

**Title:** Urban School Teachers' Self-Efficacy Beliefs and Practices, Innovation Practices, and Related Factors in Integrating Technology

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## **ABSTRACT**

Educational technology is a vehicle for transforming education and teachers are the linchpins of success for students. Teachers must actually use the technology, however, in order for it to affect change in their classrooms. This research examined the attitudes, self-efficacy beliefs, and innovation practices of urban high school teachers in relationship to technology, and how professional development affected these attitudes, self-efficacy beliefs, and innovation practices. Four hundred and twenty-eight teachers at eleven high schools in one urban district were surveyed.

The results of this study indicated that teachers who had fewer years of teaching experience, greater self-reported computer ability, more years of experience using the Internet, access to greater numbers of computers in their classrooms, and technology professional development training were more likely to have positive attitudes toward technologies, higher levels of self-efficacy practices, and higher scores on innovativeness. Teachers with more years of experience using the computer were found to have more positive attitudes toward technologies and higher levels of self-efficacy practices. Younger teachers were found to have more positive attitudes toward technologies.

Peer coaching and training that included modeling and guided practice were found to have a positive relationship with attitudes toward technologies and extent of innovativeness. Follow-up and/or advanced training was found to have a positive relationship with self-efficacy and

innovativeness. Teachers who spent more time in technology professional development were found to have more positive attitudes toward technologies, higher scores on self-efficacy practices, and higher innovativeness scores than their colleagues who spent less time in such activities. Gender was not found to be a significant predictor of the teachers' attitudes toward technologies, self-efficacy, and innovativeness.

These findings suggest that teachers need ongoing training and assistance as they employ new pedagogic methods that make extensive use of technologies. Teachers may also be more likely to integrate technologies into classroom instruction if the technologies are available to them, available in their classrooms, and available in greater numbers. A topic for additional research may be an investigation of the correlation between the teachers' use of technologies and student achievement.