

PREPARING TECHNOLOGY-LITERATE TEACHERS: A STRATEGY FOR IMPROVING ICT COMPETENCE BASED ON SYSTEMATIC LITERATURE STUDY

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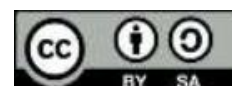
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ABSTRACT

Teacher competence in Information and Communication Technology (ICT) is a key pillar of digital education transformation. However, studies show that the digital literacy gap among educators remains a systemic challenge in developing countries, including Indonesia, due to generational differences, infrastructure limitations, and the absence of measurable ICT standards. This study aims to formulate strategies for improving teacher ICT competence based on a synthesis of recent literature. Using library research with a systematic approach to indexed journals (2023–2026) and textbooks (2018–2026), data were analysed through thematic content analysis and narrative synthesis. Findings reveal four strategic pillars: locally adapted UNESCO CFT frameworks; sustainable andragogical and micro-learning training; digital communities of practice with peer mentoring; and incentive systems integrated with project-based digital portfolios. Key barriers include technostress among senior teachers, lack of institutional support, and urban-rural infrastructure disparities. The main contribution of this research is providing an integrated, evidence-based strategic model for enhancing teacher ICT competence that bridges policy, practice, and local context in developing countries. The study concludes that strategies must be holistic and contextual. Policy recommendations include measurable competency standards, sustainable budgets, and community-based online professional development platforms.

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