

Innovation in Teacher Education for Preparing Educators in the Era of Digital Transformation

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Abstract

The rapid advancement of digital technologies has significantly transformed the educational landscape, necessitating a paradigm shift in teacher education. This study explores innovation in teacher education as a strategic approach to preparing educators for the demands of the digital era. The primary objective is to examine how innovative pedagogical practices, technology integration, and curriculum redesign can enhance teachers' digital competence and instructional effectiveness. Grounded in the frameworks of constructivism and technological pedagogical content knowledge (TPACK), the study adopts a mixed-method approach, combining survey data from pre-service teachers with qualitative insights from teacher educators. The findings indicate that innovative practices such as blended learning, simulation-based training, use of artificial intelligence tools, and collaborative digital platforms significantly improve teaching readiness and adaptability. However, challenges such as inadequate infrastructure, the digital divide, and lack of continuous professional development hinder effective implementation. The study emphasizes the need for restructuring teacher education programs to include hands-on digital training, reflective practices, and policy-level support. In conclusion, innovation in teacher education plays a pivotal role in equipping educators with the necessary skills, knowledge, and attitudes required for effective teaching in a digitally transformed environment. It calls for a holistic and sustainable approach to teacher preparation that aligns with the evolving demands of 21st-century education.

Keywords: Teacher Education, Digital Transformation, Innovative Pedagogy, TPACK, Blended Learning, Professional Development