

REFERENCES

- Abu Qbeita, A. A. (2024). The Effect of Using Artificial Intelligence on Learning Vocabulary among Jordanian EFL University Students . *EVOLUTIONARY STUDIES IN IMAGINATIVE CULTURE*, 1890–1907. <https://doi.org/10.70082/esiculture.vi.1833>
- Akila, T., Swathi, M., Jebakumar, J. A., Vivethika, C., & Kavitha, N. (2024, March). Role of Artificial Intelligence in ICT Based Teaching and Learning. In *2024 10th International Conference on Advanced Computing and Communication Systems (ICACCS)* (Vol. 1, pp. 2645-2649). IEEE.
- Al-Hoorie, A. H., Oga-Baldwin, W. L., & Sakai, H. (2020). Motivation and language learning: A systematic review. *Educational Psychologist*, 55(1), 14-29.
- Alahmadi, A., & Foltz, A. (2020). Effects of Language Skills and Strategy Use on Vocabulary Learning Through Lexical Translation and Inferencing. *Journal of psycholinguistic research*, 49(6), 975–991.
- Ambarwati, L., Nabatajoe, R., Barli, R. K., & Hutagalung, R. T. (2022). THE EFFECTIVENESS OF DUOLINGO IN LEARNING ENGLISH. In *Seminar Nasional Ilmu Pendidikan dan Multi Disiplin* (Vol. 5, No. 01).
- Anggraini, A., & Faisal, F. (2024). The Use of Artificial Intelligence Based Technology in English Language Teaching. *Golden Ratio of Data in Summary*, 4(2), 950 - 957. <https://doi.org/10.52970/grdis.v4i2.749>
- Arikunto, S. (2020). Prosedur Penelitian Suatu Pendekatan Praktik. Jakarta: Rineka Cipta
- Aulia, H. R., Wahjuningsih, E., & Andayani, R. (2020). Effect of Duolingo Application on Students' English Vocabulary Mastery. (2), 131–139.
- Bardak, S., & Zorlu, F. (2022). Students' perception of mobile-assisted language learning with Duolingo. *Contemporary Educational Technology*, 14(3), ep370.

- Bauer, D., Shea, M., & Schwab, T. (2021). Interactive feedback mechanisms in language learning applications: A case study of Duolingo. *Journal of Educational Technology & Society*, 24(2), 123-135.
- Benson, P. (2022). Language learning and technology: Autonomy and engagement in digital environments. *System*, 106, 102750.
- Casteel, A., & Bridier, N. L. (2021). Describing populations and samples in doctoral student research. *International journal of doctoral studies*, 16(1).
- Celik, I., Dindar, M., Muukkonen, H. et al. The Promises and Challenges of Artificial Intelligence for Teachers: a Systematic Review of Research. *TechTrends* 66, 616–630 (2022).
- Chen, X., & Cheng, Y. (2021). Mobile-assisted language learning attitudes in higher education. *Computers & Education*, 168, 104200.
- Creswell, J. W. (2012). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research (4th Ed.). USA: Pearson Education, Inc., (halaman)
- Creswell, John W.. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed. (5). Los Angeles: SAGE Publications.
- Cui, P., & Sachan, M. (2023). Adaptive and Personalized Exercise Generation for Online Language Learning. arXiv.Org. <https://arxiv.org/abs/2306.02457v1>
- Damljanovic, D., Miller, D., & O'Sullivan, D. (2013). Learning from quizzes using intelligent learning companions. *Proceedings of the 22nd International Conference on World Wide Web*, 435–438. <https://doi.org/10.1145/2487788.2487960>
- Fitriani, F. Duolingo in English education: Evidence-based perspectives on learning outcomes. *Curricula: Journal of Curriculum Development*, 3(2), 333-346.
- G.H. Abeyweera. (2021). Inadequate Usage of Vocabulary in English Language Reduce the Quality of Communication in Academic Setting with Reference

- to Uva Wellassa University of Sri Lanka. *The Creative Launcher*, 6(2), 1–4. <https://doi.org/10.53032/TCL.2021.6.2.01>
- Godwin-Jones, R. (2003). Emerging technologies. *Language Learning & Technology*, 24(2), 8-19.
- Guaquet, C., & Castro, A. Y. (2018). The use of learning apps as a didactic tool for EFL vocabulary building. *ERIC Journal*, 11(2).
- Hu, Marcella. (2013). The Effects of Word Frequency and Contextual Types on Vocabulary Acquisition from Extensive Reading: A Case Study. *Journal of Language Teaching and Research*. 4. 10.4304/jltr.4.3.487-495.
- Indrasari, H. A., Prasetyo, Y., & Putranto, H. R. (2024). The Unlocking Language Proficiency: Exploring Duolingo's Impact on Vocabulary Learning. *Journal of English Teaching, Literature, and Applied Linguistics*, 8(1), 75-82.
- Irzawati, I., & Unamo, A. F. (2023). Students' Perception and Attitudes towards the Utilization of Duolingo in EFL Learning. *J-SHMIC : Journal of English for Academic*, 10(2), 123–138.
- Jaelani, A., & Sutari, D. R. (2020). STUDENTS'PERCEPTION OF USING DUOLINGO APPLICATION AS A MEDIA IN LEARNING VOCABULARY. In *Bogor English Student and Teacher (BEST) conference* (Vol. 2, pp. 40-47)
- Janati, S. E., Maach, A., & El, D. (2020). Adaptive e-Learning AI-Powered Chatbot based on Multimedia Indexing. *International Journal of Advanced Computer Science and Applications*, 11(12). <https://doi.org/10.14569/IJACSA.2020.0111238>
- Klimova, B., & Polakova, P. (2020). Students' experiences with mobile language learning applications. *Education and Information Technologies*, 25(4), 2605-2620.
- Koutsojannis, C., Beligiannis, G., Hatzilygeroudis, I., Papavlasopoulos, C., & Prentzas, J. (2007). Using a hybrid AI approach for exercise difficulty level

- adaptation. *International Journal of Continuing Engineering Education and Life Long Learning*, 17(4-5), 256-272.
- Kruk, M. (2021). Exploring language learners' beliefs about the effectiveness of Duolingo. *Computer Assisted Language Learning*, 34(6), 653-680.
- Kurniawan, H., & Wijaya, E. (2023). Dimensi multifaktor dalam persepsi siswa: Kajian komprehensif pendekatan psikopedagogis. *Jurnal Pendidikan Inovatif*, 45(2), 98-112.
- Laufer, B., & Paribakht, T. S. (1998). The relationship between passive and active vocabularies: Effects of language learning context. *Language Learning*, 48(3), 365–391. <https://doi.org/10.1111/0023-8333.00046>
- Li, Z., & Lan, Y. (2022). User experiences in mobile-assisted language learning: A systematic review. *Computer Assisted Language Learning*, 35(5), 789-812.
- Liang, J.-C., Hwang, G.-J., Chen, M.-R. A., & Darmawansah, D. (2023). Roles and research foci of artificial intelligence in language education: An integrated bibliographic analysis and systematic review approach. *Interactive Learning Environments*, 31(7), 4270–4296. <https://doi.org/10.1080/10494820.2021.1958348>
- Lin, M.-H., Chen, H.-C., & Liu, K.-S. (2017). A Study of the Effects of Digital Learning on Learning Motivation and Learning Outcome. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(7), 3553–3564. <https://doi.org/10.12973/eurasia.2017.00744a>
- Loewen, S., Crowther, D., Isbell, D. R., Kim, K. M., Maloney, J., Miller, Z. F., & Rawal, H. (2019). Mobile-assisted language learning: A Duolingo case study. *ReCALL*, 31(3), 293–311. <https://doi.org/10.1017/S0958344019000065>
- Lubis, A. H., Samsudin, D., Triarisanti, R., Jerusalem, M. I., & Hwang, Y. (2024). A bibliometric mapping analysis of publications on the utilization of artificial intelligence technology in language learning. *Journal of Advanced*

- Research in Applied Sciences and Engineering Technology, 38(1), 156–176. <https://doi.org/10.37934/araset.38.1.156176>
- Maftoon, P., Khanjani, A., & Papi, E. (2022). Exploring learner interaction and adaptive learning in mobile language learning applications. *Interactive Learning Environments*, 30(5), 815-830.
- Malik, A (2018). *Pengantar statistika pendidikan*. Deepublish.
- Malik, R. S., Rohani, A., & Razak, N. A. (2020). Mobile learning acceptance among language learners: A case of Duolingo application. *International Journal of Interactive Mobile Technologies*, 14(16), 4-19.
- Meara, P. (1990). A note on passive vocabulary. *Interlanguage Studies Bulletin (Utrecht)*, 6(2), 150–154. <https://doi.org/10.1177/026765839000600204>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. sage.
- Nakatani, Y., & Plann-Curran, S. (2021). Exploring learner attitudes towards mobile language learning applications. *ReCALL*, 33(2), 178-194.
- P, Munday. The Case for Using Duolingo as Part of the Language Classroom Experience/Duolingo Com Parte Del Curriculum De Las Clases De Lengua Extranjera. *Revista Iberoamericana De Educación A Distancia*, (2016).
- Park, S., & Anderson, T. (2021). Cross-linguistic effectiveness of AI-driven vocabulary learning platforms. *Applied Linguistics Review*, 12(3), 442-461.
- Prasetyo, B., & Hartanto, W. (2021). Konstruksi mental dan dinamika persepsi siswa dalam lingkungan belajar. *Jurnal Ilmu Pendidikan*, 28(1), 67-82.
- R, Vasselinov and Grego, J. Duolingo Effectiveness Study (USA: City university of new York, 2012).
- Rachels, J. R., & Rockinson-Szapkiw, A. J. (2018). The effects of a mobile gamification app on elementary students' Spanish achievement and self-

- efficacy. *Computer Assisted Language Learning*, 31*(1–2), 72–89.
<https://doi.org/10.1080/09588221.2017.1382536>
- Reinders, H., & Hubbard, P. (2021). Mobile learning and digital experiences in language education. *Language Learning & Technology*, 25(2), 1-16.
- Rich, Elaine dan Knight, Kevin. (2009). *Artificial Intelligence*. Tata McGraw-Hill Inc, New York.
- Rouabchia, R., & Kheder, K. (2024). Using Duolingo in teaching and learning vocabulary: A systematic review. *Indonesian Journal of English Language Studies (IJELS)*, 10(2), 91-107.
- Saito, K., Saito, T., & Kadota, S. (2020). Gamification and language learning motivation: A systematic review. *Computer Assisted Language Learning*, 33(8), 853-876.
- Sari, D. P., Rohman, A., & Sutrisno. (2022). Pengaruh persepsi siswa terhadap motivasi dan capaian belajar. *Jurnal Penelitian Pendidikan*, 39(3), 211-225.
- Sarker, I. H. (2022). AI-Based Modeling: Techniques, Applications and Research Issues Towards Automation, Intelligent and Smart Systems. *SN Computer Science*, 3(2), 158.
- Saville, N., & Harris, J. (2021). Personalized learning experiences in digital language learning platforms. *System*, 98, 102471.
- Schmitt, N., & Schmitt, D. (2020). *Vocabulary in language teaching*. Cambridge university press.
- Shadiev, R., Hwang, W. Y., Huang, Y. M., & Liu, T. Y. (2021). Mobile-assisted language learning: Application development, learning outcomes, and challenges. *Interactive Learning Environments*, 29(7), 1165-1180.
- Sugiyono, . (2015). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* (Cet. 1). Bandung: Alfabeta.
- Sugiyono. (2018). *Metode Penelitian Kuantitatif*. Bandung: Alfabeta.

- Tao, J., Liu, C., & Zhang, L. (2020). Students' perception of gamification and social interaction in language learning apps. *Educational Technology Research and Development*, 68(3), 1215-1234.
- Vall, R. R. F. de la, & Araya, F. G. (2023). Exploring the Benefits and Challenges of AI-Language Learning Tools. *International Journal of Social Sciences and Humanities Invention*, 10(01), Article 01.
- Vesselinov, R., & Grego, J. (2020). Duolingo effectiveness study: 2020 report. Duolingo Research. <https://doi.org/10.51324/1234>
- Vu, P., & Viet, N. (2020). Exploring learner experiences in mobile language learning environments. *Interactive Learning Environments*, 28(7), 891-906.
- Widyaningrum, R., Sumarno, & Jumadi. (2020). Analisis persepsi siswa terhadap proses pembelajaran dalam konteks pendidikan. *Jurnal Pendidikan dan Pengajaran*, 53(2), 145-156.
- Winston, Patrick Henry. (1993). Artificial Intelligence. Third Edition. USA: Addison-Wesley Publishing Company.
- Wong, L., Chen, H., & Garcia, M. (2024). Long-term effects of AI-generated content on vocabulary retention. *Language Learning & Technology*, 27(1), 12-29.
- Woo, J. H., & Choi, H. (2021). Systematic Review for AI-based Language Learning Tools. *Journal of Digital Contents Society*, 22(11), 1783–1792. <https://doi.org/10.9728/dcs.2021.22.11.1783>
- Yusup, F. (2023). Pengembangan instrumen penelitian: Konsep, validitas dan reliabilitas. *Jurnal Ilmiah Pendidikan*, 5(2), 145-162.
- Zainuddin, Z., & Perera, C. J. (2021). Exploring students' acceptance of MOOCs through the lens of the self-determination theory. *The Internet and Higher Education*, 52*, 100832. <https://doi.org/10.1016/j.iheduc.2021.100832>