

REFERENCES

- Ackah-Jnr, F. R., Appiah, J., Abedi, E. A., Opoku-Nkoom, I., & Salaam, M. A. (2022). Quality Education: Critical Policy Considerations that Impact Teacher Retention in Schools. *European Journal of Education and Pedagogy*, 3(3), 26–32. <https://doi.org/10.24018/ejedu.2022.3.3.345>
- Alrajeh, T. S. (2021). Project-based Learning to Enhance Pre-service Teachers' Teaching Skills in Science Education. *Universal Journal of Educational Research*, 9(2), 271–279. <https://doi.org/10.13189/ujer.2021.090202>
- Amerstorfer, C. M., & Freiin von Münster-Kistner, C. (2021). Student Perceptions of Academic Engagement and Student-Teacher Relationships in Problem-Based Learning. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.713057>
- Aslan. (2024). LITERATURE REVIEW: THE EFFECT OF PROJECT-BASED LEARNING ON STUDENT MOTIVATION AND ACHIEVEMENT IN SCIENCE. *Indonesian Journal of Education (INJOE)*, 4(3).
- Azzahra, N. R., & Nurkamto, J. (2024). How Do EFL Teachers Navigate Problem-Based Learning in Indonesian Classrooms? *Voices of English Language Education Society*, 8(3). <https://doi.org/10.29408/veles.v8i3.27956>
- Behera, S. (2402). *Innovative Pedagogical Practices in Teacher Education* (Vol. 6, Number 2). www.ijfmr.com
- Bhardwaj, V., Zhang, S., Tan, Y. Q., & Pandey, V. (2025). Redefining learning: student-centered strategies for academic and personal growth. In *Frontiers in Education* (Vol. 10). Frontiers Media SA. <https://doi.org/10.3389/feduc.2025.1518602>
- Biletska, I. O. , P. A. F. , A. H. D. , & K. Y. Y. (2021). *The Use of Modern Technologies by Foreign Language Teachers: Developing Digital Skills*. <https://doi.org/10.37028/lingcure.v5nS2.1327>
- C Phyllis, Blumenfeld, Soloway Elliot, Mark W Ronald, Krajick S Joseph, Guzdial Mark, & Palincsar Annemarie. (1991). Motivating Project-Based Learning : Sustaining the Doing, Supporting the Learning. *EDUCATIONAL PSYCHOLOGY*.
- de Jong, T., Lazonder, A. W., Chinn, C. A., Fischer, F., Gobert, J., Hmelo-Silver, C. E., Koedinger, K. R., Krajcik, J. S., Kyza, E. A., Linn, M. C.,

- Pedaste, M., Scheiter, K., & Zacharia, Z. C. (2023). Let's talk evidence – The case for combining inquiry-based and direct instruction. In *Educational Research Review* (Vol. 39).
<https://doi.org/10.1016/j.edurev.2023.100536>
- Demchenko, I., Maksymchuk, B., Bilan, V., Maksymchuk, I., & Kalynovska, I. (2021). Training Future Physical Education Teachers for Professional Activities under the Conditions of Inclusive Education. *BRAIN. BROAD RESEARCH IN ARTIFICIAL INTELLIGENCE AND NEUROSCIENCE*, 12(3), 191–213. <https://doi.org/10.18662/brain/12.3/227>
- Erviana, V. Y., Sintawati, M., Bhattacharyya, E., Habil, H., & Fatmawati, L. (2022). The effect of Project-Based Learning on Technological Pedagogical Content Knowledge among Elementary School Pre-Service Teacher. *Pegem Egitim ve Ogretim Dergisi*, 12(2), 151–156.
<https://doi.org/10.47750/pegegog.12.02.15>
- Fajar Rahmani, E., Riyanti, D., & Yoga Eka Pratiwi Negara, K. (2024). EFL Pre-Service Teachers' Experiences in Implementing Differentiated Instruction during Teaching Practice Program. *Jurnal Pendidikan Progresif*, 14(2), 1245–1268.
<https://doi.org/10.23960/jpp.v14.i2.202490>
- Indriyani, N. (2025). FROM POLICY FRAMEWORKS TO CLASSROOMS: EFL CHALLENGES IN INDONESIA. *Acceleration: Multidisciplinary Research Journal*, 03(02), 73–82.
<https://doi.org/10.70210/amrj.v3i2.138>
- Kareem, J., Thomas, R. S., & Nandini, V. S. (2022). A Conceptual Model of Teaching Efficacy and Beliefs, Teaching Outcome Expectancy, Student Technology Use, Student Engagement, and 21st-Century Learning Attitudes: A STEM Education Study. *Interdisciplinary Journal of Environmental and Science Education*, 18(4), e2282.
<https://doi.org/10.21601/ijese/12025>
- Kim, J. (2024). Leading teachers' perspective on teacher-AI collaboration in education. *Education and Information Technologies*, 29(7), 8693–8724.
<https://doi.org/10.1007/s10639-023-12109-5>
- Kraft, M. A., Lyon, M. A., Tu, S., Chong, E., Cooper-Hohn, A., Benjes, J., Kuo, T., Noh, H., Lee, J., Edwards, D., Henig, J., Johnson, S. M., Lovison, V., Murnane, R., Qazilbash, E., Saenz-Armstrong, P., Schneider, J., & Albany, S. (2024). *NBER WORKING PAPER SERIES THE RISE AND FALL OF THE TEACHING PROFESSION: PRESTIGE, INTEREST, PREPARATION, AND SATISFACTION OVER THE LAST HALF CENTURY*. <http://www.nber.org/papers/w32386>

- Larmer, J., & Mergendoller, J. R. (2010). *Seven Essentials for Project-Based Learning*.
http://www.ascd.org/publications/educational_leadership/sept10/vol68/num01
- Martinez, C. (2022). Developing 21st century teaching skills: A case study of teaching and learning through project-based curriculum. *Cogent Education*, 9(1). <https://doi.org/10.1080/2331186X.2021.2024936>
- Mulang, H. (2021). The Effect of Competences, Work Motivation, Learning Environment on Human Resource Performance. *Golden Ratio of Human Resource Management*, 1(2), 84–93.
<https://doi.org/10.52970/grhrm.v1i2.52>
- Noor, A. H., & Nurhayati, S. (2024). Project-Based Learning Implementation in a Participative Planning Course: Strategies, Outcomes, and Challenges. *CAHAYA PENDIDIKAN*, 9(2), 164–172.
<https://doi.org/10.33373/chypend.v9i2.5660>
- Obae, C. K. T. K. A. L. S. C. N. J. M. I. et al. (2024). (2024). Immersive learning: innovative pedagogies, techniques, best practices and future trends. *Royal College of Surgeons in Ireland*.
<https://doi.org/https://doi.org/10.25419/rcsi.28741469.v1>
- Pamuji, Kristanto, W., Ahmad, T., & Khotimah, N. (2025). Integrating project-based learning and video exposé to enhance English language teaching in higher education: a case study of student empowerment. *Cogent Education*, 12(1).
<https://doi.org/10.1080/2331186X.2025.2578371>
- Pishghadam, R., Golzar, J., & Miri, M. A. (2022). A New Conceptual Framework for Teacher Identity Development. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.876395>
- Rivera-Vargas, P., Anderson, T., & Cano, C. A. (2021). Exploring students' learning experience in online education: analysis and improvement proposals based on the case of a Spanish open learning university. *Educational Technology Research and Development*, 69(6), 3367–3389.
<https://doi.org/10.1007/s11423-021-10045-0>
- Santos, J. M., & Castro, R. D. R. (2021). Technological Pedagogical content knowledge (TPACK) in action: Application of learning in the classroom by pre-service teachers (PST). *Social Sciences and Humanities Open*, 3(1). <https://doi.org/10.1016/j.ssaho.2021.100110>
- Setiono, P., Setyosari, P., Praherdhiono, H., Harsiati, T., & Amaliyah, Y. (2025). AN EXPERIENTIAL LEARNING MODEL TO ENHANCE

THE METACOGNITIVE ABILITIES OF PRE-SERVICE TEACHERS.
Prima Magistra: Jurnal Ilmiah Kependidikan, 6(4), 648–662.
<https://doi.org/10.37478/jpm.v6i4.5756>

- Subiyantoro, S., Zain Musa, M., & Efendi, A. (2024). Preparing Indonesian Primary School Teachers for Deep Learning: Readiness, Challenges, and Institutional Support. In *Cognitive Development Journal* (Vol. 2, Number 2).
- Sukackè, V., Guerra, A. O. P. de C., Ellinger, D., Carlos, V., Petronienè, S., Gaižiūnienè, L., Blanch, S., Marbà-Tallada, A., & Brose, A. (2022). Towards Active Evidence-Based Learning in Engineering Education: A Systematic Literature Review of PBL, PjBL, and CBL. In *Sustainability (Switzerland)* (Vol. 14, Number 21). MDPI.
<https://doi.org/10.3390/su142113955>
- Taskiran, A. (2021). Project-based online learning experiences of pre-service teachers. *Journal of Educational Technology and Online Learning*, 4(3), 391–405. <https://doi.org/10.31681/jetol.977159>
- Tia, J. N. A., & Wangid, M. N. (2024). Impact of Project Based Learning (PjBL) on Enhancing Student Self-Confidence. *AL-ISHLAH: Jurnal Pendidikan*, 16(3). <https://doi.org/10.35445/alishlah.v16i3.5425>
- Vera, J. L. De, Manalo, M. O., Ermeno, R. D., Reyes, C. B. delos, & Elores, Y. D. P. (2022). Teachers' Instructional Planning and Design for Learners in Difficult Circumstances. *Jurnal Pendidikan Progresif*, 12(1), 17–32. <https://doi.org/10.23960/jpp.v12.i1.202202>
- Yamin, M., Negeri Makassar Abd Halim, U., & Negeri Makassar, U. (2023). The Implementation Steps of Project-based Learning in English Language Teaching at Islamic Boarding School. *Celebes Journal of Language Studies*, 3(1), 2776–7493.