# 21st Century paradigms for pre-service teacher technology preparation

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Abstract: This study investigated major course changes in 11 sections of a stand-alone educational technology course redesigned around 21st century skill sets as opposed to technical skill development. Conducted in the fall of 2007 and spring 2008 with a random sample of 100 pre-service teachers, independent and paired sample t tests and correlational analyses were used to examine differences in students' computer attitude, self-efficacy, and computer skills before and after instruction. Results of the study suggest that, even in a more rigorous course, pre-service teachers became less anxious about computers, their belief in the value of using technology to enhance teaching and learning as well as their self-efficacy toward integrating technology in the classroom significantly improved, and they became more advanced in their technical skills and knowledge of how to apply these skills in the classroom. © Taylor & Francis Group, LLC.

Author Keywords: 21st century skills; Attitude; Educational technology; Self-efficacy; Teacher education; Technology integration

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