

DAFTAR PUSTAKA

- Aeni, N., Prihatin, T., & Utanto, Y. (2017). Pengembangan Model Blended Learning Berbasis Masalah pada Mata Pelajaran Sistem Komputer. *Innovative Journal of Curriculum and Educational Technology*, 6(2), 84–97. <https://doi.org/10.15294/ijcet.v6i2.15642>
- Alves, Paulo; Miranda, Luísa; Morais, Carlos (2017), The Influence of Virtual Learning Environments in Students' Performance. *Universal Journal of Educational Research*, v5 n3 p517-527 2017
- Alonso, F., López, G., Manrique, D., & Viñes, J. M. (2005). An instructional model for web-based e-learning education With a Blended Learning Process Approach. *British Journal of Educational Technology*, 36(2), 217–235. <https://doi.org/doi:10.1111/j.1467-8535.2005.00454.x>
- Arkorful, V., & Abaidoo, N. (2015). The role of e-learning, advantages and disadvantages of its adoption in higher education. *International Journal of Instructional Technology and Distance Learning*, 12(1), 29–42.
- Al-Ani, W. T. (2013). Blended Learning Approach Using Moodle and Student's Achievement at Sultan Qaboos University in Oman. *Journal of Education and*
- Annisatul Aulia1 and Andromeda (2019). Pengembangan *E_modul* Berbasis Inkiri Terbimbing Terintegrasi Multirepresentasi dan Virtual Laboratory pada Materi Larutan Elektrolit dan Nonelektrolit untuk Kelas X SMA/MA.
<http://edukimia.ppj.unp.ac.id/os/index.php/edukimia> volume 1 issue 2
- Aggarwal, J. C. (2014). *Essentials of Educational Technology*, 3rd Edition. Noida: Vikas Publishing.
- Allan Jolliffe, J. R. dan D. S. (2001). *The Online Learning Handbook: Developing and Using Web-Based-Learning*. London: Kogan Page Limited.
- Alqawi, Dalal A, and Sawsan M Ezzeldin. 2015. “A Suggested Model for Developing and Assessing Competence of Prospective Teachers in Faculties of Education.” *World Journal of Education* 5(6): 65–73.
- Alves, P., Miranda, L., & Morais, C. (2017). The Influence of Virtual Learning Environments in Students' Performance. *Universal Journal of Educational Research*, 5(3), 517–527. <https://doi.org/10.13189/ujer.2017.050325>
- Amil, B., Nasional, Z., BAZNAS, Badan, K., Zakat, A., Republik, N., ... Eddy, S. A. (2020). No 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析Title. *Journal of Chemical Information and Modeling*, 21(1), 1–9.
- Author 1, Author 2, & Author 3. (2017). Title article. *Seminar Nasional: Jambore Konseling 3*, 00(00), XX–XX. <https://doi.org/10.1007/XXXXXX-XX-0000-00>
- Banathy, B. H. (1968). *Instructional Systems*. California: Fearon Publishers.
- Bell, M. W. (2008). Journal of virtual worlds research. *Journal For Virtual Worlds Research*, 1(1), 1–5.
- Castro, Laureano, Miguel Ángel Castro-Nogueira, and Miguel Ángel Toro. 2019. “Assessor Teaching and the Development of the Capacity to Innovate and to Imitate.” *Journal of Theoretical Biology* 472: 88–94.
<https://doi.org/10.1016/j.jtbi.2019.04.004>

- Charles Kivunja (2014). *Innovative Pedagogis in Higher Education to Become Effective Teachers of 21st Century Skills : Unpacking the Learning and Innovations Skills Domain of the New Learning Paradigm*. International Journal of Higher Education Vol 3 No 4: 2014. www.sciedu.ca/ijhe
- Chaeruman, U. A., Wibawa, B., & Syahrial, Z. (2020). Development of an instructional system design model as a guideline for lecturers in creating a course using blended learning approach. *International Journal of Interactive Mobile Technologies*, 14(14), 164–181. <https://doi.org/10.3991/ijim.v14i14.14411>
- Chen, A. S. and X. (2016). Online Education and Its Effective Practice: A Research Review. *Journal of Information Technology Education*, 15, 164.
- Chowdhury, Harun, Firoz Alam, and Israt Mustary. 2019. “Development of an Innovative Technique for Teaching and Learning of Laboratory Experiments for Engineering Courses.” *Energy Procedia* 160(2018): 806–11
- Christopher Butcher, Clara Davies, and M. H. (2006). *From Module Outline to Effective Teaching*. New York: Routledge.
- Clark, D. (2012). ADDIE Timeline.
- Clark Linda (2013). Virtual Learning Environments in teacher education: A journal, a journey. *Technology, Journal Pedagogy and Education*. DOI : 10.1080/1475939X.2012.731632
- Dabbagh, N. dan B. B. R. (2005). *Online Learning : Concepts, Strategies and Application*. New Jersey: Pearson Prentice Hall.
- Dale H. Schunk. (2012). *Learning Theories An Education Perspective*. <https://doi.org/10.1111/j.1552-6569.2011.00666.x>
- Donald Ary, Lucy C. Jacobs, dan C. S. (2010). *Introduction to research in Education*. Belmont: Wadsworth.
- Divayana, D. G. H. (2019). The implementation of blended learning with kelase platform in the learning of assessment and evaluation course. *International Journal of Emerging Technologies in Learning*, 14(17), 114–132. <https://doi.org/10.3991/ijet.v14i17.8308>
- Dwi Agustine, Ketang Wiyono, M. Muslim (2014). Pengembangan e_learning Berbantuan Virtual Laboratory untuk Mata Kuliah Praktikum FIsika Dasar II di Program Studi Pendidikan Fisika FKIP Unsri. *Jurnal Inovasi dan Pembelajaran Fisika* Vol.1 No.1, Mei 2014 ISSN : 2355-7109
- Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. (2018). Blended learning: the new normal and emerging technologies. *International Journal of Educational Technology in Higher Education*, 15(1), 1–16
- Ever, K. Y., & Dimililer, K. (2017). The effectiveness of a new classification system in higher education as a new e-learning tool. *Quality and Quantity*, 52, 573–582. <https://doi.org/10.1007/s11135-017-0636-y>
- Eki Yuliyanti , M. Hasan, dan Muhammad Syukri (2016). Peningkatan Keterampilan Generik Sains dan Penguasaan Konsep Melalui Laboratorium Virtual Berbasis Inkuiri. *Jurnal Pendidikan Sains Indonesia*, Vol. 04, No.02. <http://jurnal.unsyiah.ac.ad/jpsi>
- Farber Canziani, Bonnie, and Dianne H.B. Welsh. 2019. “How Entrepreneurship

- Influences Other Disciplines: An Examination of Learning Goals.” *International Journal of Management Education* (December 2018): 1–16.
- Friedman, A., & Schneider, E. (2018). Developing a Visualization Education Curriculum in the Age of Big Data Using the Dick and Carey Model. *Visual Communication Quarterly*, 25(4), 250–256.
<https://doi.org/10.1080/15551393.2018.1530115>
- Fitzgerald, Deirdre Lee. 2009. “How Development Affects Learning : Lessons Learned from Developmental , Cognitive , and Natural Science.” In *Chapter 2 How Development Affects Learning: Lessons Learned from Developmental, Cognitive, and Natural Science*, Connecticut State University, 83 Windham Street, Webb Hall #132
- Forsberg, Sara. 2019. “Setting a Global Agenda of Education: Cooperation and Tension within the Global Education Policy Field.” *Geoforum* 100(January): 32–40. <https://doi.org/10.1016/j.geoforum.2019.01.019>.
- Fu, Fongling, Sheng-Chin Yu, and Chai-Jen Ting. 2012. “The Ignored Concept on Development of Educational Information Technology.” *Procedia - Social and Behavioral Sciences* 64: 447–56. <http://dx.doi.org/10.1016/j.sbspro.2012.11.053>
- Girvan, C. (2018). What is a virtual world? Definition and classification. *Educational Technology Research and Development*, 66(5), 1087–1100.
<https://doi.org/10.1007/s11423-018-9577-y>
- Glenn E. Snelbecker. (1974). *Learning Theory, Instructional Theory, and Psychoeducational Design*. USA: Mc Graw-Hill, Inc.
- Gredler, M. E. B. (2009). *Learning and Instructional Theory Into Practice, Sixth Edition*. New Jersey: Pearson Education, Inc.
- Guzzetti, B. (2016). Handbook of research on the societal impact of digital media. In *Choice Reviews Online* (Vol. 53). <https://doi.org/10.5860/choice.195137>
- Hadi, A. S. (2012). *Teknologi Informasi dan komunikasi dalam Pendidikan*. Yogyakarta, Graha Ilmu.
- Hamdani. (2011). *Strategi Belajar Mengajar*. Bandung: Pustaka setia.
- Harasim, L. (2012). *Learning Theory And Online Technology*. US: Routdege.
- Hargis, J. (2000). The Self Regulated Learner Advantage: Learning Scince on the Internet. *Electronic Journal of Science Education*, 4(4).
- Hari Setiaji, Wing Wahyu W, dan S. S. K. (2015). Pengembangan Faktor Learner Satisfaction Dengan Menggunakan Kerangkan Kerja Community Of Inquiry. *Seminar Nasional Teknologi Informasi dan Komunikasi*. Yogyakarta.
- Haughey, M. & Anderson, T. (1998). *Networked Learning: The pedagogy of the Internet*. Montreal: Cheneliere/McGraw-Hill.
- Hendri Saputra, T. M. Ridha Al Auwal, dan Dona Mustika (2017), Pembelajaran Inkuiiri Berbasis Virtual Laboratory untuk Meningkatkan Kemampuan Literasi Sains Mahasiswa Calon Guru Pendidikan Fisika Universitas Samudra. *Jurnal IPA dan Pembelajaran IPA (JIP)*. p-ISSN: 2614-0500 www.jurnal.unsyiah.ac.id/jipi
- Hermes, Jan, and Isabel Rimanoczy. 2018. “Deep Learning for a Sustainability Mindset.” *International Journal of Management Education* 16(3): 460–67.
<https://doi.org/10.1016/j.ijme.2018.08.001>

- Ibrahim, N. (2010). *Perspektif Pendidikan Terbuka Jarak Jauh*. Jakarta: Bumi Aksara.
- Islahudin , M.Isnaini (2019), Pemanfaatan Laboratorium virtual Berbasis Software Electronics Workbench (EWB) untuk Menunjang Pemahaman Konsep Mahasiswa pada Mata Kuliah Elektronika Dasar. *Jurnal Hasil Kajian, Inovasi, dan Aplikasi Pendidikan Fisika*. jurnalfkip.unram.ac.id
- Jaya, H. (2018). Pengembangan laboratorium virtual untuk kegiatan paraktikum dan memfasilitasi pendidikan karakter di SMK. *Jurnal Pendidikan Vokasi*. <https://doi.org/10.21831/jpv.v2i1.1019>
- Santos, Júlia, Amélia Simões Figueiredo, and Margarida Vieira. 2019. “Innovative Pedagogical Practices in Higher Education: An Integrative Literature Review.” *Nurse Education Today* 72: 12–17. <https://doi.org/10.1016/j.nedt.2018.10.003>.
- Jerrold E. Kemp et al. (2007). *Jerrold E.* New Jersey: John Wiley & Sons, Inc.
- Jia, Mengda, Ali Komeily, Yueren Wang, and Ravi S. Srinivasan. 2019. “Adopting Internet of Things for the Development of Smart Buildings: A Review of Enabling Technologies and Applications.” *Automation in Construction* 101(July 2018): 111–26. <https://doi.org/10.1016/j.autcon.2019.01.023>.
- Kelvin, O. K., Gregory, W., & Samuel, M. M. (2012). Integrating Virtual Worlds and Virtual Learning Environments in Schools in Developing Economies. *International Journal of Information and Communication Technology Research*, 2(1), 17–21.
- Kitao, D. K. K. and D. S. K. (n.d.). Selecting and Developing Teaching/ Learning Materials.
- Koehler, M. J., & Mishra, P. (2005). Teachers Learning Technology by Design. *Journal of Computing in Teacher Education*, 21(3), 94–102. <https://doi.org/10.1080/10402454.2005.10784518>
- Komara, E. (2014). *Belajar dan Pembelajaran Interaktif*. Bandung: Refika Aditama.
- Kupetz, R., & Ziegenmeyer, B. (2005). Blended learning in a teacher training course: Integrated interactive elearning and contact learning. *ReCALL*, 17(2), 179–196. <https://doi.org/10.1017/S0958344005000327>
- Means B., Toyama Y., Murphy R., Bakia M., J. K. (2010). Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies. *U.S. Department of Education*.
- Maria, Lydiawati Kosasih Asalla; Naova, R. H. (2014). Pengaruh Penerapan CoI Framework Pada Pembelajaran Online Terhadap Peningkatan Pemahaman (Subkategori Cognitive Presence) Mahasiswa. *Comtech*, 5(1), 213–223.
- Matthew B. Miles dan A Michael Huberman. (1992). *Analisis Data Kualitatif, Terjemahan Tjetjep Rohendi Rohidi*. Jakarta: UI Press.
- Media, E. (2018). *Educational Media and Technology Yearbook* (Vol. 41). <https://doi.org/10.1007/978-3-319-67301-1>
- Miarso, Y. (2007). Menyemai Benih Teknologi Pendidikan. In *Computer*. <https://doi.org/10.1038/cddis.2011.1>
- McAvinia, C. (2016). Online Learning and its Users: Lessons for Higher Education. In *Online Learning and its Users: Lessons for Higher Education* (Vol. 44, Issue 0).

- Miarso, Y. (2009). *Menyemai Benih Teknologi Pendidikan*. Jakarta: Kencana Prenada Group.
- Mimirinis, M., & Bhattacharya, M. (2007). Design of Virtual Learning Environments. *Jl. of Interactive Learning Research*, 18(1), 55–64.
- Mitchell, J. (2008). How Information-Based Planning Can Flourish Where Traditional Politics Reign: An Example from Pakistan. *Journal of Education for International Development*.
- Molenda, A. K. B. dalam A. J. dan M. (2008). *Educational technology. A Definition with Commentary* (hal. 225). hal. 225. New York: Lawrence Erlbaum Associates.
- Munandi, Y. (2008). *Media Pembelajaran; Sebuah Pendekatan Baru*. Jakarta: Gaung Persada.
- Neumann, K., Viering, T., Boone, W. J., & Fischer, H. E. (2013). Towards a learning progression of energy. *Journal of Research in Science Teaching*, 50(2), 162–188. <https://doi.org/10.1002/tea.21061>
- Nisrokhah. (2016). Pengembangan Modul Mata Kuliah Sejarah Pendidikan Islam di Sekolah Tinggi Ilmu Tarbiyah Pemalang. *Jurnal Teknologi Pendidikan*, 18(1)
- Olabarriaga, S. D., Glatard, T., & De Boer, P. T. (2010). A virtual laboratory for medical image analysis. *IEEE Transactions on Information Technology in Biomedicine*. <https://doi.org/10.1109/TITB.2010.2046742>
- Panigrahi, Ritanjali, Praveen Ranjan Srivastava, and Dheeraj Sharma. 2018. “Online Learning: Adoption, Continuance, and Learning Outcome—A Review of Literature.” *International Journal of Information Management* 43(May): 1–14. <https://doi.org/10.1016/j.ijinfomgt.2018.05.005>.
- Prawiradilaga, D. S. (2012). *Wawasan Teknologi Pendidikan* (Vol. 81). Jakarta: Kencana Prenada Media Group.
- Pribadi, B. A. (2010). *Model Desain Sistem Pembelajaran*. Jakarta: Dian Rakyat.
- Purwanto, P. P. dan. (2001). *Penulisan Bahan Ajar* (hal. 8). hal. 8. Jakarta: Departeman Pendidikan Nasional.
- Ramasundaram, V., Grunwald, S., Mangeot, A., Comerford, N. B., & Bliss, C. M. (2005). Development of an environmental virtual field laboratory. *Computers and Education*, 45(1), 21–34. <https://doi.org/10.1016/j.compedu.2004.03.002>
- Ranius, A. Y., Syahrial, Z., Sokardjo, M., & Syakirah. (2019). Virtual learning: Practicum of algorithms and programming using Pascal program. *AIP Conference Proceedings*, 2194(December). <https://doi.org/10.1063/1.5139833>
- Ranius, A. Y., Syahrial, Z., & Sukardjo, M. (2020). Development of virtual learning methods in the application of practice algorithms and programming. *International Journal of Advanced Science and Technology*.
- Ratih Rizqi Nirwana (2011), Pemanfaatan Laboratorium Virtual dan E_refrance dalam Proses Pembelajaran dan penelitian Ilmu Kimia. *Jurnal PHENOMENON*, Volume 1 Nomor 1, Juli 2011
- Richey, B. B. S. dan R. C. (1994). *Teknologi Pembelajaran : Definisi dan Kawasannya*. Jakarta: Unit Penerbitan Universitas Negeri Jakarta.
- Rita C. Richey, James D. Klein, and M. W. T. (2011). *The Instructional Design*

- Knowledge Base Teori, Research, and Practice.* New York: Routledge.
- Roblyer, M. . (2016). *Integrating Educational Technology into Teaching*. New Jersey: pearson.
- Rowntree, D. (1994). *Preparing Materials for Open, Distance and Flexible Learning*. London: Kogan Page Limited.
- Sanjaya, W. (2006). *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta: Kencana Prenada Media Group.
- Sharon E. Smaldino, D. L. L. and J. D. R. (2008). *Instructional Technology & Media For Learning Teknologi Pembelajaran dan Media untuk belajar*. New Jersey: Pearson Prentice Hall.
- Sharon E. Smaldino, D. L. L. J. D. S. (2012). *Instructional Technology & Media For Learning Teknologi Pembelajaran dan Media untuk Belajar*. Penterjemah : Arif Rahman (Kencana, Ed.). Jakarta.
- Sheilds, R. (2007). Ken Hillis, Digital Sensations: Space, Identity and Embodiment in Virtual Reality. *Space and Culture*. <https://doi.org/10.1177/120633120000300406>
- Shulamit Kotzer, Y. E. (2012). Learning and teaching with Moodle-based E-learning environments, combining learning skills and content in the fields of Math and Science & Technology. *Proceedings of 1st Moodle Research Conference*, 122.
- Siang, J. L., Nurdin Ibrahim, & Rusmono. (2017). Pengembangan Paket Modul Cetak Mata Pelajaran Pendidikan Agama Kristen SMP Negeri Tidore Kepulauan. *Jurnal Teknologi Pendidikan*, 19(3), 191–205.
- Sitepu B.P. (2014). *Pengembangan Sumber Belajar*. Jakarta: Raja Grafindo Persada.
- Smellie, J. E. K. dan D. C. (1989). *Planning, Producing, And Using Instructional Media 6th Edition*. New York: Harper and Row.
- Sudjana. (2005). *Metoda Statistika*. Bandung: Tarsito Bandung.
- Stetten, Nichole E. et al. 2019. “Interprofessional Service Learning Experiences among Health Professional Students: A Systematic Search and Review of Learning Outcomes.” *Journal of Interprofessional Education and Practice* 15: 60–69. <https://doi.org/10.1016/j.xjep.2019.02.002>.
- Sugiana, I. N., Harjono, A., Sahidu, H., & Gunawan, G. (2018). Pengaruh Model Pembelajaran Generatif Berbantuan Media Laboratorium Virtual Terhadap Penguasaan Konsep Fisika Siswa pada Materi Momentum dan Impuls. *Jurnal Pendidikan Fisika dan Teknologi*, 2(2), 61. <https://doi.org/10.29303/jpft.v2i2.290>
- Sugiyono. (2015). *Metode Penelitian Kuantitatif, Kualitatif, dan R & D*. Bandung: Alfabeta.
- Sukardjo, M., & Sugiyanta, L. (2018). Measurement of Usability for Multimedia Interactive Learning Based on Website in Mathematics for SMK. *IOP Conference Series: Materials Science and Engineering*, 336(1). <https://doi.org/10.1088/1757-899X/336/1/012032>
- Suparman, A. (2014). *Desain Instruksional Modern: Panduan Para Pengajar dan Inovator Pendidikan, Edisi Keempat*. Jakarta: Erlangga.
- Supranata, S. (2006). *Analisis, Validitas, Reliabilitas dan Interpretasi Hasil Tes*. Bandung: Remaja Rosdakarya.

- Tatli, Z., & Ayas, A. (2010). Virtual laboratory applications in chemistry education. *Procedia - Social and Behavioral Sciences*.
<https://doi.org/10.1016/j.sbspro.2010.12.263>
- Thohari, Afandi Nur Aziz, Kodrat Iman Satoto, and Kurniawan Teguh Martono. 2016. “Pembuatan Aplikasi Mobile Learning Sebagai Sarana Pembelajaran Di Lingkungan Universitas Diponegoro.” *Jurnal Teknologi dan Sistem Komputer* 1(2): 56.
- Walter Dick, Lou Carey, J. O. C. (2006). The Systematic Design of Instruction. In *Educational Technology Research and Development*.
<https://doi.org/10.1007/s11423-006-9606-0>
- Walter Dick. Lou Carey, dan J. O. C. (2015). *The Systematic Design of Instruction*. London: pearson.
- Walter Dick, L. C. and J. O. C. (2005). *The Systematic Design of Instruction*. New York: Pearson Education, Inc.
- Wichadee, S. (2017). A development of the blended learning model using edmodo for maximizing students' oral proficiency and motivation. *International Journal of Emerging Technologies in Learning*, 12(2), 137–154. <https://doi.org/10.3991/ijet.v12i02.6324>
- Widodo, U. R. & A. (2017). Pengembangan Tutorial Online Yang Mengintegrasikan Panduan Belajar Mandiri Untuk Melatih Self-Regulated Learning. , *Jurnal Pendidikan dan Kebudayaan*, 2(2), 202.
- Wong, K. T., Hwang, G. J., Goh, P. S. C., & Mohd Arrif, S. K. (2018). Effects of blended learning pedagogical practices on students' motivation and autonomy for the teaching of short stories in upper secondary English. *Interactive Learning Environments*, 28(4), 512–525. <https://doi.org/10.1080/10494820.2018.1542318>
- Xu, J., & Zhou, Y. (2017). Application and effects of blended learning in public courses in the university. *International Journal of Continuing Engineering Education and Life-Long Learning*, 27(1–2), 87–100.
<https://doi.org/10.1504/IJCEELL.2017.081002>
- Yamin, M. (2007). *Desain Pembelajaran Berbasis Tingkat Satuan Pendidikan*. Jakarta: GP Press.
- Yamins, D. L. K., & DiCarlo, J. J. (2016). Using goal-driven deep learning models to understand sensory cortex. *Nature Neuroscience*, 19(3), 356–365.
<https://doi.org/10.1038/nn.4244>
- Yamin, M. (2011). *Paradigma Baru Pembelajaran*. Jakarta: Gaung Persada.