

## DAFTAR PUSTAKA

- Abdinejad, M., Talaie, B., Qorbani, H. S., & Dalili, S. (2021). Student perceptions using augmented reality and 3d visualization technologies in chemistry education. *Journal of Science Education and Technology*, 30, 87-96.
- Anuyahong, Asst.Prof.Dr.Bundit & Pucharoen, Nattida. (2023). Exploring the Effectiveness of Mobile Learning Technologies in Enhancing Student Engagement and Learning Outcomes. *International Journal of Emerging Technologies in Learning (iJET)*. 18, 50-63.
- Azuma,R. (1997). "A Survey of Augmented Reality," *Presence: Teleoperators and Virtual Environments*. 6(4), 355-385.
- Borg, W. R., & Gall, M. D. (2003). *Educational Research: An Introduction, Seventh Edition*. New York: Allyn and Bacon.
- Cahyana, Ucu., Lestari, Ika., Irwanto, Irwanto., & Suroso, JarotSembodo. (2024). Development of a mobile learning network for science with augmented reality and its impact on students' literacy and numeracy. *International Journal of Innovative Research and Scientific Studies*, 7(2), 576–586.
- Caudell, Thomas. (1990). *1990: The term 'Augmented Reality' is attributed to Thomas P. Caudell, a former Boeing researcher*.
- Cawood, Stephen, dan Fiala, Mark. (2007). "Augmented reality: a practical guide". Pragmatic Bookshelf.
- Chiang, T. H., Yang, S. J., & Hwang, G. J. (2014). An augmented reality-based mobile learning system to improve students' learning achievements and motivations in natural science inquiry activities. *Journal of Educational Technology & Society*, 17(4), 352-365.
- Djaali dan Muljono, Pudji. (2008) . Pengukuran dalam Bidang Pendidikan. Jakarta: Grasindo
- Elsharkawy, A., Naheem, K., Koo, D., & Kim, M. S. (2021). A UWB-Driven Self-Actuated Projector Platform for Interactive Augmented Reality Applications," *Applied Sciences*. 11 (6).
- Fahrul, H. (2021). Peningkatan Motivasi Belajar dan Pengetahuan Peserta Didik: Penerapan Mobile Learning pada Mata Pelajaran Pendidikan Agama Islam. *Jurnal Pendidikan Agama Islam Al-Thariqah*, 6(2), 297-316.
- Fauziah, E., & Rohmah, U. S. (2024). Pengembangan Materi dan Bahan Ajar PAI Dengan Model Dick And Carey. *Social Science Academic*, 2(1), 67-78.

- Febriyanto, Yudha., Utami, Lisa dan Zona Octarya. (2020). Desain Media Pembelajaran Berbasis Android Pada Materi Koloid di Sekolah Menengah Kejuruan Negeri Pertanian Terpadu Provinsi Riau, *Journal Education and Chemistry*, 2 (1), 1.
- Gabel, D., 1998, The Complexity of Chemistry and Implications for Teaching, In Fraser, B.J. dan. Tobin K. G., *International Handbook of Science Education Dordrecht*, The Netherlands: Kluwer Academic Publishers.
- Gilbert, J. K., & Treagust, D. F. (2009). *Multiple representations in chemical education*. Dordrecht: Springer.
- Golse, N., Petit, P., Lewin, M., Vibert, E., & Cotin, S. (2020). Augmented Reality during Open Liver Surgery Using a Markerless Non-rigid Registration System. *Journal of Gastrointestinal Surgery*. 25, 662–671.
- Gomes, A., Fernandes, K., & Wang, D. (2021). Surface Prediction for Spatial Augmented Reality Applications. *Virtual Reality*.
- Gupta, R. K. (2021). Augmented Reality Based Collaborative Product Enhancement. *Springer*, Singapore.
- Harefa, N., Tafonao, G. S., & Hidar, S. (2020). Analisis minat belajar kimia siswa melalui pembelajaran berbasis multimedia. *Paedagogia: Jurnal Kajian, Penelitian dan Pengembangan Kependidikan*, 11(2), 81-86.
- Huang, C. S. J. dkk. (2016). Effects of Situated Mobile Learning Approach on Learning Motivation and Performance of EFL Students. *Journal of Educational Technology and Society*, 19(1), 263–276.
- Ibharim N. A. N., Ramli, S. Z., Zahari, S. A., Edyanto, N. A. A., & Zawawi, M. A. Abdullah. (2021) Learning History Using Augmented Reality. *International Journal of Multimedia and Recent Innovation*. 3 (1), 1-10.
- Indahsari, L., & Sumirat, S. (2023). Implementasi Teknologi Augmented Reality dalam Pembelajaran Interaktif. *Cognoscere: Jurnal Komunikasi Dan Media Pendidikan*, 1(1), 7-11.
- Liu, B., & Tanaka, J. (2021). Virtual Marker Technique to Enhance User Interactions in a Marker Based AR System. *Applied Sciences*.
- Lubis, A. W. (2017). Perbandingan Hasil Belajar Siswa Dengan Menggunakan Model Mengajar Deduktif Dan Model Mengajar Induktif Pada Materi Pokok Sistem Koloid Di Kelas XI IPA SMA Negeri 13 Medan. *Keguruan*, 5(1).
- Mansour, N., Aras, C., Staarman, J.K. Alotaibi, S.B.M. (2025). Embodied learning of science concepts through augmented reality technology. *Educ Inf Technol*. 30, 8245–8275.

- Mareta, A. 2015. *Implementasi Media Ajar Bangun Ruang Berbasis Augmented Reality pada SMPN 2 Selomerto Kabupaten Wonosobo* (Doctoral dissertation, Universitas Negeri Semarang).
- Martha, Z. D., Adi, E. P., & Soepriyanto, Y. (2018). E-book berbasis Mobile learning. *JKTP: Jurnal Kajian Teknologi Pendidikan*, 1(2), 109-114.
- Maydiantoro, A. (2021). Model-Model Penelitian Pengembangan (Research and Development). *Jurnal pengembangan profesi pendidik indonesia (JPPPI)*.
- Midak, Liliya & Pahomov, Ju & Kuzyshyn, O & Lutsyshyn, Victor & Kravets, I & Buzhdyhan, Khrystyna & Baziuk, L. (2022). Visualizing the school organic chemistry course with augmented reality. *Journal of Physics: Conference Series*.
- Mulyatiningsih, E. (2011). *Pengembangan model pembelajaran*. UNY Press.
- Mustaqim, I. (2016). Pemanfaatan Augmented Reality sebagai media pembelajaran. *Jurnal pendidikan teknologi dan kejuruan*, 13(2), 174-183.
- Mustaqim, I., & Kurniawan, N. (2017). Pengembangan Media Pembelajaran Berbasis Augmented Reality. *Jurnal Edukasi Elektro*, 1 (1), 36-48.
- Parera, L. A. M., Toni, S., Naat, J., Sudirman, S., Dewi, N. W. O., Kerih, E. C., & Nenohai, J. A. (2022). Pengembangan Video Pembelajaran Kimia Berbantuan Kinemaster pada Materi Sistem Koloid untuk Kelas XI SMA/MA. *Jurnal Beta Kimia*, 2(1), 23-32.
- Putra, I. A. A., & Putra, I. G. N. A. C. (2021). Development of Augmented Reality Application for Canang Education Using Marker-Based Tracking Method. *Jurnal Elektronik Ilmu Komputer Udayana*. 9 (3), 365-274.
- Radosavljevic, S., Radosavljevic, V., & Grgurovic, B. (2020). The potential of implementing augmented reality into vocational higher education through mobile learning. *Interactive Learning Environments*, 28(4), 404-418.
- Rachman, Andy., Alfiah, Agry., Briliananda, C.C. (2024). Increasing Student Interest and Motivation in Learning with Augmented Reality Technology. *International Journal of Teaching and Learning (INJOTEL)*. 2(8), 2299-2311.
- Rahayu, A. (2025). Metode Penelitian dan Pengembangan (R&D): Pengertian, Jenis dan Tahapan. *DIAJAR: Jurnal Pendidikan dan Pembelajaran*. 4(3), 459-470.
- Republik Indonesia, *Undang-Undang RI No. 20 Tahun 2003 Tentang Sistem Pendidikan Nasional*.

- Romli, R., Aznan, M. A., Xian, L. Z., Bakhoruddin, A. A., Wazir, F. N. H. Mohd., & Singh, A. R. S. Gurdial. (2020). ARUNIMAP: A Development of Interactive Map Using Augmented Reality," *Journal of Physics: Conference Series*. 1755.
- Sahputra, D., Yanto, O., & Susanto, S. (2020). Kebijakan Formulasi Tindak Pidana Ujaran Kebencian Yang Disebarkan Oleh Buzzer Dalam Perspektif Sistem Peradilan Pidana. *Jurnal Lex Specialis*, 1(2).
- Sain, Muh. Hanafy. (2018). "Konsep Belajar dan Pembelajaran". *Jurnal Ilmu Tarbiyah dan Keguruan*, 17(1), 66–79.
- Samsinar, (2021). Mobile Learning Dalam Pembelajaran. *Al-Gurfah: Journal of Primary Education*, 1(1), 41-57.
- Sari, R. M. M., & Priatna, N. (2020). Model-Model Pembelajaran di Era Revolusi Industri 4.0 (E-Learning, M-Learning, AR-Learning dan VR-Learning). *Biormatika: Jurnal ilmiah fakultas keguruan dan ilmu pendidikan*, 6(1), 107-115.
- Sarrab, Elgamel, dan Aldabbas. (2012). Mobile Learning (M-Learning And Educational Environments). *International Journal of Distributed and Parallel System (IJDPS)*, 3 (4).
- Sugiono. (2019). *Metode Penelitian dan Pengembangan (R&D)*. Bandung: Penerbit Alfabeta.
- Sugiyono. (2010). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sutherland, I.E. (1968). "A Head-Mounted Three-Dimensional Display," *AFIPS Conference Proceedings*, 33 (1), 757-764.
- Sutopo, Ariesto Hadi. (2012). *Teknologi Informasi dan Komunikasi Dalam Pendidikan*. Yogyakarta: Graha Ilmu.
- Tania, Bella., Murni. (2017). "Penerapan Model Pembelajaran Learning Cycle 5e Untuk Meningkatkan Keterampilan Proses Sains Siswa". *Jurnal Ilmiah Penelitian dan Pembelajaran Fisika*, 3(1), 68.
- Thiagarajan, S., Semmel, D. G., & Semmel, M. I. (1974). Instructional development for training teachers of exceptional children: A sourcebook. *Journal of School Psychology*, 14(1), 75.
- Usada, E. (2014). Rancang Bangun Modul Praktikum Teknik Digital Berbasis Mobile Augmented Reality (AR). *Jurnal Infotel*, 6(2), 83-88.
- Vallino, James R. (1998). *Interactive Augmented Reality*. Rochester, New York: University of Rochester.

Waruwu, M. (2024). Metode penelitian dan pengembangan (R&D): konsep, jenis, tahapan dan kelebihan. *Jurnal Ilmiah Profesi Pendidikan*. 9(2), 1220-1230.

Wood, Karen. (2003). *Introduction to Mobile Learning (M Learning)*. Ferl, Becta (British Educational Communications and Technology Agency).

