

REFERENCES

- Anantasia, G., & Rindrayani, S. R. (2025). Quasi experimental research methodology. *Innovative: Journal Of Social Science Research*, 4(1), 47–56.
- Arib, M. F., Rahayu, M. S., Sidorj, R. A., & Afgani, M. W. (2024). Experimental research in educational research. *Innovative: Journal Of Social Science Research*, 4(1), 5497–5511.
- Brown, H. D. (2004). *Language assessment: Principles and classroom practices*. Pearson Education.
- Cabrera-Duffaut, A., Pinto-Llorente, A. M., & Iglesias-Rodríguez, A. (2024). Immersive learning platforms: Analyzing virtual reality contribution to competence development in higher education—A systematic literature review. *Frontiers in Education*, 9, Article 1391560. <https://doi.org/10.3389/feduc.2024.1391560>
- Çoban, M., Topuz, A. C., Karabulut, A., & Chiu, T. K. F. (2024). Comparing realities: A study on the impact of virtual reality versus paper-based reading on higher education students' comprehension skills. *Participatory Educational Research*, 11(4), 19–36. <https://doi.org/10.17275/per.24.47.11.4>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334. <https://doi.org/10.1007/BF02310555>
- Derewianka, B., & Jones, P. (2016). *Teaching language in context*. Oxford University Press.

- Field, A. (2018). *Discovering statistics using IBM SPSS Statistics* (5th ed.). Sage Publications.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (8th ed.). McGraw-Hill.
- Gerot, L., & Wignell, P. (1994). *Making sense of functional grammar*. Gerd Stabler.
- Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. Cambridge University Press.
- Grabe, W., & Stoller, F. L. (2020). *Teaching and researching reading* (3rd ed.). Routledge.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Huang, X., Zou, D., Cheng, G., & Xie, H. (2022). A systematic review of AR and VR enhanced language learning. *Educational Technology & Society*, 25(3), 1–15.
- Kementerian Pendidikan Dasar dan Menengah. (2026). *Profil sekolah - Data pokok pendidikan*. Dapodikdasmen.
<https://dapo.kemendikdasmen.go.id/sekolah/99CD948862F133745DC3>
- Knapp, P., & Watkins, M. (2005). *Genre, text, grammar: Technologies for teaching and assessing writing*. UNSW Press.
- Lee, N., Choi, W., & Lee, S. (2021). Development of an 360-degree virtual reality video-based immersive cycle training system for physical enhancement in older adults: A feasibility study. *BMC Geriatrics*, 21(325), 1–10.
<https://doi.org/10.1186/s12877-021-02263-1>
- Makransky, G., Andreasen, N. K., Baceviciute, S., & Mayer, R. (2021). Immersive virtual reality increases liking but not learning with a science simulation and generative learning strategies promote learning in immersive virtual reality.

- Journal of Educational Psychology*, 113(4), 719–735.
<https://doi.org/10.1037/edu0000473>
- Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge University Press.
- Mayer, R. E. (2021). *Multimedia learning* (3rd ed.). Cambridge University Press.
- Miguel-Alonso, I., Checa, D., Guillen-Sanz, H., & Bustillo, A. (2024). Evaluation of the novelty effect in immersive Virtual Reality learning experiences. *Virtual Reality*, 28, Article 27. <https://doi.org/10.1007/s10055-023-00926-5>
- Nachar, N. (2008). The Mann-Whitney U: A test for assessing whether two independent samples come from the same distribution. *Tutorials in Quantitative Methods for Psychology*, 4(1), 13–20.
- Nahm, F. S. (2016). Nonparametric statistical tests for the continuous data: The basic concept and the practical use. *Korean Journal of Anesthesiology*, 69(1), 8–14.
- Nation, I. S. P. (2009). *Teaching ESL/EFL reading and writing*. Routledge.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw Hill.
- Organisation for Economic Co-operation and Development. (2023). *PISA 2022 results (Volume I): The state of learning and equity in education*. OECD Publishing.
- Paivio, A. (1986). *Mental representations: A dual coding approach*. Oxford University Press.
- Parmaxi, A. (2023). Virtual reality in language learning: A systematic review. *Computer Assisted Language Learning*, 36(1–2), 1–28.
- Radianti, J., Majchrzak, T. A., Fromm, J., & Wohlgenannt, I. (2020). A systematic review of immersive virtual reality in education. *Computers & Education*, 147, 103778. <https://doi.org/10.1016/j.compedu.2019.103778>

- Ramadhianti, A., & Somba, S. (2023). Reading comprehension difficulties in Indonesian EFL students. *Journal of English Language Teaching and Literature (JELTL)*, 6(1).
- Saifudin, A., Setiawan, S., & Anam, S. (2020). The implementation of task based learning in teaching writing descriptive text to the junior high school.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business* (7th ed.). Wiley.
- Şimşek, B., Direkci, B., Koparan, B., Gülmez, M., Akbulut, S., Şimşek, E. E., & Kayır, G. (2026). The effect of virtual reality applications on the development of productive language skills: A meta-analysis. *Frontiers in Education*, 11, Article 1782286. <https://doi.org/10.3389/feduc.2026.1782286>
- Snow, C. E. (2002). *Reading for understanding*. RAND Corporation.
- Sugiyono. (2021). *Metode penelitian kuantitatif, kualitatif, dan R&D [Quantitative, qualitative, and R&D research methods]*. Alfabeta.
- Yu, N., Shi, W., Dong, W., & Kang, R. (2025). The impact of virtual reality immersion on learning outcomes: A comparative study of declarative and procedural knowledge acquisition. *Behavioral Sciences*, 15(10), Article 1322. <https://doi.org/10.3390/bs15101322>