

REFERENCES

- Arini, D. N., Hidayat, F., Winarti, A., & Rosalina, E. (2022). Artificial intelligence (AI)-based mobile learning in ELT for EFL learners: The implementation and learners' attitudes. *International Journal of Educational Studies in Social Sciences (IJESSS)*, 2(2), 88–95. <https://doi.org/10.53402/ijesss.v2i2.40>
- Ayanwale, M. A., Adelana, O. P., Molefi, R. R., Adeeko, O., & Ishola, A. M. (2024). Examining artificial intelligence literacy among pre-service teachers for future classrooms. *Computers and Education Open*, 6(March), 100179. <https://doi.org/10.1016/j.caeo.2024.100179>
- Backfisch, I., Lachner, A., Hische, C., Loose, F., & Scheiter, K. (2020). Professional knowledge or motivation? Investigating the role of teachers' expertise on the quality of technology-enhanced lesson plans. *Learning and Instruction*, 66(March 2019), 101300. <https://doi.org/10.1016/j.learninstruc.2019.101300>
- Benvenuti, M., Cangelosi, A., Weinberger, A., Mazzoni, E., Benassi, M., Barbaresi, M., & Orsoni, M. (2023). Artificial intelligence and human behavioral development: A perspective on new skills and competences acquisition for the educational context. *Computers in Human Behavior*, 148(August), 107903. <https://doi.org/10.1016/j.chb.2023.107903>
- Boonchom, W., Piyanukool, S., & Prachanant, N. (2024). Trends of Using Artificial Intelligence (AI) Technologies in Research Studies of English Language Teaching Wanchana. *Brulet Journal*, 2(1), 34–50. <https://doi.org/10.14456/bej.2024.3>
- Bu, Y., Ma, T., & Li, W. (2021). Pteacher: A computer-aided personalized pronunciation training system with exaggerated audio-visual corrective feedback. *Association for Computing Machinery*. <https://doi.org/10.1145/3411764.3445490>
- Burstein, J., Chodorow, M., & Leacock, C. (2004). Automated essay evaluation: The criterion online writing service. *AI Magazine*, 25(3), 27–36.

- Celik, I. (2023). Towards Intelligent-TPACK: An empirical study on teachers' professional knowledge to ethically integrate artificial intelligence (AI)-based tools into education. *Computers in Human Behavior*, 138(May 2022), 107468. <https://doi.org/10.1016/j.chb.2022.107468>
- Celik, I., Dindar, M., Muukkonen, H., & Järvelä, S. (2022). The Promises and Challenges of Artificial Intelligence for Teachers: a Systematic Review of Research. *TechTrends*, 66(4), 616–630. <https://doi.org/10.1007/s11528-022-00715-y>
- Chai, C. S., Hwee Ling Koh, J., & Teo, Y. H. (2019). Enhancing and Modeling Teachers' Design Beliefs and Efficacy of Technological Pedagogical Content Knowledge for 21st Century Quality Learning. *Journal of Educational Computing Research*, 57(2), 360–384. <https://doi.org/10.1177/0735633117752453>
- Chai, C. S., Koh, J. H. L., & Tsai, C.-C. (2013). A Review of Technological Pedagogical Content Knowledge. *Educational Technology and Society*, 16(2), 31–51.
- Chassignol, M., Khoroshavin, A., Klimova, A., & Bilyatdinova, A. (2018). Artificial Intelligence trends in education: A narrative overview. *Procedia Computer Science*, 136, 16–24. <https://doi.org/10.1016/j.procs.2018.08.233>
- Cheng, K. H. (2017). A survey of native language teachers' technological pedagogical and content knowledge (TPACK) in Taiwan. *Computer Assisted Language Learning*, 30(7), 692–708. <https://doi.org/10.1080/09588221.2017.1349805>
- Cohen, L., Manion, L., & Morrison, K. (2002). *Research Methods in Education*. Routledge.
- Cresswell, J. W. (2015). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (Fourth, Issue 112). Pearson.
- Crompton, H., Edmett, A., Ichaporia, N., & Burke, D. (2024). AI and English language teaching: Affordances and challenges. *British Journal of*

- Educational Technology*, September 2023, 2503–2529.
<https://doi.org/10.1111/bjet.13460>
- Daulay, S. F., & Ginting, P. (2024). Transforming English Language Teaching Through AI: Evaluation of the Strategies and Potential of Artificial Intelligence Applications in EFL. *IDEAS Journal of Language Teaching and Learning, Linguistics and Literature*, 12(1), 376–395.
<https://doi.org/10.24256/ideas>.
- DeVellis, R. F. (2017). Scale Development Theory and Applications (Fourth Edition). *SAGE Publication*, 4, 256.
- Dörnyei, Z. (2007). *Research Methods in Applied Linguistics*. Oxford University Press.
- Drajati, N. A., Tan, L., Haryati, S., Rochsantiningsih, D., & Zainnuri, H. (2018). Investigating English language teachers in developing TPACK and multimodal literacy. *Indonesian Journal of Applied Linguistics*, 7(3), 575–582. <https://doi.org/10.17509/ijal.v7i3.9806>
- Eser, Y. H., Inan, M. Y., Kucuker, M. U., Kilciksiz, C. M., Yilmaz, S., Dincer, N., Kilic, O., Ercan, A. C., & Aydemir, O. (2020). Development, Validity and Reliability of the 4-point Likert Turkish version of Cognitive Failures Questionnaire. *Annals of Medical Research*, 27(5), 1.
<https://doi.org/10.5455/annalsmedres.2020.04.308>
- Fertier, A., Montarnal, A., Truptil, S., & Bénaben, F. (2020). Navigating the Ethical Terrain of AI in Education: A Systematic Review on Framing Responsible Human-Centered AI Practices. *Computers and Education: Artificial Intelligence*, January, 113260. <https://doi.org/10.1016/j.nhres.2023.06.006>
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How To Design and Evaluate Research in Education* (8th ed., Issue 112).
- Ghafar, Z. N., Salh, H. F., Abdulrahim, M. A., & Farxha, S. S. (2023). The Role of Artificial Intelligence Technology on English Language Learning: A Literature Review. *Canadian Journal of Language and Literature Studies*, 3(2), 17–31. <https://doi.org/10.53103/cjlls.v3i2.87>

- Goodfellow, I., Bengio, Y., & Courville, A. (2016). Deep Learning. *Cambridge: MIT Press.*, 1(2), 247–303. https://doi.org/10.1007/978-3-030-95041-5_6
- Harris, J., Mishra, P., & Koehler, M. (2009). Teachers' technological pedagogical content knowledge and learning activity types: Curriculum-based technology integration refrained. *Journal of Research on Technology in Education*, 41(4), 393–416. <https://doi.org/10.1080/15391523.2009.10782536>
- Hockly, N. (2023). Artificial Intelligence in English Language Teaching: The Good, the Bad and the Ugly. *RELC Journal*, 54(2), 445–451. <https://doi.org/10.1177/00336882231168504>
- Holmes, W., Maya, B., & Fadel, C. (2019). Artificial Intelligence In Education Promises and Implications for Teaching. *Journal of Computer Assisted Learning*, 14(4), 251–259. <https://onlinelibrary.wiley.com/doi/10.1046/j.1365-2729.1998.1440251.x>
- Ibrahim, A. I. (2022). the Effect of Storytelling As a Teaching Method on Speaking Skills in Efl Programs: an Action Research. *European Journal of English Language Teaching*, 7(3), 20–35. <https://doi.org/10.46827/ejel.v7i3.4247>
- Joshi, A., Kale, S., Chandel, S., & Pal, D. (2015). Likert Scale: Explored and Explained. *British Journal of Applied Science & Technology*, 7(4), 396–403. <https://doi.org/10.9734/bjast/2015/14975>
- Kalra, R. (2024). Exploring Teachers' Perceptions Toward the Integration of AI Tools in the Language Classroom. *NIDA Journal of Language and Communication.*, 29(45), 21–36.
- Koehler, M. J., Mishra, P., & Cain, W. (2009). What is Technological Pedagogical Content Knowledge (TPACK)? *Journal of Education*, 193(3), 13–19. <https://doi.org/10.1177/002205741319300303>
- Labadze, L., Grigolia, M., & Machaidze, L. (2023). Role of AI chatbots in education: systematic literature review. *International Journal of Educational Technology in Higher Education*, 20(1), 1–17. <https://doi.org/10.1186/s41239-023-00426-1>
- Liu, Z. Y., Vobolevich, A., & Oparin, A. (2023). The Influence of AI ChatGPT on Improving Teachers' Creative Thinking. *International Journal of Learning*,

- Teaching and Educational Research*, 22(12), 124–139.
<https://doi.org/10.26803/ijlter.22.12.7>
- Luckin, R., & Holmes, W. (2016). *Intelligence Unleashed: An argument for AI in Education*. In Pearson.
<https://www.pearson.com/content/dam/corporate/global/pearson-dot-com/files/innovation/Intelligence-Unleashed-Publication.pdf>
- Makwana, V. (2025). A Comparative Analysis of AI-Powered and Teacher-Led Feedback: Investigating Student Perceptions and Writing Performance. *Journal of English Language Teaching*, 67(1), 3–12.
- Mamoon, R., & Arif, F. (2024). Enhancing Language Proficiency Through TPACK Model and AI Applications A Study on Effective Integration Strategies in English Language Instruction. *Pakistan Languages and Humanities Review*, 8(II). [https://doi.org/10.47205/plhr.2024\(8-ii\)47](https://doi.org/10.47205/plhr.2024(8-ii)47)
- Manji, K., Hanefeld, J., Vearey, J., Walls, H., & De Gruchy, T. (2021). Using WhatsApp messenger for health systems research: A scoping review of available literature. *Health Policy and Planning*, 36(5), 774–789.
<https://doi.org/10.1093/heapol/czab024>
- Mavhandu-Mudzusi, A. H., Moyo, I., Mthombeni, A., Ndou, A., Mamabolo, L., Ngwenya, T., Marebane, T., & Netshapapame, T. (2022). WhatsApp as a Qualitative Data Collection Method in Descriptive Phenomenological Studies. *International Journal of Qualitative Methods*, 21, 1–9.
<https://doi.org/10.1177/16094069221111124>
- McCarthy, J., Minsky, M. L., Rochester, N., & Shannon, C. E. (2006). A proposal for the Dartmouth summer research project on artificial intelligence. *AI Magazine*, 27(4), 12–14.
- Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge. *Teachers College Record: The Voice of Scholarship in Education*, 108(6), 1017–1054.
<https://doi.org/10.1177/016146810610800610>
- Moorhouse, B. L. (2023). Teachers' digital technology use after a period of online teaching. *ELT Journal*, 77(4), 445–457. <https://doi.org/10.1093/elt/ccac050>

- Nilsson, N. J. (2009). The Quest for Artificial Intelligence. In *The Quest for Artificial Intelligence*. Cambridge University Press. <https://doi.org/10.1017/cbo9780511819346>
- Nunan, D., & Bailey, K. M. (2009). *Exploring Second Language Classroom Research: A Comprehensive Guide*. HEINLE CENGAGE Learning.
- Sabaruddin, S., Purnama, A. D., Harmilawati, H., Aminah, S., Irmayani, I., Takdir, T., & AR, A. (2024). Artificial Intelligence in English Language Teaching: A Study of English Teachers' TPACK. *Globish: An English-Indonesian Journal for English, Education, and Culture*, 13(2), 125. <https://doi.org/10.31000/globish.v13i2.11250>
- Sanusi, I. T., Ayanwale, M. A., & Tolorunleke, A. E. (2024). Investigating pre-service teachers' artificial intelligence perception from the perspective of planned behavior theory. *Computers and Education: Artificial Intelligence*, 6(January), 100202. <https://doi.org/10.1016/j.caeai.2024.100202>
- Scheuren, F. (2014). What is a Survey? *Alexandria: American Statistical Association*, 1–21. <https://www.qualtrics.com/uk/experience-management/research/surveys/?rid=ip&prevsite=en&newsite=uk&geo=AE&geomatch=uk%0Ahttps://www.qualtrics.com/experience-management/research/survey-basics/>
- Sharadgah, T. A., & Sa'di, R. A. (2022). A Systematic Review of Research on the Use of Artificial Intelligence in English Language Teaching and Learning (2015-2021): What are the Current Effects? *Journal of Information Technology Education: Research*, 21.
- Swiecki, Z., Ruis, A. R., Gautam, D., Rus, V., & Williamson Shaffer, D. (2019). Understanding when students are active-in-thinking through modeling-in-context. *British Journal of Educational Technology*, 50(5), 2346–2364. <https://doi.org/10.1111/bjet.12869>
- Syarifudin, A. S. (2023). *Challenges and opportunities of implementing AI in language learning in Indonesia*. 3(1), 67–76. <https://doi.org/10.4018/979-8-3693-3989-3.ch004>

- Tan, L., Chai, C. S., Deng, F., Zheng, C. P., & Drajati, N. A. (2019). Examining pre-service teachers' knowledge of teaching multimodal literacies: a validation of a TPACK survey. *Educational Media International*, 56(4), 285–299. <https://doi.org/10.1080/09523987.2019.1681110>
- Tondeur, J., Aesaert, K., Pynoo, B., van Braak, J., Fraeyman, N., & Erstad, O. (2017). Developing a validated instrument to measure preservice teachers' ICT competencies: Meeting the demands of the 21st century. *British Journal of Educational Technology*, 48(2), 462–472. <https://doi.org/10.1111/bjet.12380>
- Tseng, J. J., Chai, C. S., Tan, L., & Park, M. (2022). A critical review of research on technological pedagogical and content knowledge (TPACK) in language teaching. *Computer Assisted Language Learning*, 35(4), 948–971. <https://doi.org/10.1080/09588221.2020.1868531>
- Tulasi, L., & Rao, C. S. (2023). Integration of AI-technologies into ELT: a brief study. *Journal for Research Scholars and Professionals of English Language Teaching*, 7(38), 1–14. <https://www.ncbi.nlm.nih.gov/books/NBK558907/>
- Val, 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), 7569–7576. <https://doi.org/10.18535/ijsshi/v10i01.02>
- Voithofer, R., & Nelson, M. J. (2021). Teacher Educator Technology Integration Preparation Practices Around TPACK in the United States. *Journal of Teacher Education*, 72(3), 314–328. <https://doi.org/10.1177/0022487120949842>
- Wang, B., Rau, P. L. P., & Yuan, T. (2023). Measuring user competence in using artificial intelligence: validity and reliability of artificial intelligence literacy scale. *Behaviour and Information Technology*, 42(9), 1324–1337. <https://doi.org/10.1080/0144929X.2022.2072768>
- Wulandari, M., & Purnamaningwulan, R. A. (2022). Exploring Indonesian EFL pre-service teachers' experiences in AI-assisted teaching practicum: benefits and drawbacks. *LLT Journal: A Journal on Language and Language Learning*, 25(1), 132–148. <http://e-journal.usd.ac.id/index.php/LLT>

- Yuan, S., He, T., Huang, H., Hou, R., & Wang, M. (2020). Automated chinese essay scoring based on deep learning. *Computers, Materials and Continua*, 65(1), 817–833. <https://doi.org/10.32604/cmc.2020.010471>
- Zakaria, A., Salleh, A. M., Ismail, M. A., & Ghavifekr, S. (2017). Promoting Meaningful Learning via Online Project-based Module. *International Journal of E-Learning and Higher Education (IJELHE)*, 6(5), 2–15.
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education – where are the educators? *International Journal of Educational Technology in Higher Education*, 16(1). <https://doi.org/10.1186/s41239-019-0171-0>