# Implications of Virtual Credit Recovery on High School End-of-Course State Exams

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## EXECUTIVE SUMMARY

*In the State of Georgia, high schools must administer End-of-Course (EOC) exams to students enrolled in the specific courses for accountability purposes. Students who fail these exams must retake the course until credit has been successfully earned. Through an analysis of paired pre-test/post-test data from a Georgia high school between the 2021-22 and 2022-23 academic years, this study examined the influence of virtual credit recovery courses on high school student achievement on four focal EOC exams for students who initially failed a course. Findings indicated that virtual credit recovery had a statistically significant effect on student EOC exam scores, though none resulted in a mean score of proficient or above, indicating that these students may not have been prepared for subsequent coursework nor prepared for postsecondary coursework and future career paths. Conclusions and implications for course design are presented, including how artificial intelligence may be leveraged in virtual credit recovery courses in the future.*

## INTRODUCTION

For decades, architects of educational reform movements have struggled to concoct the just right potion to ensure all students graduate college- and career-ready. Providing the opportunity to high school students to participate in asynchronous credit recovery (CR) is imperative. This causal comparative research study examines the implications asynchronous CR has on student achievement.

High school graduation rates are considered essential for productive and competitive society and is of paramount importance to position the United States at both the domestic and international levels (Harris et al., 2020). With data indicating that approximately 1.2 million students fail to graduate each year, an astounding 41% of students who require remediation ultimately drop out of college (National Governors Association, 2010). As a result, students of color and minorities are disproportionately impacted due to their inability to demonstrate the minimum proficiency as dictated by high-stakes testing (Darling-Hammond, 2018).

It is estimated that 1.7 million to 3.3 million eighth to 12th grade students will likely drop out from schools (Dorn et al., 2021) Further, data has found the rate of dropout for African American, Hispanic/Latino, and Native Americans is nearly 50%—almost twice as much as that of Caucasian students (Tyner & Munyan-Penney, 2018). Starting in 2010, mounting pressure in the form of mandates from the U.S. Department of Education relative to graduation rates started a shift in accountability for high schools across the country (Harris et al., 2020).

The implementation and investment in CR courses are the pragmatic reform option that high schools can offer their students to exponentially impact graduation rates. Harris et al. (2020) defined CR as "programs that help struggling students earn credits for courses they have failed, to stay on track to graduate" (p. 5). Alternatively, Malkus (2018) conceptualized CR as a "strategy or program that allows students who failed a high school class to earn credit by successfully redoing coursework or retaking the class in an alternative manner" (p. 4).

Online credit recovery (OCR) programs have been adopted by states to assist students to stay in school. These programs became immensely popular during the pandemic where student course failures exponentially increased. These courses are typically taken by students who have below grade reading levels, lack self-regulation skills, are learning English as a second language, failed Algebra I courses and/or need special accommodations for learning disabilities (Heinrich, 2022). These courses have become popular in large, urban school districts with large numbers of students who are failing courses and at risk of dropping out of high school. Connecticut was the first state to implement OCR in 2013. In 2015-16 school year, 72% schools offered CR courses. The usage of OCR programs increased from 70% in 2007 to 84% in 2016 (Malkus, 2018).