains dan Teknologi Fakultas Matematika dan Ilmu Pengetahuan Alam, di Universitas Muhammadiyah Semarang.

Arsyad, Azhar. (2011). *Media Pembelajaran*. Jakarta: PT Raja Grafindo Persada.

Baanu, T.F., Oyelekan, O.S., & Olorundare, A. (2016). Self-efficacy and chemistry student's academic achievement in senior secondary schools in north-central, Nigeria. *The Malaysian Online Journal of Educational Science*, 4 (1), 43-52. Retrieved from http://mojes.um.edu.my/index.php/MOJES/article/view/12644

Baharuddin, H. & Wahyuni, E. S. (2010). *Teori belajar dan pembelajaran.* Yogyakarta: Ar-Ruzz Media.

Bandura, A. (1997). *Self-Efficacy: The exercise of control*. New York: W.H. Freeman and Company

Baran, E. (2014). A review of research on mobile learning in teacher education. *Educational Technology and Society, 17*(4):17–32. Retrieved from http://www.jstor.org/stable/jeductechsoci.17.4.17.

Batubara, H. H. (2015). Pengembangan media pembelajaran interaktif pada materi operasi bilangan bulat. *MUALLIMUNA: Jurnal Madrasah Ibtidaiyah*,

1(1), 1–12. Retrieved from http://ojs.uniska-bjm.ac.id/index.php/muallimuna.

Brady, J. E. (2005). *Kimia universitas azas & struktur jilid I*. Jakarta: Binarupa Aksara.

Branch, R. M. (2009). *Instructional design: The ADDIE approach*. New York, NY: Springer. https://doi.org/10.1007/978-0-387-09506-6.

Calimag, J., Mugel, P., & Conde, R. (2014). Ubiquitos learning environment using android mobile application. *IMPAC: International Journal of Research in Engineering & Technology, 2*(2), 119-128. Retrieved from http://impactjournals.us/journals.php?jtype=2&id=78.

Cetingul, P.I. & Geban, O. (2005). Understanding of acid-base concept by using conceptual change approach. *Hacettepe University Journal of Education, 29*, 69-74. Retrieved from http://www.efdergi.hacettepe.edu.tr.

Chang, R. (2003). *General chemistry: the essential concepts (3rd ed.)*. New York: The McGraw-Hill Companies, Inc.

Chen, Y. L. (2014). A study on student self-efficacy and technology acceptance model within an online task-based learning environment. *Journal of Computers, 9* (1), 34-43. https://doi.org/10.4304/jcp.9.1.34-43.

Chuang, T., & Chen, W. (2007). Effect of digital games on children's cognitive achievement. *Journal of Multimedia, 2*(5), 27-30. DOI 10.4304/jmm.2.5.27-30.

Chuang, Y. T. (2014). Increasing learning motivation and student engagement through the technology-supported learning environment. *Creative Education, 5*, 1969-1978. https://doi.org/10.4236/ce.2014.523221.

Chung, C. J., Hwang, G. J., & Lai, C. L. (2019). A review of experimental mobile learning research in 2010-2016 based on the activity theory framework. *Computers & Education, 129*, 1-13. https://doi.org/10.1016/j.compedu.2018.10.010.

Crozat, S., Hû, O. & Trigano, P. (1999). *A Method for Evaluating Multimedia Learning Software*. Florence, IEEE: 714 - 719. https://doi.org/10.1109/MMCS.1999.779287.

Danim, S. (1995). *Media komunikasi pendidikan: Pelayanan profesional pembelajaran dan mutu hasil belajar*. Jakarta: Bumi Aksara.

Daryanto. (2010). *Media pembelajaran, peranannya sangat penting dalam mencapai tujuan pembelajaran*. Yogyakarta: Gava Media.

Dick, W., Carey, L., & Carey, J. O. (2005). *The systematic design of instruction*. Florida: Pearson Education Inc.

Dimyati, & Mudjiono. (2013). *Belajar dan pembelajaran*. Jakarta: PT. Rineka Cipta.

Eggen, P., & Kauchak, D. (2010). *Educational psychology*. New Jersey, NJ: Pearson Merril Prentice Hall.

Fathurrohman, M. (2017). *Belajar dan pembelajaran modern konsep dasar, inovasi, dan teori pembelajaran*. Yogyakarta: Penerbit Garudhawaca.

Fitriyana, N., Ikhsan, J., Wiyarsi, A., & Sugiyarto, K. H. (2018). Effects of using media of Chemondro and Video Conference on teaching learning towards students' self-efficacy and students' self-regulated learning on the subject of Hydrocarbon. *EDUCATUM Journal of Science, Mathematics and Technology (EJSMT), 5*(1), 1-8. Retrieved from http://ojs.upsi.edu.my/index.php/EJSMT/article/view/75.

Fitriyana, N., Wiyarsi, A., & Sugiyarto, K. (2018). The profile of students' self-efficacy on hidrocarbon hybrid learning and android-base-game. *International Journal on New Trends in Education and Their Implications, 9*(2), 1-15. Retrieved from http://www.ijonte.org/FileUpload/ks63207/File/01a.nur_fitriyana.pdf.

Ghufron, M. N. & Suminta, R. R. (Juni 2013). Efikasi diri dan hasil belajar matematika: Meta-analisis. *Buletin Psikologi Fakultas Psikologi Universitas Gadjah Mada, 21*(1), 20-30. DOI: 10.22146/bpsi.9843.

González, M. Á., Martín, E., Llamas, C., Martínez, Ó., Vegas, J., Herguedas, M., & Hernández, C. (2015). Teaching and learning physics with smartphones. *Journal of Cases on Information Technology, 17*(1), 31–50. http://dx.doi.org/10.4018/JCIT.2015010103.

Hamalik, O. (2011). *Kurikulum dan Pembelajaran*. Jakarta: Bumi Aksara.

Hanafi, H. F., & Samsudin, K. (2012). Mobile Learning Environment System (MLES): The case of android-based learning application on undergraduates' learning. *International Journal of Advanced Computer Science and Applications (IJACSA), 3*(3), 1-5. http://dx.doi.org/10.14569/IJACSA.2012.030311.

Huang, Y. M., Lin, Y. T., & Cheng, S. C. (2010). Effectiveness of a mobile plant learning system in a science curriculum in Taiwanese elementary education. *Computers & Education, 54*(1), 47-58. http://doi.org/ 10.1016/j.compedu.2009.07.006.

Jabbour, K. K. (2013). An analysis of the effect of mobile game based learning (M-GBL) on Lebanese Higher Education. *Bulgarian Journal of Science and Education Policy, 7*(2), 280-301. Retrieved from http://bjsep.org/getfile.php?id=145.

Jengathe, G & Rojatkar, D. V. (2015). Use of android in education system. *International Journal of Electrical and Electronics Research, 3*(4), 133-137. Retrieved from http://www.researchpublish.com/journal/IJEER/Issue-4-October-2015-December-2015/15.

Johnson, R.A., & Wichern, D. W. (2007). *Applied multivariate statistical analysis*. New Jersey: Prentice Hall.

Joyce, B., Weil, M., & Calhoun E. (2009). *Model-model pengajaran (edisi delapan)*. (terjemahan Achmad Fawaid & Ateilla Mirza). Yogyakarta: Pustaka Pelajar. (Edisi asli diterbitkan tahun 2009 oleh: Pearson Education Inc. New Jersey Upper Saddle River).

Keenan, C. W., Kleinfelter, D.C., & Wood, J.H. (1984). *Kimia untuk Universitas*. Jakarta: Erlangga.

Khattree, R., & Naik, D. N. (2003). *Applied multivariate statistics with SAS software* (2nd ed.). North Carolina: SAS Institute Inc.

Leow, F., T. & Neo, M. (2014). Interactive multimedia learning: Innovating classroom education in a Malaysian university. *The Turkish Online Journal of Educational Technology, 13*(2), 99–110. Retrieved from http://www.tojet.net/articles/v13i2/13211.pdf.

Lubis, I., & Ikhsan, J. (2015). Pengembangan media pembelajaran kimia berbasis android untuk meningkatkan motivasi belajar dan prestasi kognitif peserta didik. *Jurnal Inovasi Pendidikan IPA, 1*(2), 191 - 201. DOI: 10.21831/jipi.v1i2.7504.

Marzoan, P. S, Ulfa, S., Kuswandi, D. (2016). Learning styles, learning strategies and learning outcomes of science in primary school. *Academic Research International 7*(5), 183-196. Retrieved from www.savap.org.pk/journals/ARInt./Vol.7 (5)/2016(7.5-18).

Nesbit, J., Belfer, K., & Vargo, J. (2002). A convergent participation model for evaluation of learning objects. *Canadian Journal of Learning and Technology, 28*(3), 105-120. http://dx.doi.org/10.21432/T25C8C.

Nurchaili. (2010). Pengaruh media pembelajaran berbasis teknologi informasi dalam proses pembelajaran kimia terhadap peningkatan hasil belajar siswa. *Jurnal Pendidikan dan Kebudayaan, 16*(6), 648-658. http://dx.doi.org/10.24832%2Fjpnk.v16i6.493.

Nurohmah, S., Partono & Wahyudin. (2014). Perancangan aplikasi media pembelajaran fisika kelas VII berbasis android. *Jurnal Algoritma Sekolah Tinggi Teknologi Garut*. *11*(1), 1-10. Retrieved from http://sttgarut.ac.id/jurnal/index.php/algoritma/article/view/124.

Økland, G. M. (2012). Determinants of learning outcome for students at High School in Norway: A constructivist approach. *Scandinavian Journal of*

Educational Research, *56*(2), 119-138. http://doi.org/10.1080/00313831.2011.568622.

Özdener, N and Demirci, F. (2019). Determining students' views about an educational game-based mobile application supported with sensors. *Technology, Knowledge and Learning*, *24*(1), 143–159. http://doi.org/10.1007/s10758-018-9368-x.

Ozmen, H., Demircioglu, G., Burhan, Y., Naseriazar, A., & Demircioglu, H. (2012). Using laboratory activities enhanced with concept cartoons to support progression in students'understanding of acid-base concepts. *Asia-Pacific Forum on Science Learning and Teaching*, *18*(1), 1-29. Retrieved from https://www.eduhk.hk/apfslt/v13_issue1/ozmen/index.htm.

Putra, R. S., Wijayati, N., & Mahatmanti, F.W. (2017). Pengaruh penggunaan media pembelajaran berbasis aplikasi android terhadap hasil belajar siswa. *Jurnal Inovasi Pendidikan Kimia*, *11*(2), 2009-2018. https://journal.unnes.ac.id/nju/index.php/JIPK/article/view/10628.

Ramnarain, U & Ramaila, S. (2018). The relationship between chemistry self-efficacy of South Africa first year university student and their academic performance. *Chemistry Education and Practice*, *19*(1), 60-67. http://doi.org/10.1039/C7RP00110J.

Rivalina, R. (2014). Kompetensi teknologi informasi dan komunikasi guru dalam peningkatan kualitas pembelajaran. *Jurnal Teknodik*, *18*(2), 165–176. Retrieved from https://jurnalteknodik.kemdikbud.go.id/index.php/jurnalteknodik/article/view/121.

Rosana, D. (2014). Pendekatan saintifik dalam pembelajaran IPA secara terpadu. *Makalah* disajikan dalam Seminar Nasional Unes, di Universitas Negeri Semarang, 4-21, Semarang.

Sadiman, A. S., Rahardjo, R., & Haryono, A. (1990). *Media pendidikan: Pengertian, pengembangan dan pemanfaatannya*. Jakarta: CV. Rajawali.

Sanaky, H. A. (2013). *Media pembelajaran interaktif-inovatif*. Yogyakarta: Kaukaba Dipantara.

Santrock, J. W. (2011). *Educational psychology.* New York: The MC Graw-Hill Companies, Inc.

Schober, P. Boer, C. Schwarte, L. A. (2018). Correlation coefficients: Appropriate use and interpretation. *Anesthesia & Analgesia*, *126*(5), 1763-1768. http://doi.org/10.1213/ANE.0000000000002864.

Setiawan, A. (2017). *Belajar dan pembelajaran.* Surabaya: Uwais Inspirasi Indonesia.

Shabrina, S., & Kuswanto, H. (2018). Android-assisted mobile physics learning through Indonesian batik culture: Improving students' creative thinking and problem solving. *International Journal of Instruction, 11*(4), 287-302. http://doi.org/10.12973/iji.2018.11419a.

Subianto, R. (20 Agustus 2016). *Penggunaan Teknologi dalam Pendidikan di Indonesia*. Retrieved from https://www.kompasiana.com/richoco/57b86428167b612f1a1ceeec/penggunaan-teknologi-dalam-pendidikan-di-indonesia.

Sufirmansyah. (2015). Pengaruh efikasi diri terhadap prestasi belajar mahasiswa pascasarjana prodi PAI STAIN Kediri dengan motivasi sebagai variabel intervening. *Didaktika Religia, 3*(2), 133-155. http://doi.org/10.30762/didaktika.v3.i2.p%p.2015.

Sukmadinata, N. S. (2011). *Metode penelitian pendidikan*. Bandung: PT. Remaja Rosdakarya.

Sung, Y.T., Chang, K. E., & Liu, T. C. (2016). The effects of integrating mobile devices with teaching and learning on students' learning performance: A meta-analysis and research synthesis. *Computers & Education, 94*, 252-275. http://doi.org/10.1016/j.compedu.2015.11.008.

Suprihatiningrum, J. (2013). *Strategi pembelajaran teori & aplikasi*. Yogjakarta: Ar-Ruzz Media.

Suyanti, R. D. (2010). *Strategi pembelajaran kimia*. Yogyakarta: Graha Ilmu.

Suyono & Hariyanto. (2011). *Belajar dan pembelajaran: Teori dan konsep dasar*. Bandung: Remaja Rosdakarya.

Tatli, Z., & Ayas, A. (2013). Effect of a Virtual Chemistry Laboratory on Students' Achievement. *Educational Technology & Society, 16*(1), 159-170. Retrieved from https://www.j-ets.net/ETS/journals/16_1/14.pdf.

Wahdania, Rahman, U., & Sulasteri, S. (2017). Pengaruh efikasi diri dan motivasi terhadap hasil belajar matematika peserta didik kelas X SMA Negeri 1 Bulupoddo Kab. Sinjai. *Jurnal Matematika dan Pembelajaran, 5*(1), 68-81. http://doi.org/10.24252/mapan.2017v5n1a5.

Wardani, S., Lindawati, L., & Kusuma, S. B. W. (2017). The development of inquiry by using android-system-based chemistry board game to improve learning outcome and critical thinking ability. *Jurnal Pendidikan IPA Indonesia, 6*(2), 196-205. http://doi.org/10.15294/jpii.v6i2.8360.

Widoyoko, E. (2011). *Evaluasi program pembelajaran.* Yogyakarta: Pustaka Pelajar.

Woolfolk, A. H. (2007). *Educational psychology (10th Ed.) Pearson International Edition,* MA: Pearson Education Inc, Boston.

Yektyastuti, R., & Ikhsan, J. (2016). Pengembangan media pembelajaran berbasis android pada materi kelarutan untuk meningkatkan performa akademik peserta didik SMA. *Jurnal Inovasi Pendidikan IPA, 2*(1), 88-99. http://dx.doi.org/10.21831/jipi.v2i1.10289.

Yusrizal, Y., Safiah, I. & Nurhaidah, N. (2017). Kompetensi guru dalam memanfaatkan media pembelajaran berbasis Teknologi Informasi dan Komunikasi (TIK) di SD Negeri 16 Banda Aceh. *Jurnal Ilmiah Pendidikan Guru Sekolah Dasar FKIP Unsyiah*, *2*(2), 126-134. Retrieved from http://www.jim.unsyiah.ac.id/pgsd/article/view/4573.

Zheng, Z., Cheng, J., & Peng, J. (2015). Design and implementation of teaching system for mobile cross-platform. *International Journal of Multimedia and Ubiquitous Engineering, 10*(2), 287-296. http://dx.doi.org/10.14257/ijmue.2015.10.2.26.

Zimmerman, B. J. (2000). Self-Efficacy: An essential motive to learn. *Contemporary Educational Psychology, 25*(1), 82-91. http://doi.org/10.1006/ceps.1999.1016.