

Early College Folio

Milestones

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The Early College Research Tradition and the People Who Made It

A Brief History of Interventions that Shaped the Field

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Early college as an educational reform has had a unique trajectory over the past two decades. School reform in the United States (with a few exceptions) has been a top-down movement, and the majority of attention has centered on grades three through eight, the grade levels the No Child Left Behind Act focused on. As my colleague Meghann Walk put so well, early college is unique in that it is a strategy deeply rooted in optimism in terms of what students can accomplish, the role of teachers, and the ways administrators and policymakers support it.¹ Early college is a strategy that assumes that with the right structure, students will rise to the challenge of more difficult work; that teachers and leaders will find a way to support this learning; and that policymakers will send the check to cover the extra costs of instruction and support.

Below I will try to tell part of the story of the early college movement through the lens of individuals whose research helped to reorient the field and broaden the impact and appeal of the movement. This is not meant to be exhaustive, but to suggest the contours of the field and highlight some of the best work done to support it, even if that work is critical in nature. The story in this article starts in the 1990s and continues to the present, but it is by no means over; new work is emerging every day. As early college programs expand across higher education, so do the number of doctoral students and other researchers who turn their lenses to what is happening in early college programs and to its alumni.²

FROM “GOING TO COLLEGE EARLY” TO “EARLY COLLEGE”
MICHAEL SAYLER, RESEARCHER OF GIFTED EDUCATION

For people who became involved in early college after the massive infusion of Gates Foundation funding in the 2000s, the roots of early college in

gifted education came as somewhat of a surprise. The education of gifted students provided a place for the ideas of early college to hatch in the post-World War II era, and to create some of its most important institutions. The original idea for early college, according to scholars in the 1990s, was to send academically-ready young people to a college campus while still in high school, much in the same way students could skip a grade in elementary school. This was not a widespread strategy, and the separation of students from their age cohort in secondary school is still not the norm in the United States. In addition, sending students at this age away to a residential campus is a hurdle, particularly for families who might count on help from that student at home or financially.

Education professor and Dean Michael Sayler exemplifies the shift of early college from a strategy that was aimed at “gifted” individual students to a strategy designed to reach many more students, often in cohorts. Sayler published in the 1990s on the subject of early entry into college, and over the next two decades, applied this gifted education lens to the burgeoning early colleges in Texas and elsewhere. Among his research topics was the impact of early college programs hosted on college campuses in Texas where promising high school students were given the opportunity to live on a college campus as part of an innovative STEM program.³

Sayler brought attention to student well-being in all his research, examining how the decision to accelerate education, whether through a gifted program or a residential early college experience, impacted student academic achievement as well as overall thriving. His research found that participants in the Texas program did seem to adjust to their new surroundings, on campus and beyond it, and were well-positioned for adulthood. Sayler’s research spans the major shifts in the field: from early college as an individual, gifted education intervention to an educational movement focused on larger cohorts, often comprising diverse and economically disadvantaged students who would have faced extensive barriers to accessing an early college program in the past.

What makes Sayler remarkable is that he wrote about and experienced several different waves of early college interest while maintaining the same types of research questions. He researched early college at a time when there was little published about the topic outside of specialized gifted education journals. He lived through the expansion of early college into Texas as an access effort; and he ended his career at Eastern Michigan University where the early college program is considered one of the state’s top preparatory programs for college completion, boasting impressive numbers of four-year college graduates.⁴ Through all this, he remained focused on both the academic achievement of students as well as their well-being and long-term life satisfaction.

QUANTIFYING THE IMPACT OF DUAL ENROLLMENT AND EARLY COLLEGE

BRYAN AN

In the first decade of early college research after the Gates funding initiative, University of Iowa professor Brian An stands out as a researcher who made a major impact in the field. Using data collected by the federal government from the 1980s through the 2000s, An made a counterintuitive discovery about the impact of dual enrollment and early college. Using an array of statistical methods, he was able to produce high-quality research that not only showed how early college worked, but also showed whom it worked for. His research continues to impact policy circles.

While it might seem obvious that high-income students gain from dual enrollment and early college programs, An approached the data with a focus on who actually benefits the most. In his 2013 article, he found that students who were the first in their family to attend college gained the most from early college, relative to their peers with better-educated parents.⁵ This finding shifted the programs' practice away from passively enrolling students who self-identify as college-bound or whose teachers and counselors identify as headed to college. Instead, school administrators and policymakers began to consider the students who would gain the most academic skills and confidence from the experience.

Nine years ago, An warned that dual enrollment or early college may not be able to close the gap in college attendance between highly educated families and their lower educated counterparts. This resonates into the present day; while early college has helped students make great gains, educational inequality has not disappeared as a result.

An's research has shaped the way we talk about early college to this day, particularly in discussions with K-12 and government policymakers. When I am pressed on who should be attending early college, I almost always respond with a variation of An's findings—everyone can benefit, but Minoritized, low-income, and first-generation students will benefit the most.

THE GREAT LOTTERY EXPERIMENT

HOW JULIE EDMUNDS PROVED THAT EARLY COLLEGE REALLY WORKS

University of North Carolina-Greensboro researcher Dr. Julie Edmunds created a gold-standard research program out of a once-in-a-career opportunity. As North Carolina embraced early college as a state-wide strategy around 2005, student/family demand outpaced the supply of seats in many communities. Edmunds used this as a chance to create a longitudinal study early college student outcomes. Her research center established a lottery for participating schools, and then followed up by collecting data on those who “won” the

lottery and enrolled as well as those in the control group who were turned away. The result was the most rigorous study ever done on early college, and at a scale that helped show its positive impact.⁶ As the study extended, the results became less one-sided, as the students in the control group eventually made gains on their early college peers, although the programs' overall impact stands out in this research.

In her article, "What Happens When You Combine High School and College? The Impact of the Early College Model on Postsecondary Performance and Completion,"⁷ Edmunds and her research team looked at the long-term impact of this intervention. When it came to students seeking an Associate's degree, early college students had an edge over the control group. While earlier studies found this same advantage for the early college students seeking a Bachelor's degree, it narrowed over time as more of the control group finished their degrees in the five plus years after college entry. Notably, the early college advantage persisted for low-income students, who, without the program, might have never prevailed over barriers to college graduation.

Edmunds's research opened scholars' and policymakers' eyes to the kinds of rigorous research that can be performed by better tracking student participation (or controls) and asking the right questions about the data. With the rise of massive state data systems, Edmunds's approach paved the way for researchers and policymakers to set up better systems to track the impacts of early college while they developed the programs. In terms of methodology and findings, Edmunds's work has supported the expansion of early college beyond North Carolina and Texas and into the other 48 states. For both educators and policymakers, her research has helped galvanize support for early college and has helped policymakers recognize it as an investment in the future academic and career success of their young constituents.

HOW EARLY COLLEGE CHANGES YOUR VIEW OF YOURSELF

MICHAEL NAKKULA AND KAREN FOSTER

Michael Nakkula and Karen Foster's research on two early college programs helped shape subsequent program design by focusing on how students viewed themselves during and after their experience in an early college program.⁸ They studied two early college programs, one in Los Angeles, California and the other in Akron, Ohio. Like Edmunds, Nakkula and Foster's work was longitudinal. They and their graduate students collected data (including interviews) on students while they were in the program, and then each year thereafter. They paid close attention to how the students viewed themselves and their futures, which had not been a focus area in previous research.

Nakkula and Foster found that students' experience in early college not only reshaped who they thought they were academically, but also reshaped their views of the future. For example, one student in the study entered high school thinking of applying for a city job as a garbage worker post graduation, but his

experience in advanced math classes (he earned an A in Introductory Calculus in 10th grade) got him thinking about college and a career in engineering instead. Nakkula and Foster summarize this dynamic shift as follows: “A psychological orientation toward college success, rooted in firsthand experiences of such success, is likely to be more realistic, more hardy, than one exclusively rooted in imagining what college will be like, based on reading about it or talking with others who have attended.”⁹ This is the difference between learning from direct personal experience and trying to learn from the exhortations of teachers and other adults in students’ lives. While not questioning the motives of the latter, it is clear that the former can be a more powerful learning experience for teenagers.

Nakkula and Foster found that this aspect of early college programming—being able to experience college courses, to struggle with the work, and to emerge victorious—is what makes it a uniquely powerful intervention. The process can move students from seeing college as the journey of a “possible self,” to an “expected self.” Nakkula and Foster write, “The possible self in this regard is one that anticipates such challenges abstractly; the expected self is one that has taken on these challenges in current encounters, thereby strengthening the student for similar challenges in the future.”¹⁰

Nakkula and Foster’s focus on the lived experience of early college students has helped put a face on the numbers that Saylor, An, and Edmunds would later produce. Their research has also helped explain why the early college intervention is so powerful with students and their families. When students feel more confident about college, their college-going rate and their academic success rate increases. Subsequent programs have drawn on this research to help maximize this impact.

MAKING EARLY COLLEGE PAY

AMERICAN INSTITUTES FOR RESEARCH (AIR) EARLY COLLEGE REPORT

The educational research organization AIR has played a key role in securing the resources for early college programs nationwide. Using all available data, AIR’s Drew Atchison and Kristine Zeiser (and their colleagues) calculated in 2019 that investments in these programs generate \$58,000 in additional benefits for students, leading to a \$15 return on every dollar. Documented in detail, the study definitively answered the question, “Why invest in early college?” While early college has been a popular policy innovation for decades, state governments have been reluctant to make a full investment in the field, even as they poured money into initiatives with far fewer positive, research-backed outcomes. AIR answered this question as both a public policy report¹¹ and as a peer-reviewed article.¹² This research has provided the data necessary to support the pitch for early college whenever it has approached the shark tank of policymakers and philanthropic investors.

NOT SO HAPPILY EVER AFTER? NEW RESEARCH ON EARLY COLLEGE AND CAMPUS LIFE

Is there a happy ending for early college and its students? While the research from Saylor, An, Edmunds, and Nakkula and Foster all point to the overall positive impact of the innovation, new researchers have investigated whether the reality of the campus life experience measures up to what has been promised to early college students. Bradley Smith, a researcher affiliated with UNC-Charlotte, found in his qualitative research¹³ that the long-term impact of early college programs could vary by major, career intention, and credit policies. Some students he interviewed found themselves not gaining as much college credit as they had expected; some found themselves with lopsided schedules weighed heavily with major-specific STEM courses, but without a balance of general education classes.

Researchers have examined how early college and dual enrollment students differ from traditionally-aged college freshmen, especially in terms of their need for support. One of the earliest contributors to this research was Terry Born,¹⁴ who looked at students in two different early colleges—LaGuardia Community College in New York City and Harbor Teacher Preparation Academy in Los Angeles, CA. Born found that students in both programs struggled with the change from how high schools supported students (reminders, extended deadlines, tutoring by teachers, frequent grade updates) and how college faculty conducted their classes (negative feedback, less sense of whether students are passing or not, referring students for help).

Marvarene Oliver and her colleagues¹⁵ found that early college high school students in grades nine and ten of their program had a view of support services much different than traditional first-year students at the same university. The early college students were entering the program with much higher confidence in their abilities (particularly in STEM fields), but with less willingness to seek out help on campus, or as much sense that they might need academic support. While early college students had less financial stress than their traditionally-aged freshman counterparts, their overall college stress score was much higher, indicating that they were worried about the experience of taking classes on a college campus, despite seeming less likely to seek help to address these issues.

Other researchers such as Adams, Williams, and Lewis¹⁶ have found that early college students from Minoritized backgrounds at a STEM-focused Early College High School face barriers that may not have been predicted by the administrators who designed the institution, such as social isolation from neighborhood peers. As early college continues to scale, teachers, administrators, and policymakers must ensure that the new majority of K-12 students who are first-generation, low-income, non-white, and often from immigrant backgrounds, have positive experiences on our campuses and get what they came for.

While it is not a study about early college or dual enrollment, Anthony Jack's¹⁷ research on how low-income and minority student experience elite college campuses has informed much thinking and programming aimed to ease this transition. Jack's descriptions of the doubly disadvantaged—students who arrive on campus with few resources and little skill in navigating faculty and staff relationships—represent the outcomes that early college and dual enrollment programs seek to prevent through their efforts.

WHAT'S NEXT FOR EARLY COLLEGE AND EARLY COLLEGE RESEARCH?

Early college and dual enrollment have benefited from the attention of a small group of dedicated and talented researchers. As the intervention has spread to more states and more campuses, research on the topic is coming out with increased frequency. Early college, and dual enrollment, and the fate of these programs' alumni, have become the topic for research articles as well as many MA and PhD/EdD dissertations. The future of the field is in the hands of this larger group of burgeoning researchers who will bring their own insights to the conversation.

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NOTES

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- 2 Material for this piece is drawn from Russ Olwell, *A Guide to Early College and Dual Enrollment Programs*, Routledge, 2021.
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- 10 Nakkula and Foster, "Academic Identity Development," 156.
- 11 Drew Atchison, Kristina L. Zeiser, Salma Mohammed, Jesse Levin, and David Knight, "The Costs and Benefits of Early College High Schools," AIR (December 2019), <https://www.air.org/sites/default/files/2021-07/Costs-Benefits-Early-College-High-Schools-508-report-Dec-2019.pdf>

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- 13 Bradley Smith, "From Early College to the University: A Case Study Exploring First-Semester Experiences," dissertation (The University of North Carolina at Charlotte, 2019).
- 14 Terry Born, "Middle and Early College High Schools: Providing Multilevel Support and Accelerated Learning," *New Directions for Community Colleges* 2006, no. 135 (September 25, 2006): 49-58, <https://doi.org/10.1002/cc.247>. Even earlier research about this topic can be found in the longitudinal study completed by Nancy Goldberger who, while the Director of Evaluation at Bard College at Simon's Rock in the late 1970s, studied the social, academic, and developmental needs of early college students. In 1980 she published "Simon's Rock: Meeting the Developmental Needs of Early College Students" in *New Directions for Higher Education* 29, <https://doi.org/10.1002/he.36919802906>.
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