Change in High School Impacts for Early Colleges

This poster examines changes in outcomes and impacts over time as students progress through high school in both an innovative school reform model (North Carolina’s early college model) as well as in traditional comprehensive high schools. We explore outcome patterns in four different domains—academic, behavioral, attitudinal, and experiential.

Partnerships between local districts and postsecondary institutions, early colleges are small high schools that intentionally blur the line between high school and college. These schools are focused explicitly on college readiness; students who enroll are expected to obtain a high school diploma and two years of college credit. The target population for the model is students for whom the access to college has historically been problematic, including students who are low-income and first generation college-goers. In North Carolina, where our study takes place, the model is comprehensive in scope and is designed to influence multiple aspects of the school (see Figure 1—outcomes in blue are the outcomes of focus for this poster.)

Methodology Overview

Research questions:
1. What is the impact of the early college model on students’ academic performance, behavior, and attitudes toward and experiences in school?
2. How do those impacts change over time?

Research Design: This paper reports results from an IES-funded longitudinal experimental study of the impact and implementation of North Carolina’s model. Participating schools agreed to use a lottery to select students and the study is tracking outcomes for students randomly accepted into the program (treatment) and those who were not accepted through the lottery process and who enrolled in other North Carolina public schools (control). Some schools enrolled in the study for multiple years so have multiple lotteries associated with them. We examine impact estimates for students across multiple grades in high school.

For more information, contact Julie Edmunds at jedmunds@serve.org or at 336-574-8727. This study has been supported by IES Grants R305R060022, R305A110085, and R305A140361.
Longitudinal Patterns of High School Outcomes: How Impacts Change over Time

Julie Edmunds, SERVE Center at UNCG; Fatih Unlu & Lily Fesler, Abt Associates, Inc; Elizabeth Glennie, RTI International

**Figure 2: Percentage of students on-track for college, by grade and treatment status**

Findings:
- The percentage of students who were on-track for college declined over time, which is to be expected, given that this outcome is cumulative. The difference between the two groups remained relatively consistent, except for an increased impact in 10th grade.
- Early college students had lower absences than control students, although absences increased similarly in both groups over the three years.
- Suspensions decreased in the control group over time; the early college saw an increase in suspensions from 9th to 10th grade and then a decline in 11th grade.

**Figure 3: Days absent, by grade and treatment status**

**Figure 4: Percent suspended at least once in a specific grade, by treatment status**

**Figure 5: Effect sizes for scales focused on students’ experiences in school, by grade**

**Figure 6: Effect sizes for scales focused on students’ attitudes toward school, by grade**

Longitudinal patterns can help demonstrate how programs are working. In general, the percentage of students on track for college decreases while absences increase for both early college and control group students over time, but these outcomes are more positive for early college students. The fact that absences increased over time in both groups suggests that schools may want to pay particular attention to absences in the upper grades.

Students began by reporting much more positive experiences in the early college but then their experiences began to more closely resemble those of the control group. This may suggest that such a positive perception is difficult to sustain over time or it may reflect students’ spending less time in the high school and more time in the college. The longitudinal patterns do suggest something is happening in 10th grade, particularly in the early college, perhaps a “sophomore slump.” Different patterns in the longitudinal analysis also indicate that longitudinal patterns in one outcome may not necessarily predict patterns in other outcomes.

Conclusions

*Sущественные различия между группами контроля и эксперимента оставались статистически значимыми в течение всего периода.*

Note: Control means are unadjusted; treatment means are adjusted.