

DAFTAR PUSTAKA

- Adžgauskaitė, M., Abhari, K. and Pesavento, M. (2020) 'How Virtual Reality Is Changing the Future of Learning in K-12 and Beyond', in Stephanidis, C. et al. (eds) *HCI International 2020 -- Late Breaking Papers: Cognition, Learning and Games*. Cham: Springer International Publishing, pp. 279–298.
- Anifowose, H., Yan, W. E. I. and Dixit, M. (2022) 'Interactive virtual construction', 2, pp. 547–556.
- Au, E. H. and Lee, J. J. (2017) 'Virtual reality in education: a tool for learning in the experience age', *International Journal of Innovation in Education*, 4(4), p. 215. doi: 10.1504/ijiie.2017.091481.
- de Back, T. T. et al. (2020) 'Benefits of immersive collaborative learning in CAVE-based virtual reality', *International Journal of Educational Technology in Higher Education*, 17(1), pp. 1–18. doi: 10.1186/S41239-020-00228-9/FIGURES/5.
- Brooke, J. (2020) 'SUS: A "Quick and Dirty" Usability Scale', *Usability Evaluation In Industry*, (November 1995), pp. 207–212. doi: 10.1201/9781498710411-35.
- Bureau of Labor Statistics (2023) *Construction deaths due to falls, slips, and trips increased 5.9 percent in 2021 : The Economics Daily: U.S. Bureau of Labor Statistics*. Available at: <https://www.bls.gov/opub/ted/2023/construction-deaths-due-to-falls-slips-and-trips-increased-5-9-percent-in-2021.htm> (Accessed: 6 December 2023).
- Candrianto, S. T. M. P. (2020) *Pengenalan Keselamatan Dan Kesehatan Kerja*. Literasi Nusantara. Available at: <https://books.google.co.id/books?id=-igMEAAQBAJ>.
- Ceylan, S. (2020) 'Using virtual reality to improve visual recognition skills of first year architecture students: A comparative study', *CSEDU 2020 - Proceedings of the 12th International Conference on Computer Supported Education*, 2(Csedu), pp. 54–63. doi: 10.5220/0009346800540063.
- Chellappa, V. et al. (2022) 'VR-based Safety Training Research in Construction', *IOP Conference Series: Materials Science and Engineering*, 1252(1), p. 012058. doi: 10.1088/1757-899x/1252/1/012058.
- Chen, S.-Y. and Chien, W.-C. (2022) 'Immersive Virtual Reality Serious Games With DL-Assisted Learning in High-Rise Fire Evacuation on Fire Safety Training and Research', *Front. Psychol*, 13, p. 786314. doi: 10.3389/fpsyg.2022.786314.
- Christian, B., Salvador, C. and Christian, G. (2021) 'Virtual Reality (VR) in Superior Education Distance Learning: A Systematic Literature Review',

International Journal on Informatics Visualization, 5(3), pp. 264–270. doi: 10.30630/JOIV.5.3.632.

Colin, R. *et al.* (2022) ‘Comparing virtual reality, desktop-based 3D, and 2D versions of a category learning experiment’. doi: 10.1371/journal.pone.0275119.

Dr. Eng. Herry Santosa, S. T. M. T. (2021) *PENCITRAAN VISUAL KAWASAN URBAN: TEORI, STRATEGI DAN PERENCANAAN LANDSCAPE VISUAL PLANNING SYSTEM*. Media Nusa Creative (MNC Publishing). Available at: <https://books.google.co.id/books?id=FnRMEAAAQBAJ>.

Fundamental principles of occupational health and safety (2002) *Choice Reviews Online*. American Library Association. doi: 10.5860/choice.39-3997.

Getuli, V., Capone, P. and Bruttini, A. (2021) ‘Planning, management and administration of HS contents with BIM and VR in construction: an implementation protocol’, *Engineering, Construction and Architectural Management*, 28(2), pp. 603–623. doi: 10.1108/ECAM-11-2019-0647.

Goppold, M., Herrmann, J.-P. and Tackenberg, S. (2022) ‘An error-based augmented reality learning system for work-based occupational safety and health education.’, *Work (Reading, Mass.)*, 72(4), pp. 1563–1575. doi: 10.3233/WOR-211243.

Government Digital Service United Kingdom (2020) ‘The safety of domestic virtual reality systems A literature review’.

Grasnick, A. (2021) *Basics of Virtual Reality*, *Basics of Virtual Reality*. doi: 10.1007/978-3-662-64201-6.

Grega, M., Nečas, P. and Lancik, B. (2021) ‘Virtual Reality Safety Limitations’, *INCAS Bulletin*, 13(4), pp. 75–86. doi: 10.13111/2066-8201.2021.13.4.7.

Guan, J. Q. *et al.* (2023) ‘Effects of a virtual reality-based pottery making approach on junior high school students’ creativity and learning engagement’, *Interactive Learning Environments*, 31(4), pp. 2016–2032. doi: 10.1080/10494820.2021.1871631.

Gürer, S., Surer, E. and Erkayaoğlu, M. (2023) ‘MINING-VIRTUAL: A comprehensive virtual reality-based serious game for occupational health and safety training in underground mines’, *Safety Science*. Available at: <https://api.semanticscholar.org/CorpusID:259445801>.

Hartfill, J. *et al.* (2020) ‘Word saber: An effective and fun VR vocabulary learning game’, *ACM International Conference Proceeding Series*, pp. 145–154. doi: 10.1145/3404983.3405517.

Hasan, M. *et al.* (2021) *Media Pembelajaran*, Tahta Media Group.

Hidetoshi, T. and Kosei, I. (2022) ‘Evaluation of Construction Site Layout Using Virtual Reality Linked with 3D CAD and Body Tracking’, *Proceedings of*

the International Symposium on Automation and Robotics in Construction, 2022-July(Isarc), pp. 297–303. doi: 10.22260/isarc2022/0042.

- ILO (2015) ‘Global Trends on Occupational Accidents and Diseases’, *World Day for Safety and Health At Work*, (April), pp. 1–7. Available at: http://www.ilo.org/legacy/english/osh/en/story_content/external_files/fs_st_1-ILO_5_en.pdf.
- Jannah, A. M., Suryanto, T. L. M. and Pratama, A. (2022) ‘Pengukuran User Experience Terhadap Penggunaan Aplikasi SIMVONI dengan Pendekatan Metode HEART’, *EXPERT: Jurnal Manajemen Sistem Informasi dan Teknologi*, 12(1), p. 34. doi: 10.36448/expert.v12i1.2533.
- Jelonek, M. *et al.* (2022) ‘A User Study Exploring Learning Effects, Usability and User Experience’, *i-com*, 21(2), pp. 269–281. doi: doi:10.1515/icom-2022-0006.
- Ji, Z. *et al.* (2023) ‘Integrating diminished quality of life with virtual reality for occupational health and safety training’, *Safety Science*, 158(October 2022), p. 105999. doi: 10.1016/j.ssci.2022.105999.
- Joshi, S. *et al.* (2021) ‘Implementing Virtual Reality technology for safety training in the precast/ prestressed concrete industry’, *Applied Ergonomics*, 90(October 2020), p. 103286. doi: 10.1016/j.apergo.2020.103286.
- Van Der Kruk, S. R. *et al.* (2023) ‘Feasibility and preliminary effectiveness of virtual reality as a patient education tool for people with cancer undergoing immunotherapy: a protocol for a randomised controlled pilot study in a regional setting’, *MBJ Open*. doi: 10.1136/bmjopen-2022-071080.
- Kurniawati, A. *et al.* (2020) ‘Introduction Virtual Reality for Learning Media in Schools in Indonesia’, *Journal of Physics: Conference Series*, 1569(2). doi: 10.1088/1742-6596/1569/2/022065.
- Le, Q. T., Pedro, A. and Park, C. S. (2015) ‘A Social Virtual Reality Based Construction Safety Education System for Experiential Learning’, *Journal of Intelligent and Robotic Systems: Theory and Applications*, 79(3–4), pp. 487–506. doi: 10.1007/s10846-014-0112-z.
- Li, P., Fang, Z. and Jiang, T. (2022) ‘Research Into improved Distance Learning Using VR Technology’, *Frontiers in Education*, 7(February), pp. 1–14. doi: 10.3389/educ.2022.757874.
- Li, W. *et al.* (2022) ‘Synthesizing Personalized Construction Safety Training Scenarios for VR Training.’, *IEEE transactions on visualization and computer graphics*, 28(5), pp. 1993–2002. doi: 10.1109/TVCG.2022.3150510.
- Li, X. and Heidari, F. (2020) ‘Introduce virtual reality to college technical training program -intensified vr training for safety and economic efficiency’, *ASEE Annual Conference and Exposition, Conference Proceedings*, 2020-June.

doi: 10.18260/1-2--34871.

- Lindholm, M., Väyrynen, S. and Reiman, A. (2019) 'Findings and views on occupational safety and health teaching at universities', *Work*, 64(4), pp. 685–695. doi: 10.3233/WOR-193030.
- Loseva-Rimsha, N. S. (2022) 'Substantiation of the use of virtual and augmented reality as a means of developing cognitive interest in children.', *Современное образование*. Available at: <https://api.semanticscholar.org/CorpusID:252884891>.
- Mahdi, I. (2022) *Kasus Kecelakaan Kerja di Indonesia Alami Tren Meningkat*, dataindonesia.id. Available at: <https://dataindonesia.id/sektor-riil/detail/kasus-kecelakaan-kerja-di-indonesia-alami-tren-meningkat> (Accessed: 27 October 2022).
- Marcelo M. Soares, F. R. and and Ahram, T. Z. (2022a) *Handbook of Usability and User Experience Methods and Techniques*.
- Marcelo M. Soares, F. R. and and Ahram, T. Z. (2022b) *Handbook of Usability and User Experience Research and Case Studies*.
- Marks, S., White, D. and Singh, M. (2017) 'Getting up your nose: a virtual reality education tool for nasal cavity anatomy', *SIGGRAPH Asia 2017 Symposium on Education, SA 2017*. doi: 10.1145/3134368.3139218.
- Mehra, R. *et al.* (2022) 'Certificate Course in Occupational Safety and Health: A Capacity Building Program for Primary Care Physicians based on Adult Learning Model.', *Indian journal of occupational and environmental medicine*, 26(2), pp. 95–99. doi: 10.4103/ijoem.ijoem_241_21.
- Meta (2022) *Meta Quest 2: Our Most Advanced New All-in-One VR Headset | Oculus | Meta Store*. Available at: <https://www.meta.com/quest/products/quest-2/tech-specs/> (Accessed: 13 December 2023).
- Moro, C. *et al.* (2017) 'The effectiveness of virtual and augmented reality in health sciences and medical anatomy', *Anatomical Sciences Education*, 10(6), pp. 549–559. doi: 10.1002/ase.1696.
- Nanka, O. *et al.* (2019) 'Relationship study between the student learning approach in the occupational safety and health field and acquired competencies', *Journal of Achievements in Materials and Manufacturing Engineering*, 95(1), pp. 32–41. doi: 10.5604/01.3001.0013.7623.
- Nuryanto, M. R. *et al.* (2019) 'Pemberian Latihan Virtual Reality Lebih Baik Daripada Latihan Konvensional Terhadap Peningkatan Fungsional Tangan Pada Pasien Pasca Stroke', *Sport and Fitness Journal*, pp. 78–84. doi: 10.24843/spj.2019.v07.i01.p10.
- O'Connor, M. *et al.* (2021) '3D virtual reality simulation in radiography education:

The students' experience', *Radiography*, 27(1), pp. 208–214. doi: 10.1016/j.radi.2020.07.017.

Papagiannakis, G. *et al.* (2018) 'Transforming medical education and training with VR using M.A.G.E.S.', *SIGGRAPH Asia 2018 Posters, SA 2018*. doi: 10.1145/3283289.3283291.

Pedro, A., Le, Q. T. and Park, C. S. (2016) 'Framework for Integrating Safety into Construction Methods Education through Interactive Virtual Reality', *Journal of Professional Issues in Engineering Education and Practice*, 142(2), pp. 1–10. doi: 10.1061/(ASCE)EI.1943-5541.0000261.

Prasetyaningsih, S. and Ramadhani, W. P. (2021) 'Analisa User Experience pada TFME Interactive Learning Media Menggunakan User Experience Questionnaire', *Jurnal Integrasi*, 13(2), pp. 147–157. doi: 10.30871/ji.v13i2.3180.

Putze, S. *et al.* (2020) 'Breaking the Experience: Effects of Questionnaires in VR User Studies', *Conference on Human Factors in Computing Systems - Proceedings*, pp. 1–15. doi: 10.1145/3313831.3376144.

Ramadhani, M. *et al.* (2022) 'Design and User Experience Evaluation of Bersii Android-based Mobile Application User Interface', *MATICS: Jurnal Ilmu Komputer dan Teknologi Informasi (Journal of Computer Science and Information Technology)*, 14(2), pp. 41–49. doi: 10.18860/mat.v14i2.16919.

Rantala, M., Lindholm, M. and Tappura, S. (2022) 'Supporting Occupational Health and Safety Risk Assessment Skills: A Case Study of Five Companies', *International Journal of Environmental Research and Public Health*, 19(3). doi: 10.3390/ijerph19031720.

Renganayagalu, S. kumar, Mallam, S. C. and Nazir, S. (2021) *Effectiveness of VR Head Mounted Displays in Professional Training: A Systematic Review, Technology, Knowledge and Learning*. Springer Netherlands. doi: 10.1007/s10758-020-09489-9.

Rokoei, S. *et al.* (2023) 'Virtual reality application for construction safety training', *Safety Science*, 157(August 2022), p. 105925. doi: 10.1016/j.ssci.2022.105925.

Roy, M. *et al.* (2022) 'The International Journal of Management Education Virtual reality learning media with innovative learning materials to enhance individual learning outcomes based on cognitive load theory', *The International Journal of Management Education*, 20(3), p. 100657. doi: 10.1016/j.ijme.2022.100657.

Saniyah, F., Albarra, G. and Fikri, M. L. (2023) 'Development of 360-Degree Video-Based Virtual Reality Learning Media to Enhance Students' Learning Interest', 1, pp. 1–6.

- Saurik, H. T. T., Purwanto, D. D. and Hadikusuma, J. I. (2019) 'Teknologi Virtual Reality untuk Media Informasi Kampus', *Jurnal Teknologi Informasi dan Ilmu Komputer*, 6(1), p. 71. doi: 10.25126/jtiik.2019611238.
- Schrepp, M. (2019) 'User Experience Questionnaire Handbook Version 8', URL: https://www.researchgate.net/publication/303880829_User_Experience_Questionnaire_Handbook_Version_2. (Accessed: 02.02. 2017), pp. 1–15. Available at: www.ueq-online.org.
- Shi, Y. *et al.* (2019) 'Impact assessment of reinforced learning methods on construction workers' fall risk behavior using virtual reality', *Automation in Construction*, 104(May), pp. 197–214. doi: 10.1016/j.autcon.2019.04.015.
- Shringi, A. *et al.* (2022) 'Efficiency of VR-Based Safety Training for Construction Equipment: Hazard Recognition in Heavy Machinery Operations', *Buildings*, 12(12), pp. 1–23. doi: 10.3390/buildings12122084.
- Torrecilla-García, J. A. *et al.* (2019) 'The virtual reality in olive oil industry occupational health and safety: An integrative review', *Studies in Systems, Decision and Control*, 202, pp. 797–805. doi: 10.1007/978-3-030-14730-3_84.
- U. Bollmann, R. Gründler, M. H. (2018) 'Evaluation of education of specialist occupational health physicians in the period 2009 – 2013 in finland', 75(Suppl 2).
- Undang Undang Republik Indonesia (1970) 'Undang Undang No 1 Tahun 1970 tentang Keselamatan dan Kesehatan Kerja', (14), pp. 1–20.
- Vlake, J. H. *et al.* (2023) 'Reporting the early stage clinical evaluation of virtual-reality-based intervention trials: RATE-VR.', *Nature medicine*. United States, pp. 12–13. doi: 10.1038/s41591-022-02085-7.
- Wahidi, S. I. *et al.* (2022) 'Virtual Reality Based Application for Safety Training at Shipyards', *IOP Conference Series: Earth and Environmental Science*, 972(1). doi: 10.1088/1755-1315/972/1/012025.
- Wermann, J. and Pohn, B. (2022) 'VR Training for Laboratory Environments', *2022 30th International Conference on Software, Telecommunications and Computer Networks, SoftCOM 2022*, pp. 1–6. doi: 10.23919/SoftCOM55329.2022.9911505.
- Yeo, N. L. *et al.* (2020) 'What is the best way of delivering virtual nature for improving mood? An experimental comparison of high definition TV, 360° video, and computer generated virtual reality', *Journal of Environmental Psychology*, 72, p. 101500. doi: 10.1016/j.jenvp.2020.101500.
- Yossatorn, Y. and Nimmual, R. (2019) 'Virtual reality for anatomical vocabulary

learning', *ACM International Conference Proceeding Series*, pp. 16–20.
doi: 10.1145/3332305.3332311.

Yu, W. Der *et al.* (2022) 'the Effectiveness of Vr-Based Interactive Safety Training System for Hazardous Construction Site Scenarios', *Journal of Technology*, 37(3), pp. 149–164.

Zhao, Y. *et al.* (2019) 'SeeingVR', pp. 1–14. doi: 10.1145/3290605.3300341.