



Six elements in statewide law and policy pave the way for effective programs that help more students thrive in college courses while they are still in high school.

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Merging High School and College: The Early College High School Model

For students who would like to go to college, the separation of secondary from postsecondary systems presents many financial, logistical, and cultural barriers. Early college high schools were designed to bridge the disparate systems and address the full range of obstacles students face in attaining college degrees. While setting these schools up requires a lot of

collaborative work, it is worth the effort to expand these efforts and make early college high school available to more students.

Policymakers' solutions to the problem of inequitable access to postsecondary institutions often focus on the financial barriers students face. However, other barriers are just as significant. Students may face barriers in the logistical aspects

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of applying to college. They may not have the knowledge and skills they need to succeed in college coursework, which sets up academic barriers. They may not understand or be prepared for the college culture.

Policymakers and educators have tried to address these problems, but generally one at a time, in piecemeal fashion. For example, to reduce academic barriers, state boards of education may establish graduation requirements to increase alignment with the requirements of postsecondary education. While such academic policies are important, they do not address the financial, cultural, or logistical barriers that students might face.

Early college high schools take a different approach. By merging high school and college systems, this model sets out to address all the barriers. In these early college schools, students enroll as high school and college students at the same time, with the opportunity to simultaneously earn a high school diploma and an associate degree or two years of college credit. Essentially, this model eliminates problems stemming from the two systems' separation. In places without such options, it is largely up to students to navigate the obstacles to transitioning to institutions of higher education and completing degrees once they get there.

Responding to 21st century economic and social imperatives, most states have set goals for increasing the percentage of their population who receive postsecondary credentials.1 For example, North Carolina aims to have two million adults (66 percent of the workforce-aged population) earn a postsecondary credential by 2030, substantially above the current 50 percent level. Ohio is aiming for 65 percent of their adults gaining some sort of postsecondary credential, Minnesota set a 70 percent goal, and Pennsylvania and Nevada both have goals of 60 percent. The targets represent increases of at least 10 percentage points above current levels of attainment. Realizing these challenging goals will require the commitment and attention of all parts of the educational system. Early college high schools are an evidence-backed means to help attain these goals.

What Do Early Colleges Look Like?

While almost all states have what they call early college programs, they use the term differently. In Maine, it simply refers to the dual enrollment program. In most other states, it refers to a very specific model that allows students to earn a postsecondary degree while in high school. My work builds on the early college definition developed over years of work by organizations such as Jobs for the Future, the Middle College National Consortium, Educate Texas, and North Carolina New Schools. An early college high school is "a school that intentionally blends the high school and college experiences. These schools rely on a strong partnership between a school district and a postsecondary institution (often, but not always, a community college). Early college high schools are intended to lead to a student simultaneously receiving a high school diploma and either an associate degree or two years of transferrable college credit."2 Many early college high schools are located on college campuses, with their students taking college courses with regular college students. However, a growing number operate as pathways or academies within comprehensive high schools.

Although the nature of these schools may suggest that they focus on gifted students, they in fact focus on students who are underrepresented in college—often those who are economically disadvantaged, first in their family to go to college, or members of racial and ethnic groups that have been historically underrepresented in college (see box 1, pg 24). Studies have shown that early colleges are representative of the districts they serve or serve higher percentages of minority and low-income students.³

Because a goal of the early college is to have students earn a postsecondary credential or amass a substantial amount of college credit, dual enrollment is an important component. Students can take college courses as early as 9th grade, and by the time they are in 11th or 12th grade, their course load is often composed almost completely of college courses.

Yet early college high schools are much more than dual enrollment on steroids. They reenvision all aspects of the high school experience, Yet early college high schools reenvision all aspects of the high school experience.

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Box 1. One Student's Experience with Early College High School

Guadalupe grew up in a rural part of North Carolina with few educational opportunities. When she heard about early college high school, she knew this could be the way to get the college degree that neither of her parents had.

The early college high school was located on the campus of the local community college, where she began taking some college courses as early as ninth grade. By her last year, the majority of her courses were college classes taken with regular community college students. The early college was much more academically demanding than her middle school had been, but she received support from early college staff and learned how to manage her workload. The family-like environment in the early college provided necessary emotional support when her parents divorced.

The early college also helped her explore career opportunities through service projects and internships. In 11th grade, she shadowed doctors and nurses at the local hospital and cites it as one of the most important aspects of the early college for her: "I think about all the things that early college has done for me. I would never have the skills I have now if I went to a traditional high school. I would never understand to go and do service learning. I would've never had learned how to go and be involved in my community like that."

After five years at the early college, Guadalupe graduated with an associate's degree in science and went to one of the state's flagship institutions, where her college experience was fully paid for by a state grant for first-generation college goers. She graduated with a double major in psychology and biology and a minor in chemistry. She is also a certified nursing assistant and plans to work as a nursing assistant before going to medical school.

Source: Interview conducted during research for Julie A. Edmunds et al., Early Colleges as a Model for Schooling: Creating New Pathways for Access to Higher Education (Cambridge, MA: Harvard Education Press, 2022).

Early college high school students earned more degrees than students who did not attend such schools, particularly associate's degrees. with the goal of having all students be successful in college courses. Thus, they work to ensure that students take the high school courses they need to be ready for college. They provide student-centered, rigorous instruction, and they explicitly and purposefully build college-readiness behaviors such as study skills, time management, self-advocacy, writing and communication, and teamwork. These increased expectations are accompanied by increased academic and social-emotional supports. Early colleges also provide a professional working environment to ensure that staff can collaborate and engage in job-embedded professional development.⁴

Do They Work?

I have been studying early college high schools for almost two decades. My research includes

a 17-year randomized control trial study of the impact of the model, six evaluations of large-scale efforts to expand the model in comprehensive high schools, and a statewide study of the impact of early colleges.⁵ There are several rigorous studies besides mine, including three studies that use lottery-based experimental designs.

These and other studies generally agree that early college high school has positive impacts. At the high school level, early colleges saw improved student attendance, course taking, performance in English language arts, and high school graduation rates and decreased suspensions.⁶

There were also positive impacts on students' enrollment in postsecondary education.

Most relevant to states' educational attainment goals, early college high school students earned more degrees than students who did not attend such schools, particularly associate's

degrees.⁷ Figure 1 shows findings from my experimental study of more than 4,000 students who applied to 19 early college high schools. This figure compares outcomes for students who applied to and were randomly accepted to attend small early college high schools in North Carolina with students who applied to and were randomly not chosen to attend the early colleges (the control group). The control group usually attended the comprehensive high school in the district. Thus, students in both groups were similarly motivated and had similar background characteristics so that it is possible to attribute any differences in outcomes to the model itself.

The higher rate of associate's degree attainment did not result in a lower rate of bachelor's degree attainment. In fact, for economically disadvantaged early college students, there was a statistically significant and positive impact of 5.3 percentage points and a statistically significant positive 5.2 percentage point impact for first-generation college goers. For the full sample, early college students were 2.7 percentage points more likely to have earned a bachelor's degree by six years after 12th grade.

Early college students also completed their degrees faster. Students with associate's degrees earned them approximately two years more quickly than control students, and the time to a bachelor's degree was shortened by about six months. This reduced time meant that early college students graduated with less debt.

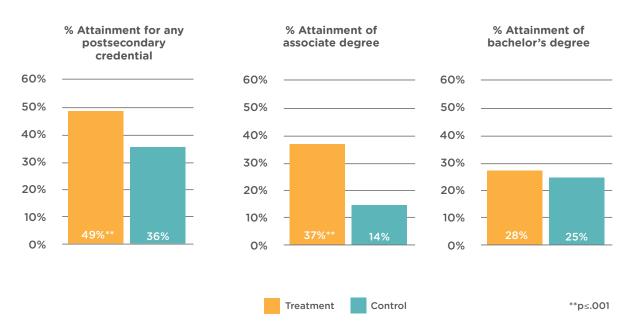
The early college model does cost more than a regular high school, primarily driven by the extra costs of the college courses. But when you consider the total cost to attaining a postsecondary credential, the early college route can be less expensive than the traditional route. Additionally, two studies have estimated very high returns on investment, roughly on the order of \$15 to \$17 in returns for every \$1 spent on the early college model.⁸

What State-Level Policies and Supports Need to Be in Place?

Early college high schools are complicated endeavors. They require work across the secondary and postsecondary sectors. While one sector can begin, both need to be highly involved to make the model successful.

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Figure 1. Early College Students Earned More Postsecondary Credentials (by Six Years after 12th Grade)



Source: Figure presents analyses reported in Edmunds et al., "The Impact of Early Colleges on Postsecondary Performance and Completion," Working Paper (2023).

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Many states already have legislation in place that explicitly authorizes early colleges. My colleagues and I have identified legislation, policies, and supports that should be in place to support this work at the state level. State boards of education could undertake some of the six elements we identify, but most would require collaboration with higher education governing boards and state legislatures. There are states, such as Texas and North Carolina, that already have aspects of all six in place.

- 1. Authorizing legislation. Many states already have legislation in place that explicitly authorizes early colleges, and every state except one has legislation that authorizes dual enrollment. For example, Texas has very detailed legislation enacting their Early College Education Program that establishes the entity administering the program, defines the target population, and describes required program components. Early college high schools are easier to implement in states with this legislation, but they still exist in places without this legislation. Absent legislative authorization, state boards of education could create policies that operate within existing law to authorize or encourage early colleges.
- **2. Financing.** The largest additional cost for early college high schools is associated with dual enrollment. For these schools to fulfill their mission of serving students who are underrepresented in college, the students should not have to pay for the college courses. In some states, such as North Carolina and Ohio, the state covers the cost of college tuition for all dual enrollment courses. In others, such as Indiana, the state covers tuition for a subset of courses or a restricted number of courses. Other states cover costs only for low-income students, and some states do not cover the cost at all. In states where dual enrollment tuition is not covered, districts or even individual schools may choose to use some of their resources to pay the tuition for students. Financing is an area where state boards will have to work with their legislatures.
- 3. Defining the early college in policy. Early college is not just about dual enrollment. State boards can lay out specific expectations for the early college high school. The policies often define the target population of the schools. For example, North Carolina requires that early colleges serve students who are first generation, at risk of dropping out, or students who can benefit from

accelerated instruction. These policies should also set up expectations for district-college partnerships such as requiring a formal memorandum of understanding between the two entities.

The policies can establish any required structures. Michigan requires that early college high schools offer a fifth year, and North Carolina requires that they be small schools of less than 400 students. The policies can also set expectations for the number of credits a student can earn. Indiana specifies that students should be expected to earn an associate's degree or 30 hours of general education coursework. States may include expectations relative to other aspects of the work, such as instruction, supports, and professional expectations.

In addition to clarifying expectations in policy, state boards may also want to consider developing an accreditation process. This process would assess the extent to which early colleges are implementing the expected practices and whether the schools can be recognized and receive any benefits that might be associated with early colleges.

- 4. Dual enrollment policies. While almost all states have legislation allowing students to take dual enrollment courses, effective implementation within the early college setting benefits from statewide policies on issues such as eligibility and information and advising. Eligibility addresses who can take dual enrollment courses. Having statewide eligibility requirements can reduce confusion among students. In all cases, these requirements should seek to establish a balance between identifying students who can be successful and avoiding setting up unnecessary barriers to student participation. To help ensure that students are aware of their dual enrollment options, some states have enacted policies requiring that information about dual enrollment courses be shared with all students. Similar policies could be enacted requiring districts to ensure that students are aware of existing early college options.
- **5. Transfer of dual enrollment credits.** To fully reap early college benefits, students who want to earn a four-year degree need to be able to transfer their college credits from early college (which are often earned at a community college) to a four-year college or university. Many states

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have articulation agreements in place that guarantee transfer of specific courses from community colleges to four-year state institutions.

These articulation agreements, which must be negotiated between the two-year and four-year systems, are intended to provide for a more seamless transfer experience. State boards may want to participate in these articulation agreement discussions so that, at a minimum, they understand the issues of transfer and can ensure that early college policies and expectations are aligned with transfer requirements.

6. Support to early colleges. Districts and schools often need outside help to implement early college high schools effectively. Some state education agencies provide support with their own staff. Others call on outside agencies to support them. Providing opportunities for schools to come together and learn from each other can help improve the quality of implementation. The state board may want to check in with the state education agency to see what supports are being provided, including professional networks.

Putting It All Together

As the need for workers with postsecondary credentials has grown, the barriers formed by states' separate secondary and postsecondary systems have become an increasing concern for policymakers. Early colleges provide a proof point that merging the two systems can reduce these barriers in a comprehensive way. Not only is this approach feasible, as demonstrated by the growing number of states already doing this work, it is good for students and cost-effective. As state boards consider how to reach their educational attainment goals, they ought to consider expanding the early college opportunities in their states.

and College? The Impact of the Early College Model on Postsecondary Performance and Completion," Educational Evaluation and Policy Analysis 42, no. 2 (2020): 257–78.

*More information about the early college high school model can be found at earlycollegeresearch.uncg.edu. Some resources on implementing early college can be found in Jobs for the Future's "Starter Kit: Launch an Early College," www.jff.org/resources/launch-early-college-starter-kit, North Carolina's "Design and Implementation Guide," www.dpi.nc.gov/documents/advancedlearning/cihs/cihs-design-and-implementation-guide, and Texas's blueprint, https://tea.texas.gov/sites/default/files/2020-21%20 ECHS_Blueprint_6.8.20_Final.pdf.

*Much of the article draws from Edmunds et al., Early Colleges as a Model for Schooling.

"Julie A. Edmunds et al, "Expanding the Start of the College Pipeline: Ninth Grade Findings from an Experimental Study of the Impact of the Early College High School Model," *Journal of Research on Educational Effectiveness* 5, no. 2 (2012); Julie A. Edmunds et al., "Mandated Engagement: the Impact of Early College High Schools," *Teachers College Record* 115, no. 7 (2013); Andrea Berger at al., "Early College, Early Success: Early College High School Initiative Impact Study" (American Institutes of Research & SRI International, September 2013).

⁷Jason Taylor et al., "Research Priorities for Advancing Equitable Dual Enrollment Policy and Practice" (Salt Lake City, UT: University of Utah, 2022).

⁸Drew Atchison et al., "The Costs and Benefits of Early College High Schools," *Education Finance and Policy* 16, no. 4 (2020) https://doi.org/10.1162/edfp_a_00310; Washington State Institute for Public Policy, "Early College High School (for High School Students): Benefit-Cost," web page, 2019, http://www.wsipp.wa.gov/BenefitCost/Program/789.

⁹Edmunds et al., *Early Colleges as a Model for Schooling*, 143.

¹⁰The Education Commission of the States has a good overview of state policies on transfer and course articulation. See https://www.ecs.org/50-state-comparison-transfer-

and-articulation/.

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¹A map with the goals for each state and the entities that have set them can be found on the Lumina Foundation website, https://www.luminafoundation.org/campaign/strategy-labs/.

²Julie A. Edmunds et al., *Early Colleges as a Model for Schooling: Creating New Pathways for Access to Higher Education* (Cambridge, MA: Harvard Education Press, 2022), 33.

³American Institutes of Research & SRI International, 2003–2007 Early College High School Initiative Evaluation: Emerging Patterns and Relationships (Washington, DC and Arlington, VA: AIR and SRI, 2008); Julie A. Edmunds et al., "What Happens When You Combine High School