

REFERENCES

- Al-Qur`an Al-Karim. (2020). Selangor: Al-Hidayah House of Qur`an Sdn. Bhd.
- Aarseth, W., Ahola, T., Aaltonen, K., Økland, A., & Andersen, B. (2017). Project sustainability strategies: A systematic literature review. *International Journal of Project Management*, 35(6), 1071-1083.
- Abbott, D. (2019). Game-based learning for postgraduates: An empirical study of an educational game to teach research skills. *Higher Education Pedagogies*, 4(1), 80-104.
- Adams, M. G. (2009). Engaging 21st-century adolescents: Video games in the reading classroom. *English Journal*, 56-59.
- Akadiri, P. O., Chinyio, E. A., & Olomolaiye, P. O. (2012). Design of a sustainable building: A conceptual framework for implementing sustainability in the building sector. *Buildings*, 2(2), 126-152.
- Aldoobie, N. (2015). ADDIE model. *American International Journal of Contemporary Research*, 5(6), 68-72.
- Aleem, S., Capretz, L. F., & Ahmed, F. (2016). Game development software engineering process life cycle: a systematic review. *Journal of Software Engineering Research and Development*, 4(1), 1-30.
- Alhojailan, M. I. (2012). Thematic analysis: A critical review of its process and evaluation. *West east journal of social sciences*, 1(1), 39-47.
- Alijah, U. (2016). *Pembangunan modul pembelajaran WebQuest pendidikan kesihatan untuk guru pelatih murid bermasalah pembelajaran* (Tesis Doktor Falsafah). Jabatan Pengurusan, Perancangan dan Dasar Pendidikan, Fakulti Pendidikan, Universiti Malaya.
- AlKhateeb, H., AlSamel, Z., AlBarazi, J., & Mansor, E. I. (2019). Qee: VR game that aims to test and enhance the player's knowledge of tajweed. *International Conferences Interfaces and Human Computer Interaction 2019; Game and Entertainment Technologies 2019; and Computer Graphics, Visualization, Computer Vision and Image Processing* (pp. 149-156).
- Almeida, F., & Simoes, J. (2019). The role of serious games, gamification and industry 4.0 tools in the education 4.0 paradigm. *Contemporary Educational Technology*, 10(2), 120-136.
- Almelhi, A. M. (2021). Effectiveness of the ADDIE Model within an E-Learning Environment in Developing Creative Writing in EFL Students. *English Language Teaching*, 14(2), 20-36.
- Almomen, R. K., Kaufman, D., Alotaibi, H., Al-Rowais, N. A., Albeik, M., & Albattal, S. M. (2016). Applying the ADDIE—analysis, design, development, implementation and evaluation—instructional design model to continuing professional development for primary care physicians in Saudi Arabia. *International Journal of Clinical Medicine*, 7(8), 538-546.

- Alsawaier, R. S. (2018). The effect of gamification on motivation and engagement. *International Journal of Information and Learning Technology*, 35(1), 56-79. <https://doi.org/10.1108/IJILT-02-2017-0009>
- Amabile, T. M. (1985). Motivation and creativity: Effects of motivational orientation on creative writers. *Journal of personality and social psychology*, 48(2), 393.
- Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California management review*, 40(1), 39-58.
- Amanda, K. N., & Katie, G. (2016). Designing for Engagement: Using the ADDIE Model to Integrate High-Impact Practices into an Online Information Literacy Course. *Communications in Information Literacy*, 10(2), 264-282.
- Aminuddin, H., Tajularipin, S., & Norhasni, Z. A. (2009). The Requirement of Grouping Technique in English Lesson in Meeting the Demand of Philosophy of Education in Malaysia. *Journal of International Social Research*, 1(6), 294-306
- Amory, A. (2007). Game object model version II: a theoretical framework for educational game development. *Educational Technology Research and Development*, 55(1), 51-77.
- Amri, R., & Saoud, N. B. B. (2014). Towards a generic sustainable software model. In *2014 Fourth International Conference on Advances in Computing and Communications* (pp. 231-234). IEEE.
- Anastasiadis, T., Lampropoulos, G., & Siakas, K. (2018). Digital game-based learning and serious games in education. *International Journal of Advances in Scientific Research and Engineering*, 4(12), 139-144.
- Andreoni, V., & Miola, A. (2016). *Competitiveness and sustainable development goals*. Publications Office of the European Union.
- Ary, D., Jacobs, L. C., Razavieh, A., & Ary, D. (2010). *Introduction to Research in Education* (8th ed.). USA: WARDSWORTH Cengage Learning.
- Aslan, S., & Balci, O. (2015). GAMED: Digital educational game development methodology. *Simulation*, 91(4), 307-319.
- Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. *Teaching and teacher education*, 27(1), 10-20. <http://linkinghub.elsevier.com/retrieve/pii/S0742051X10001435>
- Avedon, E. M., & Sutton-Smith, B. (1971). *The study of games* (Vol. 10). New York; Toronto: J. Wiley.
- Azham, H., Nazeen, J., Fazillah, M. K., & Normala, M. (2014). mFakih: modelling mobile learning game to recite Quran for deaf children. *International Journal on Islamic Applications in Computer Science and Technology*, 2(2), 8-15.
- Bajracharya, J. R. (2019). Instructional design and models: ASSURE and Kemp. *Journal of Education and Research*, 9(2), 1-9.

- Barab, S., Thomas, M., Dodge, T., Carteaux, R., & Tuzun, H. (2005). Making learning fun: Quest Atlantis, a game without guns. *Educational technology research and development*, 53(1), 86-107.
- Basu, R. (2018). Instructional Design Models: Benefits and Challenges. *UGC Approved Journal*, 41(1), 31-36.
- Beard-Gunter, A., Ellis, D. G., & Found, P. A. (2019). TQM, games design and the implications of integration in Industry 4.0 systems. *International Journal of Quality and Service Sciences*, 11(2), 235-247. <https://doi.org/10.1108/IJQSS-09-2018-0084>
- Becker, C., Chitchyan, R., Duboc, L., Easterbrook, S., Penzenstadler, B., Seyff, N., & Venters, C. C. (2015). Sustainability Design and Software: The Karlskrona Manifesto. *Proceedings - International Conference on Software Engineering*, 2, 467-476.
- Becker, K. (2005). How Are Games Educational? Learning Theories Embodied in Games. *Proceedings of DiGRA 2005 Conference: Changing Views – Worlds in Play* (pp. 1-6).
- Bellotti, F., Berta, R., & De Gloria, A. (2010). Designing effective serious games: Opportunities and challenges for research. *International Journal of Emerging Technologies in Learning*, 5(2), 22-35.
- Betti, M. J. (2021). *Needs Analysis*. June.
- Billinghamst, M., Kato, H., & Poupyrev, I. (2001). The MagicBook: a transitional AR interface. *Computers & Graphics*, 25(5), 745-753.
- Blumberg, S. J., Bramlett, M. D., Kogan, M. D., Schieve, L. A., Jones, J. R., & Lu, M. C. (2013). *Changes in prevalence of parent-reported autism spectrum disorder in school-aged US children: 2007 to 2011-2012* (No. 65). US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.
- Boughzala, I., & Michel, H. (2016). Introduction to the serious games, gamification and innovation minitrack. *49th Hawaii International Conference on System Sciences (HICSS)* (pp. 817-817). IEEE.
- Box, C., Box, & Vernikova. (2019). *Formative assessment in United States classrooms*. Springer International Publishing.
- Boyle, E. A., Connolly, T. M., Hailey, T., & Boyle, J. M. (2012). Engagement in digital entertainment games: A systematic review. *Computers in human behavior*, 28(3), 771-780.
- Boyle, E. A., Hailey, T., Connolly, T. M., Gray, G., Earp, J., Ott, M., ... & Pereira, J. (2016). An update to the systematic literature review of empirical evidence of the impacts and outcomes of computer games and serious games. *Computers & Education*, 94, 178-192.
- Bracht, G. H., & Glass, G. V. (1968). The external validity of experiments. *American educational research journal*, 5(4), 437-474.

- Brady, M., & Devitt, A. (2016). The role of winning and losing within simulation games in higher education settings. *SSRN Electronic Journal*. <http://dx.doi.org/10.2139/ssrn.2738083>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Cannell, C. F., & Kahn, R. L. (1968). Interviewing. *The handbook of social psychology*, 2, 526-595.
- Castillo-Cuesta, L. (2020). Using Digital Games for Enhancing EFL Grammar and Vocabulary in Higher Education. *International Journal of Emerging Technologies in Learning (iJET)*, 15(20), 116-129.
- Chea, C. C., Tan, J., & Huan, J. (2019). Higher Education 4.0: The Possibilities and Challenges. *Journal of Social Sciences and Humanities*, 5(2), 81-85.
- Choi, B., Huang, J., Jeffrey, A., & Baek, Y. (2013). Development of a scale for fantasy state in digital games. *Computers in Human Behavior*, 29(5), 1980-1986.
- Christoph, G., Goldhammer, F., Zylka, J., & Hartig, J. (2015). Adolescents' computer performance: The role of self-concept and motivational aspects. *Computers & Education*, 81, 1-12.
- Chyan, N. T., & Syarifanor, H. (2014). Interactive augmented reality art book to promote Malaysia traditional game. *2014 International Conference on Computer, Communications, and Control Technology (I4CT)* (pp. 203-208). IEEE.
- Cipollone, M., Schifter, C., & Moffat, R. (2014). *Minecraft as a creative tool*. *International Journal of Game-Based Learning*, 4, 1-14.
- Clark, R. C., & Mayer, R. E. (2008). Learning by viewing versus learning by doing: Evidence-based guidelines for principled learning environments. *Performance Improvement*, 47(9), 5-13.
- Codish, D., & Ravid, G. (2014). Academic course gamification: The art of perceived playfulness. *Interdisciplinary Journal of E-Learning and Learning Objects*, 10(1), 131-151.
- Cohen, S., Janicki-Deverts, D., & Miller, G. E. (2007). Psychological stress and disease. *Jama*, 298(14), 1685-1687.
- Cook, T. D., Campbell, D. T., & Shadish, W. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin.
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Pearson Education, Inc.

- Cruz, C. A., & Uresti, J. A. R. (2017). Player-centered game AI from a flow perspective: Towards a better understanding of past trends and future directions. *Entertainment Computing*, 20, 11-24.
- Daud, I., Firdaus, W. K., Wan Mohd, K., & Mahadi. M. (2014). Perkembangan dan Masalah Pembelajaran al-Quran dalam Program j-QAF di Malaysia. *Islamiyyat: International Journal of Islamic Studies*, 36(2), 57-66
- DeMarrais, K., & Lapan, S. (2004). *Foundations for research: Methods of inquiry in education and Social Sciences*. Routledge
- Department of Statistics Malaysia. (2018). *Sustainable development goals (SDG) indicators Malaysia 2018*. Putrajaya: Department of Statistics, Malaysia.
- Dib, H., & Adamo-Villani, N. (2014). Serious Sustainability Challenge Game to Promote Teaching and Learning of Building Sustainability. *Journal of Computing in Civil Engineering*, 28(5), A4014007.
- Dib, H., Adamo-Villani, N., & Niforooshan, R. (2012). A Serious Game for Learning Sustainable Design and LEED Concepts. *Computing in Civil Engineering*, 137-144.
- Dickey, M. D. (2005). Engaging by design: How engagement strategies in popular computer and video games can inform instructional design. *Educational Technology Research and Development*, 53(2), 67-83.
- Dimitra, K., Konstantinos, K., Christina, Z., & Katerina, T. (2020). Types of Game-Based Learning in Education: A Brief State of the Art and the Implementation in Greece. *European Educational Researcher*, 3(2), 87-100.
- Dos Santos, A. D., Strada, F., & Bottino, A. (2018). Approaching sustainability learning via digital serious games. *IEEE Transactions on Learning Technologies*, 12(3), 303-320.
- Duch, A., Petit, J., Rodríguez-Carbonell, E., & Roura, S. (2013). Fun in CS2. In Proceedings of the 5th International Conference on Computer Supported Education (CSEDU'13) (pp. 437-442).
- Dunleavy, M. (2014). Design principles for augmented reality learning. *TechTrends*, 58(1), 28-34. <https://doi.org/10.1007/s11528-013-0717-2>
- Ellis, T. J., & Levy, Y. (2010). A guide for novice researchers: Design and development research methods. *Proceedings of Informing Science & IT Education Conference (InSITE)*, 10(10), 107-117.
- Eow, Y. L., Wan Zah, W. A., Rosnaini, M., & Roselan, B. (2010). Appreciative learning approach: A new pedagogical option". *Proceedings of the 18th International Conference on Computers in Education: Enhancing and Sustaining New Knowledge Through the Use of Digital Technology in Education, ICCE 2010*, 607-614.

- Erbas, A. K., & Bas, S. (2015). The contribution of personality traits, motivation, academic risk-taking and metacognition to the creative ability in mathematics. *Creativity Research Journal*, 27(4), 299-307.
- Erlandsson, V., & Ivarson, E. (2021). *Augmented reality and gamification in higher education: Designing mobile interaction to enhance students' intrinsic motivation and learning*. Kristianstad University, Faculty of Business.
- Eskelinen, T. (2021). Interpreting the Sustainable Development Goals through the Perspectives of Utopia and Governance. *Forum for Development Studies*, 48(2), 179-197.
- Faiola, T., & DeBloois, M. L. (1988). Designing a visual factors-based screen display interface: The new role of the graphic technologist. *Educational Technology*, 28(8), 12-21.
- Farooq, M., & Kanwal, N. (2019). *Summary of Holy Quran: An Ultimate Guide Series*. Amazon Publishing
- Faruqi, Y. M. (2007). Islamic View of Nature and Values: Could These Be the Answer to Building Bridges between Modern Science and Islamic Science. *International Education Journal*, 8(2), 461-469.
- Filgona, J., Sakiyo, J., Gwany, D. M., & Okoronka, A. U. (2020). Motivation in learning. *Asian Journal of Education and Social Studies*, 10(4), 16-37.
- Foster, A., & Shah, M. (2020). Principles for advancing game-based learning in teacher education. *Journal of Digital Learning in Teacher Education*, 36(2), 84-95.
- Franklin, S., Peat, M., & Lewis, A. (2003). Non-traditional interventions to stimulate discussion: the use of games and puzzles. *Journal of biological Education*, 37(2), 79-84.
- Gagné, F. (1985). Giftedness and talent: Re-examining a re-examination of the definitions. *Gifted child quarterly*, 29(3), 103-112.
- Gall, J. P., Gall, M. D., & Borg, W. R. (1999). *Applying educational research: A practical guide*. Longman Publishing Group.
- Gardeli, A., Vosinakis, S., Englezos, K., Mavroudi, D., Stratis, M., & Stavrakis, M. (2017). Design and Development of Games and Interactive Installations for Environmental Awareness. *EAI Endorsed Transactions on Game-Based Learning*, 4(12), 153402.
- Garris, R., Ahlers, R., & Driskell, J. E. (2002). Games, motivation, and learning: A research and practice model. *Simulation & gaming*, 33(4), 441-467.
- Ghauri, P. G., & Gronhaug, K. (2005). *Research methods in business studies: A practical guide*. Essex education limited: Pearson
- Ghazali, D., & Sufean, H. (2016). *Metodologi Penyelidikan Dalam Pendidikan* (2nd ed.). Penerbit UM.

- Giannakos, M. N. (2013). Enjoy and learn with educational games: Examining factors affecting learning performance. *Computers & Education*, 68, 429-439.
- Goddard, R. D. (2001). Collective efficacy: A neglected construct in the study of schools and student achievement. *Journal of educational psychology*, 93(3), 467.
- Goundar, S. (2019). *Chapter 3 – Research Methodology and Research Method*. March 2012.
- Granic, I., Lobel, A., & Engels, R. C. (2014). The benefits of playing video games. *American psychologist*, 69(1), 66-78.
- Grant, J. (2002). Learning needs assessment: assessing the need. *Bmj*, 324(7330), 156-159.
- Grapragasem, S., Krishnan, A., & Mansor, A. N. (2014). Current Trends in Malaysian Higher Education and the Effect on Education Policy and Practice: An Overview. *International Journal of Higher Education*, 3(1), 85-93.
- Green, C. S., & Seitz, A. R. (2015). The impacts of video games on cognition (and how the government can guide the industry). *Policy Insights from the Behavioral and Brain Sciences*, 2(1), 101-110.
- Greipl, S., Moeller, K., & Ninaus, M. (2020). Potential and limits of game-based learning. *International Journal of Technology Enhanced Learning*, 12(4), 363-389.
- Grimshaw, J., Campbell, M., Eccles, M., & Steen, N. (2000). Experimental and quasi-experimental designs for evaluating guideline implementation strategies. *Family practice*, 17(suppl_1), S11-S16.
- Gros, B. (2007). Digital Games in Education: The Design of Game-Based Learning Integration of Digital Games in Learning and e- Learning Environments: Connecting Experiences and Context. *Journal of Research on Technology in Education*, 40(1), 23-38.
- Hadzinsky, C. (2014). A look into the industry of video games past, present, and yet to come (Tesis Penyelidikan). Spring
- Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). *Multivariate data analysis: A global perspective* (Vol. 7). Pearson Education
- Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work? --a literature review of empirical studies on gamification. *2014 47th Hawaii international conference on system sciences* (pp. 3025-3034). IEEE.
- Hamzaha, R., Soiabb, A. Z., & Mahadic, Z. S. (2016). E-Tarteel: Visualizing Quranic Tajweed Rules. *International Journal on Islamic Applications in Computer Science and Technology*, 4(2), 1-9.
- Hartmann, A., & Gommer, L. (2021). To play or not to play: on the motivational effects of games in engineering education. *European journal of engineering education*, 46(3), 319-343.

- Hauff, M. V. (2016). Sustainable development in economics. In *Sustainability science* (pp. 99-107). Springer, Dordrecht. https://doi.org/10.1007/978-94-017-7242-6_8
- Hilty, L. M., & Aebischer, B. (Eds.). (2015). *ICT innovations for sustainability* (Vol. 310). Basel, Switzerland: Springer International Publishing.
- Hsu, C. Y., & Tsai, C. C. (2013). Examining the effects of combining self-explanation principles with an educational game on learning science concepts. *Interactive Learning Environments*, 21(2), 104-115.
- Hubberman, A. M., & Miles, M. B. (1994). *Qualitative data analysis*. Beverly Hills: Sage.
- Hummel, H. G. K., Joosten-ten Brinke, D., Nadolski, R. J., & Baartman, L. K. J. (2017). Content validity of game-based assessment: case study of a serious game for ICT managers in training. *Technology, Pedagogy and Education*, 26(2), 225–240.
- Hunicke, R., LeBlanc, M., & Zubek, R. (2004). MDA: A formal approach to game design and game research. *Proceedings of the AAAI Workshop on Challenges in Game AI*, 4(1), 1722.
- Irfan Naufal, U., & Zabedah, A. A. (2015). The Effects of Multimedia with Different Modes of Presentation on Recitation Skills Among Students with Different Self-regulated Learning Level. *Procedia - Social and Behavioral Sciences*, 197, 1962–1968.
- Isman, A. (2011). Instructional Design in Education: New Model. *Turkish Online Journal of Educational Technology-TOJET*, 10(1), 136-142.
- Jääskä, E., Aaltonen, K., & Kujala, J. (2021). Game-Based Learning in Project Sustainability Management Education. *Sustainability*, 13(15), 8204.
- Jennett, C., Cox, A. L., Cairns, P., Dhoparee, S., Epps, A., Tijs, T., & Walton, A. (2008). Measuring and defining the experience of immersion in games. *International journal of human-computer studies*, 66(9), 641-661.
- Jingjit, M. (2015). The Effects of Multimedia Learning on Thai Primary Pupils' Achievement in Size and Depth of Vocabulary Knowledge. *Journal of Education and practice*, 6(33), 72-81.
- Jnr, B. A., Majid, M. A., & Romli, A. (2018). An empirical study on predictors of green sustainable software practices in Malaysian electronic industries. *Journal of Information and Communication Technology*, 17(2), 347-391.
- Johnson, A. M., Jacovina, M. E., Russell, D. G., & Soto, C. M. (2016). *Challenges and solutions when using technologies in the classroom* (pp. 13-29). ERIC Clearinghouse.
- Johnson, R. B., & Christensen, L. B. (2008). *Educational Research: Quantitative, Qualitative, and Mixed Approaches* (3rd ed.). Sage Publications, Inc., Lose Angeles.

- Juhary, J. (2019). Perceptions of students: Blended learning for IR4.0. *International Journal of Information and Education Technology*, 9(12), 887-892.
- Kasurinen, J., & Knutas, A. (2018). Publication trends in gamification: A systematic mapping study. *Computer Science Review*, 27, 33–44.
- Kasurinen, J., Palacin-Silva, M., & Vanhala, E. (2017). What Concerns Game Developers? A Study on Game Development Processes, Sustainability and Metrics. *International Workshop on Emerging Trends in Software Metrics, WETSOM* (pp. 15–21).
- Katsaliaki, K., & Mustafee, N. (2015). Edutainment for Sustainable Development: A Survey of Games in the Field. *Simulation and Gaming*, 46(6), 647–672.
- Katzeff, C. (2000). The design of interactive media for learners in an organisational setting—the state of the art. *Proceedings for NordiCHI 2000* (pp. 23-25).
- Kemp, J. E. (1985). *The instructional design processes*. New York: Haper and Row.
- Kennedy, K. J., & Lee, J. C. K. (Eds.). (2018). *Routledge international handbook of schools and schooling in Asia: A Systematic Literature review of Game-based Learning and Gamification*. New York: Routledge.
- Kiili, K. (2005). Digital game-based learning: Towards an experiential gaming model. *Internet and Higher Education*, 8(1), 13–24.
- Klabbers, J. H. (2009). The magic circle: Principles of gaming & simulation. In *The Magic Circle: Principles of Gaming & Simulation*. Brill.
- Koneru, I. (2010). ADDIE: Designing web-enabled information literacy instructional modules. *Desidoc journal of library & information technology*, 30(3), 23-33.
- Kordaki, M., & Gousiou, A. (2017). Digital card games in education: A ten year systematic review. *Computers & Education*, 109, 122-161.
- Kurniawan, E. (2017). *Olahraga Dalam Pandangan Islam*. Universitas Abulyatama, Indonesia.
- Laine, T. H., & Lindberg, R. S. N. (2020). Designing Engaging Games for Education: A Systematic Literature Review on Game Motivators and Design Principles. *IEEE Transactions on Learning Technologies*, 13(4), 804–821.
- Landis, J. R., & Koch, G. G. (1977). An application of hierarchical kappa-type statistics in the assessment of majority agreement among multiple observers. *Biometrics*, 363-374.
- Lastowka, G. (2012). Minecraft as Web 2.0: Amateur creativity and digital games. *Amateur Media* (pp. 169-185). Routledge.
- Lee, J. J., & Hammer, J. (2011). Gamification in education: What, how, why bother? *Academic exchange quarterly*, 15(2), 146.
- Lee, J., Lim, C., & Kim, H. (2017). Development of an instructional design model for flipped learning in higher education. *Educational Technology Research*

and Development, 65(2), 427-453. <https://doi.org/10.1007/s11423-016-9502-1>

- Leedy, P. D. & Ormrod, J. E. (2010). *Practical Research: Planning and Design* (9th ed.). Boston, MA: Pearson.
- Leemkuil, H. H. (2006). *Is it all in the game: learner support in an educational knowledge management simulation game* (Tesis Doktor Falsafah). University of Twente
- Leith, M., Boyle, L., Sim, D., Van Der Zwet, A., Scott, G., Jimoyiannis, A., ... & Hummel, H. (2019). What's In a game? A game-based approach to exploring 21st-century European identity and values. *Open Review of Educational Research*, 6(1), 12-25.
- Liao, G. Y., Tseng, F. C., Cheng, T. C. E., & Teng, C. I. (2020). Impact of gaming habits on motivation to attain gaming goals, perceived price fairness, and online gamer loyalty: Perspective of consistency principle. *Telematics and Informatics*, 49, 101367.
- Little, O., Goe, L., & Bell, C. (2009). A practical guide to evaluating teacher effectiveness. Washington, DC: National Comprehensive Center for Teacher Quality. National Comprehensive Center for Teacher Quality, April, 1–32.
- Little, O., Goe, L., & Bell, C. (2009). A Practical Guide to Evaluating Teacher Effectiveness. *National Comprehensive Center for Teacher Quality*.
- Liu, Z. Y., Shaikh, Z., & Gazizova, F. (2020). Using the concept of game-based learning in education. *International Journal of Emerging Technologies in Learning (iJET)*, 15(14), 53-64.
- Lodico, M. G., Spaulding, D. T., & Voegtler, K. H. (2006). *Methods in Educational Research: From Theory to Practice*. John Wiley, San Francisco.
- Madani, K., Pierce, T. W., & Mirchi, A. (2017). Serious games on environmental management. *Sustainable Cities and Society*, 29, 1-11.
- Mahardhika, G. P. (2015). Digital game based learning dengan model ADDIE untuk pembelajaran doa sehari-hari. *Teknoin*, 21(2), 115-122.
- Mahmoud, A. A. A., & Tanni, Z. A. (2014). Using games to promote students' motivation towards learning English. *Al-Quds Open University Journal for Educational & Psychological Research & Studies*, 2(5), 11-33.
- Majchrzak, A., & Malhotra, A. (2013). Towards an information systems perspective and research agenda on crowdsourcing for innovation. *The Journal of Strategic Information Systems*, 22(4), 257-268.
- Malaby, T. M. (2007). Beyond play: A new approach to games. *Games and culture*, 2(2), 95-113.
- Mashita, A. H. (2005). The First Revelation in the Holy Qur'an: It's Significance in the Methods of Learning. *Jurnal CITU*, 1(2), 117-131.
- Mayer, R. (2001). *Multimedia Learning*. Cambridge: Cambridge University Press.

- Mayer, R. (2014). Cognitive Theory of Multimedia Learning. In R. Mayer (Ed.), *The Cambridge Handbook of Multimedia Learning* (Cambridge Handbooks in Psychology, pp. 43-71). Cambridge: Cambridge University Press.
- Mayer, R. E. (2011). Does styles research have useful implications for educational practice? *Learning and Individual Differences*, 21(3), 319-320.
- Mayer, R. E. (2019). Computer games in education. *Annual review of psychology*, 70, 531-549.
- Mayer, R. E., & Moreno, R. (1998). A cognitive theory of multimedia learning: Implications for design principles. *Journal of educational psychology*, 91(2), 358-368.
- Mayer, R. E., & Moreno, R. (2002). Animation as an aid to multimedia learning. *Educational psychology review*, 14(1), 87-99.
- McLoughlin, C., & Lee, M. J. (2008). The three p's of pedagogy for the networked society: Personalization, participation, and productivity. *International journal of teaching and learning in higher education*, 20(1), 10-27.
- Mercer, T. G., Kythreotis, A. P., Robinson, Z. P., Stolte, T., George, S. M., & Haywood, S. K. (2017). The use of educational game design and play in higher education to influence sustainable behaviour. *International Journal of Sustainability in Higher Education*, 18(3), 359–384.
- Merrill, M. D. (1983). Component display theory. *Instructional-design theories and models: An overview of their current status*, 1, 282-333.
- Mifrah, A., Lukman, A. R., & Noreen, I. A. (2014). A Review of Educational Games Design Frameworks: An Analysis from Software Engineering. *2014 International Conference on Computer and Information Sciences (ICCOINS)* (pp. 1-6). IEEE.
- Milrad, M. (1999). Designing an Interactive Learning Environment to Support Children's Understanding in Complex Domains. *EdMedia+ Innovate Learning* (pp. 1707-1709). Association for the Advancement of Computing in Education (AACE).
- Ministry of Education of Malaysia. (2013). *Malaysia Education Blueprint 2013 - 2025*. Putrajaya: Ministry of Education of Malaysia
- Mishra, S., & Iyer, S. (2015). An exploration of problem posing-based activities as an assessment tool and as an instructional strategy. *Research and practice in technology enhanced learning*, 10(1), 1-19.
- Misnan, J., Ibrahim, H., Azmil, H., Abdul Kadir, A., & Ishak, I. (2012). *Strategi pengajaran Pendidikan Islam*. Tanjong Malim: Emiritus Publications.
- Mitchell, A., & Savill-Smith, C. (2004). The use of computer and video games for learning. *A review of the literature*.
- Mohamad Khairul, L., Talhah, J., & Kamarul Azmi, J. (2020). Competence and Method of Teaching Tarannum Al-Quran Among Teachers of Special Class

on Reading and Memorizing Al-Quran Skill (KKQ) in Johor. *Advances in Social Science, Education and Humanities Research*, 400, 249-258.

Mohamed Akhiruddin, I., Mohammad Hikmat, S., Shahirah, S., Azniwati, A. A., Nur Safura, A. G., & Mohd Hisyamuddin, Y. (2016). The Integration of Naqli and Aqli Knowledge in Curriculum at Universiti Sains Islam Malaysia: The Study on Student's Internship Organizations in Kelantan, Malaysia. *IJASOS-International E-journal of Advances in Social Sciences*, 2(5), 376-383.

Mohd Azmir, M. N., & Mohd Azrani, A. (2015). J-QAF in empowering Muslim Malaysian national primary school students: Issues and challenges. *Elixir International Journal*, 78, 29635–29637.

Mohd Zamri, H., & Ahmad, J. (2017). The review of sustainability model and indicators for higher education institutions in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 7(11), 1170-1182.

Moyles, J., & Adams, S. (2000). A tale of the unexpected: Practitioners' expectations and children's play. *Journal of In-Service Education*, 26(2), 349-369.

Mssraty, T. H. (2015). Multimedia Instructional Learning System to Aid in Teaching Quran Recitation with Effective Tajweed in Primary Education of Malaysia. *International Journal on Islamic Applications in Computer Science and Technology*, 3(2), 19-28.

Muhammad Sabri, S., Nor Aziah, A., Zawawi, I., & Nurulhuda, O. (2012). Employing Design and Development Research (DDR): Approaches in the Design and Development of Online Arabic Vocabulary Learning Games Prototype. *Turkish Online Journal of Educational Technology-TOJET*, 11(2), 108-119.

Muhammad Talhah, A. J., Asma Nurul 'Aqilah, M., Siti Nur Hadis, A. R., Mohamad Khairul, L., Ahmad Marzuki, M., & Nur Razan Izzati, M. R. (2019). Application of Technology in Teaching and Facilitating of Islamic Education in 4th Industrial Revolution: A Review. *The 4th International Conference on Information Technology (ICIT 2019)*. DITC, Kemaman, Terengganu, Malaysia

Muhammad, S., & Kabir, S. (2018). *Methods of data collection*. July 2016.

Munday, P. (2015). the Case for Using Duolingo As Part of the Language Classroom Experience. *RIED. Revista Iberoamericana de Educación a Distancia*, 19(1), 83-101.

Muthu, M., Banuroopa, K., & Arunadevi, S. (2020). Green and Sustainability in Software Development Lifecycle Process. *Sustainability Assessment at the 21st Century*, 1-16.

Nachmanovitch, S. (1990). *Free play: The power of improvisation in life and the arts*. New York: GP Putnam's Sons.

- Neo, T. K., & Neo, M. (2004). Integrating multimedia into the Malaysian classroom: Engaging students in interactive learning. *The Turkish Online Journal of Educational Technology-TOJET*, 3(3), 1303–6521.
- Nik Rosila, N. Y. (2013). An Islamic Perspective on the Role of Education in Responding to Social Issues among Students in Malaysia. *US-China Education Review*, 3(6), 439–446.
- Nor Tutaiini, A. W. (2019). *Development of a Problem-Posing Multimedia Module and Its Effectiveness to Enhance Student Performance in Form Four Biology* (Tesis Doktor Falsafah). Serdang: Universiti Putra Malaysia.
- Noraini, I. (2010). *Dimensions of education*. Gyan Publishing House.
- Norhazren Izatie, M., Kherun Nita, A., Ahmad Faiz Azizi, A. F., & Shirin, S. E. (2018). Serious game attributes for the construction of a hazard identification framework. *International Journal of Interactive Mobile Technologies*, 12(7), 60–69.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- Nuril Ham Al Hafizah, B. Z., Sharifah Norshah Bani, B. B., & Syadiah Nor, B. W. S. (2017). Development of Al-Quran Android Application from Year 2013 To 2016: The Highlight. *International Journal of Academic Research in Business and Social Sciences*, 7(6), 183-195.
- Nuriman, N., & Fauzan, F. (2017). The Influence of Islamic Moral Values on the Students' Behavior in Aceh. *Dinamika Ilmu: Jurnal Pendidikan*, 17(2), 275-290.
- Nurtihah, M. N., Marina, I., Rahmah, L. Y., & Fakhrol Hazman, Y. (2019). Measuring tajweed augmented reality-based gamification learning model (Targalm) implementation for children in tajweed learning. *Pertanika Journal of Science and Technology*, 27(4), 1821–1840.
- Nurtihah, M. N., Rahmah Lob, Y., Fakhrol Hazman, Y., & Marina, I. (2018). Gamification and augmented reality utilization for Islamic content learning: The design and development of tajweed learning. *International Conference on User Science and Engineering*, 163-174. Springer, Singapore.
- Nurul Azizah, R. K. (2017). *Comparative Theory on Three Instructional Design Models: Dick and Carey, Kemp, and Three-Phase Design models* (pp. 1-12).
- O'Hagan, A. O., Coleman, G., & O'Connor, R. V. (2014). Software development processes for games: A systematic literature review. *European Conference on Software Process Improvement* (pp. 182-193). Springer, Berlin, Heidelberg.
- Ouariachi, T., Olvera-Lobo, M. D., & Gutiérrez-Pérez, J. (2019). Serious Games and Sustainability. *Encyclopedia of Sustainability in Higher Education*, November, 1-10.
- Oyedeji, S., Seffah, A., & Penzenstadler, B. (2018). A catalogue supporting software sustainability design. *Sustainability*, 10(7), 2296.

- Paas, F., Renkl, A., & Sweller, J. (2003). Cognitive load theory and instructional design: Recent developments. *Educational Psychologist*, 38(1), 1–4.
- Paravizo, E., Chaim, O. C., Braatz, D., Muschard, B., & Rozenfeld, H. (2018). Exploring gamification to support manufacturing education on industry 4.0 as an enabler for innovation and sustainability. *Procedia manufacturing*, 21, 438-445.
- Partovi, T., & Razavi, M. R. (2019). The effect of game-based learning on academic achievement motivation of elementary school students. *Learning and Motivation*, 68, 101592.
- Pellegrino, J. W., & Hilton, M. L. (Eds.). (2013). *Education for life and work: Developing transferable knowledge and skills in the 21st century*. National Academies Press
- Perini, S., Luglietti, R., Margoudi, M., Oliveira, M., & Taisch, M. (2018). Learning and motivational effects of digital game-based learning (DGBL) for manufacturing education – The Life Cycle Assessment (LCA) game. *Computers in Industry*, 102, 40–49.
- Piattelli-Palmarini, M., & Nadel, L. (2016). *What is Cognitive Science?: Encyclopedia of Cognitive Science* (pp. xiii-xii). Macmillan
- Plass, J. L., Homer, B. D., & Kinzer, C. K. (2015). Foundations of Game-Based Learning. *Psychological Perspectives on Digital Games and Learning*, 50(4), 258–283.
- Prensky, M. (2001). Fun, play and games: What makes games engaging. *Digital game-based learning*, 5(1), 5-31.
- Prensky, M. (2003). Digital game-based learning. *Computers in Entertainment (CIE)*, 1(1), 21-21.
- Priyaadharshini, M., NathaMayil, N., Dakshina, R., Sandhya, S., & Bettina Shirley, R. (2020). Learning analytics: Game-based Learning for Programming Course in Higher Education. *Procedia Computer Science*, 172(2019), 468–472.
- Puncreobutr, V. (2016). Education 4.0: New Challenge of Learning. *Journal of Humanities and Social Sciences*, 2(2), 92-97.
- Ramdhani, M. A., & Ramdhani, A. (2014). Verification of research logical framework based on literature review. *International Journal of Basic and Applied Science*, 3(2), 1-9.
- Rapeepisarn, K., Wong, K. W., Fung, C. C., & Khine, M. S. (2008). The relationship between game genres, learning techniques and learning styles in educational computer games. *International conference on technologies for E-learning and digital entertainment*, 497-508. Springer, Berlin, Heidelberg.
- Reigeluth, C. M. (2014). *Instructional-design theories and models, Vol. II: A new paradigm of instructional theory (92). II* (April 1999).

- Richey, R. C. (1994). *Developmental Research: The Definition and Scope*. Diperolehi dari pangkalan data ERIC. (ED373753)
- Richey, R. C., & Klein, J. D. (2005). Developmental research methods: Creating knowledge from instructional design and development practice. *Journal of Computing in higher Education*, 16(2), 23-38.
- Richey, R. C., & Klein, J. D. (2014). Design and development research. Handbook of research on educational communications and technology (ms. 141-150). Springer, New York, NY.
- Richey, R. C., Klein, J. D., & Nelson, W. (2004). Developmental research: Studies of instructional design and development. *Handbook of Research for Educational Communications and Technology* (pp. 1099-1130).
- Riezler, K. (1941). Play and seriousness. *The Journal of Philosophy*, 38(19), 505-517.
- Riopel, M., Nenciovici, L., Potvin, P., Chastenay, P., Charland, P., Sarrasin, J. B., & Masson, S. (2019). Impact of serious games on science learning achievement compared with more conventional instruction: an overview and a meta-analysis. *Studies in Science Education*, 55(2), 169-214.
- Ritterfeld, U., Cody, M., & Vorderer, P. (Eds.). (2009). *Serious games: Mechanisms and effects*. Routledge.
- Roblyer, M. D., & Doering, A. H. (2010). Theory and practice: foundations for effective technology integration. *Integrating educational technology into teaching*, 3.
- Rodriguez-Navas, G., Duboc, L., Betz, S., Chitchyan, R., Penzenstadler, B., & Venters, C. (2015). Safety vs. sustainability design: Analogies, differences and potential synergies.
- Roungas, B., Bekius, F., & Meijer, S. (2019). The game between game theory and gaming simulations: design choices. *Simulation & Gaming*, 50(2), 180-201.
- Roussou, M. (2004). Learning by doing and learning through play: an exploration of interactivity in virtual environments for children. *Computers in Entertainment (CIE)*, 2(1), 10-10.
- Rubio, D. M., Berg-Weger, M., Tebb, S. S., Lee, E. S., & Rauch, S. (2003). Objectifying content validity: Conducting a content validity study in social work research. *Social work research*, 27(2), 94-104.
- Saettler, P. (2004). *The evolution of American educational technology*. IAP.
- Safarina, U., & Norshidah, M. S. (2018). Pelaksanaan Jawi, Al-Quran, Bahasa Arab, Fardu Ain (j-QAF) dalam Program Pendidikan Khas Integrasi. *Jurnal ORTOPEDAGOGIA*, 4(1), 59-65.
- Salama, R., & ElSayed, M. (2018). Basic elements and characteristics of game engine. *Global Journal of Computer Sciences: Theory and Research*, 8(3), 126-131.

- Salas-Rueda, R. A., Salas-Rueda, É. P., & Salas-Rueda, R. D. (2020). Analysis and design of the web game on descriptive statistics through the ADDIE model, data science and machine learning. *International Journal of Education in Mathematics, Science and Technology*, 8(3), 245-260.
- Sanmugam, M., Zaleha, A., Hasnah, M., Norasykin, M. Z., & Baharuddin, A. (2014). *Gamification: A Look into the Game Elements that Drive Towards a Meaningful Teaching and Learning Process*. November.
- Santos-Villalba, M. J., Leiva Olivencia, J. J., Navas-Parejo, M. R., & Benítez-Márquez, M. D. (2020). Higher education students' assessments towards gamification and sustainability: a case study. *Sustainability*, 12(20), 8513.
- Sapie, S., Barinah, I., Suhana, M. L., Mohamad Fuad, I., & Siti Nga'ishah, M. (2016). Analisis Tahap Penguasaan Bacaan Al-Quran Murid Tahun 5 Sekolah Kebangsaan Sungai Karang Berdasarkan Model Khatam Al-Quran Dan Model Tasmik J-Qaf. *International Conference on Islamic Education & Research (ICIER 2016)* (pp. 1-19).
- Sardan, N. A., & Rias, R. M. (2013). M-Tajweed: A Mobile Courseware to Assist in Tajweed Learning. *Int. J. Islam. Appl. Comput. Sci. Technol.*, 3(1), 1-8
- Saulter, J. (2007). *Introduction to video game design and development*. New York: McGraw-Hill.
- Sayan, H. (2015). The effects of computer games on the achievement of basic mathematical skills. *Educational Research and Reviews*, 10(22), 2846-2853.
- Seaborn, K., & Fels, D. I. (2015). Gamification in theory and action: A survey. *International Journal of human-computer studies*, 74, 14-31.
- Sekaran, U. (2003). *Research Methods for Business: A Skill-Building Approach* (4th ed.). John Wiley & Sons, New York.
- Sekaran, U., & Bougie, R. (2013). *Research Methods for Business: A Skill-Building Approach* (6th ed.). Wiley, New York.
- Shabiralyani, G., Hasan, K. S., Hamad, N., & Iqbal, N. (2015). Impact of Visual Aids in Enhancing the Learning Process Case Research: District Dera Ghazi Khan. *Journal of education and practice*, 6(19), 226-233.
- Shi, Y. R., & Shih, J. L. (2015). Game Factors and Game-Based Learning Design Model. *International Journal of Computer Games Technology*, 2015(11), 1-11.
- Shute, V. J., & Ke, F. (2012). Games, learning, and assessment. In *Assessment in game-based learning* (pp. 43-58). Springer, New York, NY.
- Sidek, M. N. (2005). *Pengujian & penilaian dalam kaunseling: Teori & aplikasi*. Serdang, Selangor: Penerbit Universiti Putra Malaysia.
- Sillaots, M. (2015). Gamification of higher education by the example of computer games course. *The Seventh International Conference on Mobile, Hybrid, and On-line Learning (eLmL)* (pp. 62-58).

- Siti Fatimah, O., Wan Hassan, W. E., & Muhammad Talhah, A. J. (2020). Islamic Education Teacher's Critical Thinking Practice and its Challenges in Enhancing 21 st Century Learning Skills. *International Journal of Psychosocial Rehabilitation*, 24(5), 973-980.
- Snow, B. (2016). The potential for game-based learning to improve outcomes for nontraditional students. *Muzzy Lane Software Report, funding from Bill and Melinda Gates Foundation*.
- Stanitsas, M., Kirytopoulos, K., & Vareilles, E. (2019). Facilitating sustainability transition through serious games: A systematic literature review. *Journal of Cleaner Production*, 208, 924–936.
- Steinmayr, R., Weidinger, A. F., Schwinger, M., & Spinath, B. (2019). The importance of students' motivation for their academic achievement—replicating and extending previous findings. *Frontiers in psychology*, 1730.
- Sudman, S., & Bradburn, N. M. (1974). *Response effects in surveys: A review and synthesis*. Chicago: Aldine Publishing.
- Suits, B. (1978). *The grasshopper: Games, life, and Utopia*. Toronto: University of Toronto Press
- Taherdoost, H. (2017). Sampling Methods in Research Methodology ; How to Choose a Sampling Sampling Methods in Research Methodology. *SSRN Electronic Journal. January 2016*.
- Tahir, M., & Yucel, S. (2019). Motivational Techniques for Teaching: Prophetic Model. *International Journal of Teaching and Education*, 7(2).
- Taormina, R. J., & Gao, J. H. (2013). Maslow and the motivation hierarchy: Measuring satisfaction of the needs. *The American journal of psychology*, 126(2), 155-177.
- Taskiran, A. (2019). The effect of augmented reality games on English as foreign language motivation. *E-Learning and Digital Media*, 16(2), 122–135.
- Tasks, S., Output, S., & Statement, P. (2000). *Instructional System Design (ISD): Using the ADDIE Model*.
- Thomas, E. J., & Rothman, J. (1994). An Integrative Perspective. *Intervention Research: Design and development for the human service*, 1.
- Tindall-Ford, S., Chandler, P., & Sweller, J. (1997). When two sensory modes are better than one. *Journal of experimental psychology: Applied*, 3(4), 257-287.
- Torres, M., & Macedo, J. (2000). Learning sustainable development with a new simulation game. *Simulation & Gaming*, 31(1), 119–126.
- Tracey, M. W. (2009). Design and development research: a model validation case. *Educational Technology Research and Development*, 57(4), 553-571.

- Trajkovik, V., Malinovski, T., Vasileva-Stojanovska, T., & Vasileva, M. (2018). Traditional games in elementary school: Relationships of student's personality traits, motivation and experience with learning outcomes. *PLoS ONE*, 13(8), 1–15.
- Tuan Sarifah Aini, S. A., Anealka, A. H., & Ghazali, Y. (2019). A review of learning theories for gamification elements in instructional games. *Conference: Malaysian International Conference on Academic Strategies in English Language Teaching (MyCASELT)*. Sutera Harbour Resort, Kota Kinabalu Sabah.
- Turner, P. E., Johnston, E., Kebritchi, M., Evans, S., & Heflich, D. A. (2018). Influence of online computer games on the academic achievement of non-traditional undergraduate students. *Cogent Education*, 5(1), 1437671.
- Tüzün, H., Yılmaz-soylu, M., Karakus, T., & Kızılkaya, G. (2009). *Computers & Education The effects of computer games on primary school students' achievement and motivation in geography learning*. 52, 68-77.
- Ummu Husna, A., Maizatul Hayati, M. Y., Laili Farhana, M. I., & Nor Zuhaidah, M. Z. (2019). Analysis of game elements in digital educational game according to Gagne nine events of instruction. *International Journal of Academic Research in Business and Social Sciences*, 9(7), 131-135.
- Versus, I. D. G. (2020). *Game On! Investigating Digital Game-Based Versus Gamified Learning in Higher Education*. 10(3), 16-46.
- Vlachopoulos, D., & Makri, A. (2017). The effect of games and simulations on higher education: a systematic literature review. *International Journal of Educational Technology in Higher Education*, 14(1), 1-33.
- Vygotsky, L. S. (1980). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press
- Wallen, N., & Fraenkel, J. (2001). Samples and population. *Educational research: A guide to the process*, 125-153.
- Wan Noor Hazlina, W. J., & Kamaruzaman, J. (2009). Using multimedia in teaching Islamic studies. *Journal of Media and Communication Studies*, 1(5), 086-094.
- Wang, A. I., & Tahir, R. (2020). The effect of using Kahoot! for learning—A literature review. *Computers & Education*, 149, 103818.
- Wang, D., & Khambari, M. N. M. (2020). The Application of a Game-Based AR Learning Model in English Sentence Learning. *Malaysian Online Journal of Educational Technology*, 8(1), 63-71.
- Wang, L. C., & Chen, M. P. (2010). The Effects of Game Strategy and Preference-Matching on Flow Experience and Programming Performance in Game-Based Learning. *Innovations in Education and Teaching International*, 47(1), 39-52.

- Wang, Z., & Wang, L. (2015). Cognitive development: Child education. *International encyclopedia of the social & behavioral sciences*, 4, 38-42.
- Watson, C., & Brathwaite, V. (2013). An Open and Interactive Multimedia e-Learning Module for Graphing Kinematics. *8th International Conference on e-Learning* (pp. 409).
- Westera, W., Van der Vegt, W., Bahreini, K., Dascalu, M., & Van Lankveld, G. (2016, October). Software components for serious game development. In *Proceedings of the 10th European Conference on Games Based Learning* (pp. 6-7). Paisley, Scotland.
- Williams, S., & Robinson, J. (2020). Measuring sustainability: An evaluation framework for sustainability transition experiments. *Environmental Science and Policy*, 103, 58-66.
- Wilson, W. J., & Ostergren, L. A. (1986). BRAINSCAPE! A Pascal adventure in neuroanatomy for IBM-PCs and compatibles. *Behavior Research Methods, Instruments, & Computers*, 18(5), 478-479.
- Wlodkowski, R. J. (1986). *Enhancing adult motivation to learn: A guide to improving instruction and increasing learner achievement*. Jossey-Bass Publishers.
- Wouters, P., & Van Oostendorp, H. (2013). A meta-analytic review of the role of instructional support in game-based learning. *Computers and Education*, 60(1), 412-425.
- Wu, B., & Wang, A. I. (2012). A guideline for game development-based learning: a literature review. *International Journal of Computer Games Technology*, 2012(8), 8.
- Wu, B., Wang, A. I., Strom, J. E., & Kvamme, T. B. (2009). An evaluation of using a Game Development Framework in higher education. *22nd Conference on Software Engineering Education and Training, CSEET 2009*, 41-44.
- Xing, B., & Marwala, T. (2017). Implications of the fourth industrial age for higher education. *The Thinker Issue_73_Third_Quarter_2017*.
- Yang, Y., Asaad, Y., & Dwivedi, Y. (2017). Examining the impact of gamification on intention of engagement and brand attitude in the marketing context. *Computers in Human Behavior*, 73, 459-469.
- Yedri, O. B., El Aachak, L., Belahbib, A., Zili, H., & Bouhorma, M. (2017). Learners' motivation analysis in serious games. In *Proceedings of the Mediterranean Symposium on Smart City Applications*, 710-723. Springer, Cham.
- Zirawaga, V. S., Olusanya, A. I., & Maduku, T. (2017). Gaming in education: Using games as a support tool to teach history. *Journal of Education and Practice*, 8(15), 55-64.