The Impacts, Costs and Benefits of NC Early Colleges: Results from an experimental study

Our twelve-year experimental study compares students who applied to and were randomly offered a slot in a North Carolina early college high school with students who applied and were randomly turned down. The study examines the impact of the model on core outcomes: academic performance, behavior, attitudes, dropout, graduation from high school, college credit attainment, and postsecondary enrollment, performance, and credential attainment. This brief focuses on three research questions:

1. What is the impact of the early college model on students’ postsecondary credential attainment?
2. What are the costs of the early college pathway compared to the traditional high school pathway?
3. What are the benefits to society of the early college?

What are early colleges?

Early colleges are small schools, mostly located on college campuses, that merge the high school and college experiences. They are targeted at students who might otherwise struggle to go to college—particularly students who are the first in their family to go to college and low-income students. The schools serve students starting in grade 9 and go through grades 12 or 13. Students start taking college courses in as early as grade 9, working toward the goal of graduating from high school with an associate degree or two years of college credit.

Core Conclusions

- Early college students earned more college credits in high school and were more likely to enroll in postsecondary education.
- Early college students were more likely to earn a postsecondary credential.
- Early colleges had lower levels of district expenditures than traditional high schools. On average, districts in our study spent an estimated $5,391 annually per student in an early college compared to an estimated $5,957 on a student in a traditional high school. (Note that special education costs, capital outlay, and district-wide costs, such as transportation, were not included in the cost calculations for either group.)
- Preliminary analyses of students who earned 4-year degrees in the UNC system show that, under the early college route (including both high school and college expenditures), it cost society an estimated $91,192 for a student to earn both a high school diploma and 4-year degree compared to $121,626 under the traditional route.
- Each early college student has an estimated average lifetime benefit to society of $23,000 more than the estimated average benefit to society from each student in the control group. Societal benefits include increased tax payments, reduced participation in public assistance support programs, and reduced incarceration costs. Each year, an estimated 4,000 NC early college students graduate annually; therefore, each graduating class of early college students could result in an increased lifetime benefit to society of $92 million.
Study Design
This 12-year study was funded by three grants from the U.S. Department of Education’s Institute of Education Sciences and took advantage of the fact that schools had more applicants than they had spots. Schools that participated in this study used a lottery to select their students. Our study compares results for students who applied to the school, went through the lottery and were accepted to the early college (our treatment group) with the results for students who applied to the school, went through the lottery, were not accepted and went to a different school (our control group). This means that students in the two groups were similarly motivated and had similar background characteristics—we are comparing apples to apples.

The total sample for the study is approximately 4,000 students in 19 schools who entered 9th grade starting in 2005-2006 through 2010-2011.

Each student was assigned a benefit to society based on their educational attainment, their race/ethnicity, and their gender. Estimates of societal benefits came from a study conducted by Carroll and Erkut (2009) and included benefits accrued to society from increased tax payments, reduced participation in social support programs, and reduced incarceration costs. These benefit estimates differed based on race/ethnicity and gender.

Please note that all figures may be updated as we continue to follow students over time.

Data Sources
- North Carolina Department of Public Instruction
- North Carolina Community College System
- University of North Carolina General Administration
- National Student Clearinghouse
- Integrated Postsecondary Education Data System

For more information, please contact the project’s Principal Investigator, Julie Edmunds, at jedmunds@serve.org or 1-336-315-7415.