THE EFFECT OF TECHNOLOGY INFUSION ON AT-RISK HIGH SCHOOL
STUDENTS' MOTIVATION TO LEARN

A Dissertation
by
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ABSTRACT

THE EFFECT OF TECHNOLOGY INFUSION ON AT-RISK HIGH SCHOOL STUDENTS’ MOTIVATION TO LEARN
(May 2011)

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Faced with the difficulty of educating at-risk students, one possible solution links success to motivation. By using instructional technologies (ITs), school systems are attempting to increase student motivation, hoping that when students are given a say into how and what they learn, they will feel more invested in their learning and improve their achievement outcomes. Because of this, individualized instruction and innovative school improvement plans using interactive technologies are becoming increasingly pervasive. The 2004 National Research Council and the Institute of Medicine report on fostering high school students’ motivation to learn argued that motivation is a key factor in the success or failure of education. At the forefront of technological shifts in curriculum is the premise that students want to use computers and are motivated to learn because technology is more engaging than conventional approaches. Increasingly, school reform programs include expensive technology initiatives, yet most current research surrounding these approaches involves little more than comparing test scores and teacher satisfaction surveys. By examining at-risk high school students’ perceptions of their motivation when using instructional technologies, this study offers a shift away from the traditional voices currently dominating research on this
topic. It also hopes to offer a better understanding of the link between students' perceptions of their motivation and the road blocks that impede motivation. Additionally, this study seeks to bring to light the frequently overlooked perspective of students who are often marginalized, unsuccessful, and in danger of failure.

By combining the work of Brophy (2010) and Dede (Dede, 2007; Clarke-Midure & Dede, 2009; Clarke-Midure & Dede, 2010), a two-fold framework converged to form three key questions in this study. Student interviews and survey data provide insight about the degree to which at-risk high school students feel that instructional technologies help contribute to or hinder their academic success. The survey tool, classroom observations, and student interviews specifically reveal how feelings of autonomy, extrinsic and intrinsic goal orientation, and task value are related to increased motivation among at-risk students and how certain management practices and road blocks can impede success. Additionally, the data collected were used to better understand what role the perceived value of digital literacy as a 21st Century job skill plays in motivating at-risk high school students when using technology in the classroom. Implications for teachers, administrators, and policy makers, as well as suggestions for further research are also presented.