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EFP Takeaways

Leveraging Experimental and Observational Evidence to Assess the Generalizability of the Effects of Early Colleges in North Carolina

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The Study

Early college high schools (ECHSs) in North Carolina are small public schools on college campuses that allow students to attain postsecondary credits and/or an associate’s degree in high school.

The authors aim to understand the overall impact of early colleges on postsecondary outcomes (e.g., ACT scores, college courses completed during high school, four-year college enrollment, and two- and four-year college degree receipt) in North Carolina and how these impacts vary for students from underserved backgrounds. In this study, they use administrative data on all ECHSs in North Carolina between 2005–2006 through 2010–2011.

Findings

The study uses a method called cross-design synthesis to pool impacts from a randomized control trial and a quasi-experimental study. Pooled results show positive and significant impacts of ECHS attendance on postsecondary-related outcomes with minority students and economically disadvantaged students benefitting more in four-year college enrollment and graduation than their more advantaged peers. Students who were low performing in eighth grade, however, do not benefit as much as their higher performing peers. Additionally, ECHSs on four-year campuses have significantly different impacts than ECHSs on two-year campuses: Students are less likely to attend and graduate from two-year colleges but more likely to attend and graduate from four-year colleges.

Policy Implications

This study provides further evidence of very large and positive early college enrollment effects on associate’s degree completion and modest positive effects on bachelor’s degree completion while also addressing weaknesses in the external validity of prior work. Further, it points to ways to use both randomized control trial and quasi-experimental estimates to improve the external validity, and therefore, the policy relevance, of evaluation evidence.

Table 4. Randomized Control Trial (RCT) and Quasi-experimental (QE) Impact Estimates for Lottery and Non-Lottery Early College High School (ECHS)

	ACT Score	College Courses in HS	2-Year Enrollment	2-Year Grad	4-Year Enrollment	4-Year Grad 4th Year	4-Year Grad 5th Year
Lottery RCT Estimates							
ECHS	0.284 ⁺ (0.167)	11.451 ^{***}	-0.093 ^{***} (0.023)	0.237 ^{***} (0.031)	0.084 ^{***} (0.023)	0.079 ^{***} (0.020)	0.055 ⁺ (0.032)
Control mean	19.304	2.344	0.371	0.169	0.380	0.144	0.232
N	1,912	3,265	3,269	2,088	3,269	2,088	1,034
Lottery QED Estimates							
ECHS	0.394 ^{**} (0.145)	11.88 ^{***} (0.793)	-0.0292 (0.0186)	0.325 ^{***} (0.0439)	0.0435 [*] (0.0201)	0.0515 ^{**} (0.0167)	0.00604 (0.0212)
Comp. Mean	18.33	1.546	0.310	0.0764	0.381	0.164	0.262
N	150,672	462,276	463,177	378,960	463,177	378,960	298,410
Non-Lottery QED Estimates							
ECHS	0.435 ^{***} (0.113)	11.30 ^{***} (0.560)	-0.0229 [*] (0.00979)	0.282 ^{***} (0.0301)	0.0363 ^{**} (0.0135)	0.0780 ^{***} (0.0112)	0.0416 ^{**} (0.0150)
Comp. Mean	19.78	2.082	0.292	0.0780	0.441	0.194	0.293
N	155,152	476,543	477,620	390,168	477,620	390,168	307,470

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- Summary of: Fuller, S., Lauen, D. L., & Unlu, F. (2023). Leveraging Experimental and Observational Evidence to Assess the Generalizability the Effects of Early Colleges in North Carolina. *Education Finance and Policy*, 18 (4): 568–596.