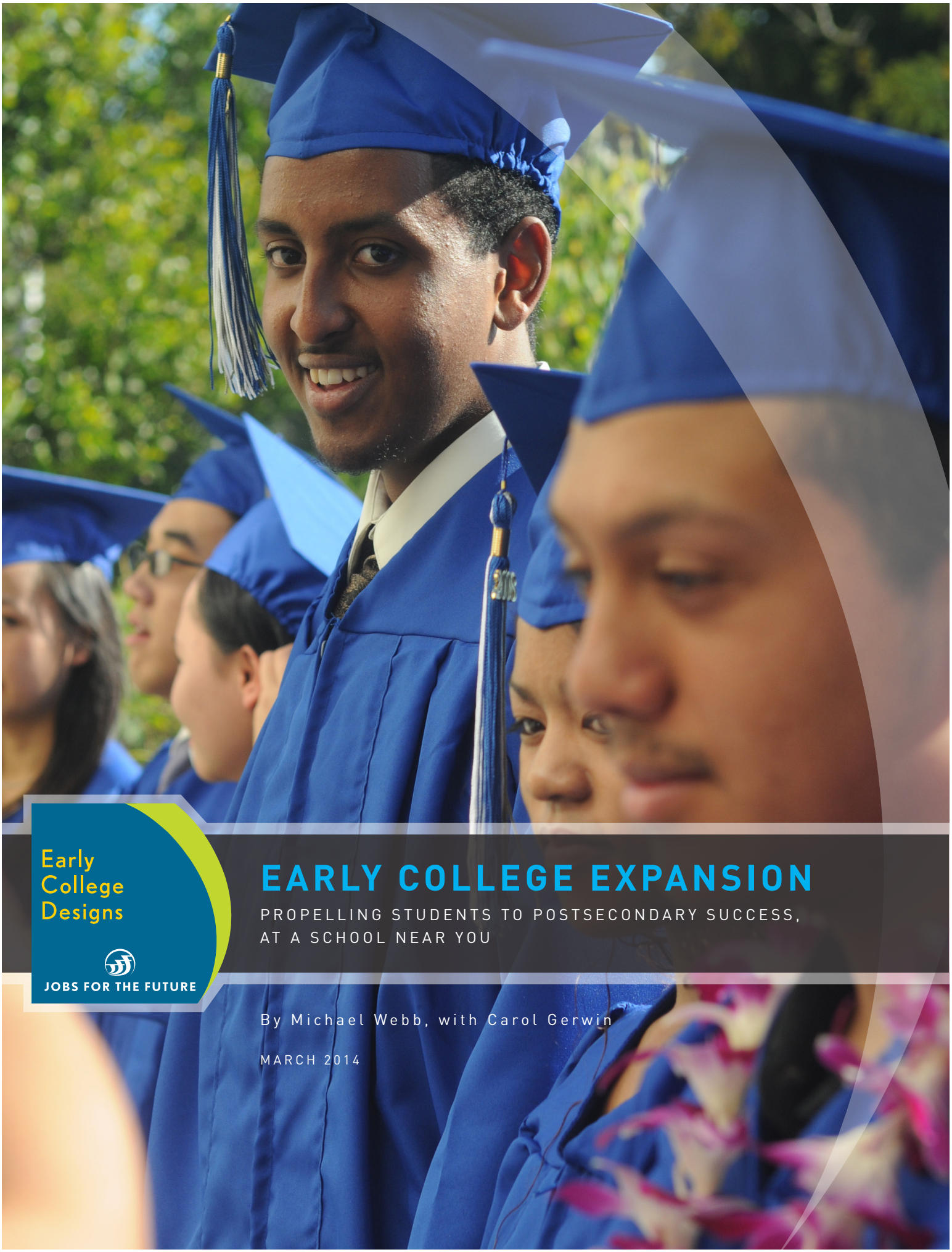

Early College Designs

JOBS FOR THE FUTURE

EARLY COLLEGE EXPANSION

PROPELLING STUDENTS TO POSTSECONDARY SUCCESS, AT A SCHOOL NEAR YOU

By Michael Webb, with Carol Gerwin

MARCH 2014

JOBS FOR THE FUTURE

Jobs for the Future works with our partners to design and drive the adoption of education and career pathways leading from college readiness to career advancement for those struggling to succeed in today's economy.

WWW.JFF.ORG

Early College Designs enable all students to simultaneously earn a high school diploma and one to two years of transferable college credit, tuition free. Early college schools predominantly help low-income youth, first-generation college goers, English language learners, students of color, and other young people from backgrounds underrepresented in higher education.

These designs represent a bold approach to high school reform, based on the principle that academic rigor, combined with the opportunity to save time and money, is a powerful motivator for students to work hard and meet serious intellectual challenges. Early college schools blend high school and college in a rigorous yet supportive program, compressing the time it takes to complete a high school diploma and the first two years of college.

Early College Design Services builds on more than decade of Jobs for the Future's experience as a strategic partner with school districts. We help district leaders assess challenges and identify cost-effective school designs, practices, and professional development tailored to local needs. We provide districts with training, tools, and advice that transform schools serving young people underrepresented in higher education.

WWW.JFF.ORG/EARLYCOLLEGE

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ACKNOWLEDGEMENTS

We would like to thank the Bill & Melinda Gates Foundation, the 13 original intermediary organizations of the Early College High School Initiative, and all of our early college partners for making these designs, and their success, a possibility, and now a reality. Thanks to our JFF colleagues: Joel Vargas and Richard Kazis for their review and comments, Steven Baker and Danita Jo Talbot for their direction, Sophie Besl for editorial support, and Rochelle Hickey for graphic design.

TABLE OF CONTENTS

INTRODUCTION: BEATING THE ODDS FOR LOW-INCOME YOUTH

Early college schools are succeeding at our nation's most daunting educational challenge—propelling students from underserved backgrounds to graduate high school and earn postsecondary degrees. These schools combine high school and college in rigorous, yet supportive environments that embrace acceleration over remediation. Their "college for all" culture helps to motivate students from backgrounds underrepresented in higher education to earn an Associate's degree or significant college credit by high school graduation—at no cost to their families. Over the past decade, early colleges have produced dramatic results, beating typical outcomes for the low-income youth, first-generation college goers, and students of color they were designed to serve.

Jobs for the Future and our partners have created or redesigned 280 early colleges, currently serving more than 80,000 students, and the movement continues to grow. As national coordinator of the Early College High School Initiative launched by the Bill & Melinda Gates Foundation in 2002, JFF helped shape and spread common principles of early college to new school developers. As a designated data collector, JFF also developed a Student Information System to track student progress in early college and beyond.

The most recent data, based on outcomes for thousands of students who attended about 100 representative early college high schools in the Student Information System, show the design's success:[1] Some 90 percent of early college students graduate high school—12 points higher than the national average of 78 percent.[2] In addition, the vast majority of early college students earn college credit in high school, and 30 percent earn an Associate's degree or other postsecondary credential with their diploma.[3]

Today, JFF and our partners are building on this record of success to spread Early College Designs to 56 additional schools—and more than 50,000 additional young people—through local, state, federal, and corporate initiatives. Endorsing expansions in South Texas and Denver with a competitive innovation grant, the U.S. Department of Education praised early college as an "innovative model with a proven record of improving student outcomes and closing achievement gaps for high-need students."[4] New and ongoing early college projects include:[5]

- Converting underperforming high schools in Boston, Chicago, Connecticut, and Michigan to STEM early colleges that feature career pathways
- Creating entire early college districts in three areas of Denver and the Lower Rio Grande Valley of Texas, with large groups of English language learners
- The New York State Smart Scholars Program, which expands programs through state funding where traditionally underserved students can earn 20 to 60 transferable college credits; and
- A whole-district conversion to early college in Dayton, Ohio.

These efforts matter—now more than ever. Individually, a postsecondary credential is increasingly a prerequisite for economic well-being. Collectively, our economy and democracy depend on a well-educated citizenry. But millions of young people graduate high school unprepared for college or career success, and struggle to become self-sufficient adults who can support a family,[6] contribute to the economy, and participate effectively in our democracy. Only 21 percent of entering U.S. high school students graduate on time, enter college immediately, and earn a postsecondary degree within 150 percent of the standard program completion time.[7] With the economy expected to become even more technology- and knowledge-based over the next several decades, a postsecondary credential will be even more essential to finding family-supporting employment.[8]

The challenges are particularly acute for low-income youth, first-generation college goers, English language learners, students of color, and other underserved populations. Students from these backgrounds are far

less likely to graduate high school, consider college, and complete a postsecondary credential. Local school districts often struggle to serve many of these students, who disproportionately attend low-performing schools and are tracked into the least challenging classes.

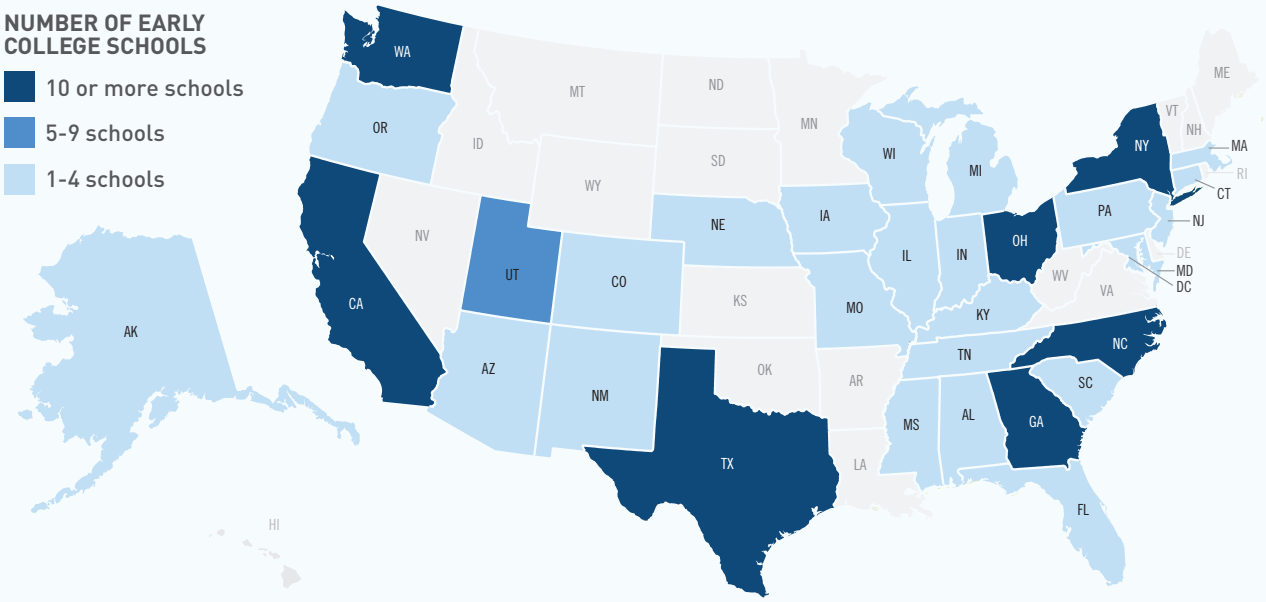
This report highlights the successes of the early college movement in advancing the essential work that traditional high schools struggle to do well—ensuring that commonly underserved students graduate and enter college on track to earn credentials and start family-supporting careers.

Early college graduates also save time and money in their pursuit of higher education. An early college student who earns two years of college credit while in high school can earn an Associate's degree for free, or save two years of tuition costs toward a Bachelor's degree. Perhaps more important, starting a career without college debt, or with much less debt than typical, provides a significant financial advantage that can benefit students and their families for years to come.

The first section of the report explores the key characteristics of early colleges that contribute to student success. The second section details their record of secondary and postsecondary achievements, based on data from the 100 representative early college high schools in JFF's Student Information System, the National Student Clearinghouse, and administrative data from state education agencies. The third section

Fast Facts: Early College High Schools, 2013-14

Schools: 280, including grades 9-12, 9-13, and 6-12 schools
States: 32
Students: 80,000+
Graduates: 5,880*
New early college schools under development by JFF and partners: 56



* *For 2012, the most recent year for which data are available.*

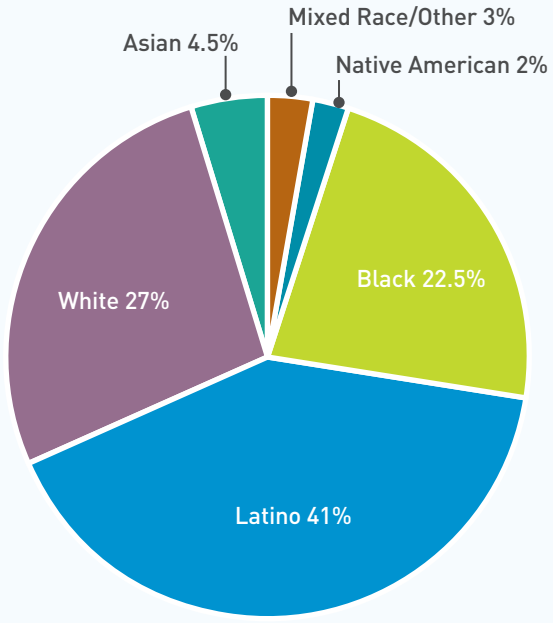
Note: Additional schools called "early colleges" that do not adhere to the core principles established under the Early College High School Initiative, such as schools for high-achieving students, are not included in these totals.

summarizes JFF's plans to continue expanding the early college network—buoyed by new district, state, nonprofit, and corporate partnerships, plus $27 million in U.S. Department of Education Investing in Innovation funds.[9] We conclude with a look ahead to current and future expansion efforts to bring early college schools to more communities.

Who Attends Early College Schools?

Early college schools are committed to serving students from backgrounds underrepresented in higher education.

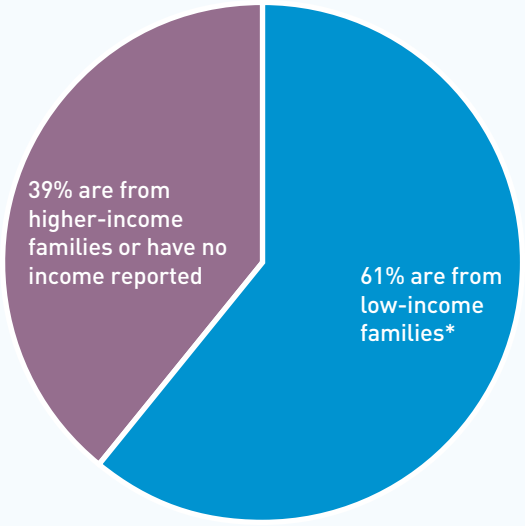
RACE AND ETHNICITY OF EARLY COLLEGE STUDENTS



Source: Early College High School Initiative Student Information System, Jobs for the Future. Three-year average (2010-2013).[10]

Most early college schools enroll a greater percentage of minority students than their corresponding school district and state.[11]

FAMILY INCOME OF EARLY COLLEGE STUDENTS



Source: Early College High School Initiative Student Information System, Jobs for the Future. Three-year average (2010-2013).[12]

** In this graph, the term "low-income" is based on free and reduced-price lunch data collected through SIS. Youth from families with incomes at or below 130% of the poverty level are eligible for free meals. Those with incomes 130-185% percent of the poverty level are eligible for reduced-price meals.*[13]

> **56% of early college students will be the first in their immediate families to attend college.**[14]

DESIGNING FOR SUCCESS: PROVIDING SUPPORTS FOR ALL, COLLEGE FOR ALL

To succeed in college, young adults need academic proficiency and much more. They also must have essential nonacademic skills—sometimes referred to as "college knowledge"—such as the ability to manage time effectively, recognize when they need help, and navigate campus resources, from faculty office hours to career counseling. A lack of this type of preparation limits many young people—especially first-generation college goers and low-income students—from achieving the prerequisites necessary to enter credit-bearing college coursework and attain a postsecondary credential that leads to a career.

The outstanding outcomes of early college students are striking given that most come from backgrounds underrepresented in higher education *(see box, "Who Attends Early College Schools?" on page 3)*. More than 60 percent are from low-income families[15] and more than half will be the first in their family to attend college.[16] Nearly three-fourths are students of color.[17] These are the youth who too often fall through the cracks of America's public K-12 schools and our postsecondary education system. But the early college record shows that even students who enter high school below grade level can succeed—not only in high school, but in college, too.

To what do early colleges owe their success with traditionally underserved students?

Educators who design and operate early colleges often say that the most important feature is a sincere belief that every child can learn—and achieve college readiness. Early college schools foster a "college for all" culture, demonstrate that a college education is attainable, and support each student to develop a college-going identity. All students, regardless of past achievement, are on a college-prep track, and teachers employ proven strategies to help them progress. Students who would be the first in their immediate families to attend postsecondary education learn the background knowledge, problem-solving strategies, and other college-going skills that young people from more affluent families may learn from their parents or other adults.

College identity and skills are fostered by strong connections to one or more postsecondary institutions, an integrated secondary-postsecondary curriculum, student-centered instruction, strong interpersonal relationships, and intensive academic supports. These attributes are embodied in the core principles developed by JFF and the Early College High School Initiative intermediary organizations in 2002, and refined in 2008. *(See "Core Principles of Early College Schools" on page 5.)*

COLLEGE IMMERSION

The most concrete way that many early college schools introduce and gradually expose students to more and more of the college experience is their location on or near a college campus. Each school is a partnership between a school district and a nearby postsecondary institution, either a community college, a technical college, a four-year college, or a university.

A significant number of early colleges—44 percent—are located right on the campus of their postsecondary partner. While high school classes are held in the early college building, students typically start to get a feel for college life from the first day they step on campus. Students usually receive a college identification card and are able to access facilities, such as the library and the gym, and can join college clubs. By the time they begin to take college classes, they are already used to the physical layout of the campus as well as the campus culture or environment. This helps them feel more comfortable in the challenging academic and social environment of a college classroom.

CORE PRINCIPLES OF EARLY COLLEGE SCHOOLS

1

Core Principle 1

Early college schools are committed to serving students from backgrounds underrepresented in higher education.

2

Core Principle 2

Early college schools are created and sustained by a local education agency, a higher education institution, and the community, all of whom are jointly accountable for student success.

3

Core Principle 3

Early college schools and their higher education and community partners jointly develop an integrated academic program so that all students earn one to two years of transferable college credit leading to college completion.

4

Core Principle 4

Early college schools engage all students in a comprehensive support system that develops academic and social skills, as well as the behaviors and conditions necessary for college completion.

5

Core Principle 5

Early college schools and their higher education and community partners work with intermediaries to create conditions and advocate for supportive policies that advance the early college movement.

Source: Early College High School Initiative, October 2008. Developed jointly by Jobs for the Future and the Early College High School Initiative intermediary organizations (see page 9 for a list of the organizations).

Even when early college schools are physically separated from their postsecondary partner, most students still take their college classes on a two- or four-year campus from regular college faculty surrounded by regular college students. They experience the same "power of place" as students whose school is located on the college campus.

Only a quarter of the schools offer college classes in their own school building. At these schools, distance or other logistical issues prevent accessing the physical postsecondary campus, so college instructors come to the students, or high school faculty with the requisite credentials may be employed by the college as adjunct college instructors. They also utilize other important strategies to connect the students to the college environment, such as summer bridge programs that take place wholly or in part on campus, weekend programs or visits to the college, use of mentors and tutors who are college students, and distance learning.

ENGAGING INSTRUCTION

Early college schools prepare students for success in college courses that frequently bear dual credit, and incorporate an aligned secondary-postsecondary curriculum that also meets high school graduation

requirements. Teachers strive to personalize instruction and make lessons engaging and relevant to all students. Early colleges schools typically incorporate practices and strategies that have been validated through research and practice, including working in small groups of peers and doing project- and inquiry-based learning. *(See box, "Common Instructional Framework" below.)* Examples are "real-world" projects that ask students to identify and attempt to solve a problem in their neighborhood that is related to class topics. Effective projects easily can integrate reading, writing, science, math, politics, sociology, and character development, among other areas. Partnerships with local businesses, including local offices of major corporations, sometimes offer internships or mentorships in the areas of students' career interests.

SUPPORT SERVICES

Just as important to student success are the intensive support services that early college schools provide to all of their students. Many students have the opportunity for tutoring, frequent advising, test prep, taking high school classes that parallel college courses for extra instruction, taking college courses with a cohort of students, who can often help one another, and developing a relationship with a teacher as mentor. *(See box, "Commonly Used Student Support Strategies," on page 7.)*

Early college schools also incorporate a variety of strategies specifically intended to develop college readiness. One is AVID (Advancement Via Individual Determination), a college-readiness system that helps students develop the discipline, routines, and organization required to be successful. Early college schools also offer courses with names like College Success or College Readiness, which may be offered for college, high school, or dual credit, where students learn how to negotiate the college environment and develop essential skills, such as note taking and how to seek help before they fall behind.

Other ways early college students build "college knowledge" include participating in small seminars and advisories sometimes with the same teacher and group of students each year. Students receive lessons

Common Instructional Framework

JFF developed this framework for early college high school instruction based on practices used at the University Park Campus School in Worcester, Massachusetts, a top-ranked public school serving low-income students in grades 7-12. All University Park students have the opportunity to take free college courses at Clark University. *(See box, "A Radical Idea Takes Root: The History of Early College" on page 8.)* The six strategies listed here are designed to foster deep learning and promote the skills necessary for all students to succeed in high school and postsecondary education.

In **Collaborative Group Work**, students engage in learning by constructing group solutions, texts, experiments, or works of art.

Through **Writing to Learn**, students can develop their ideas, their critical thinking abilities, and their writing skills, with low-stakes writing in every class, every day.

Scaffolding helps students to connect prior knowledge and experience with new information and ideas.

Questioning challenges students and teachers to use good questions as a way to open conversations and further intellectual inquiry.

Classroom Talk creates the space for students to articulate their thinking and strengthen their voices.

Literacy Groups provide students with a collaborative structure for understanding a variety of texts, problem sets, and documents by engaging them in a high level of discourse.

Commonly Used Student Support Strategies in Early College Schools

- Formal tutoring program
- AVID college readiness system
- Advisories, houses
- College skills center
- Mentoring
- Summer bridge courses/programs
- College readiness/skills/success classes
- Cohorts of students receiving common supports together
- Parallel courses at the high school for college courses being taken by students
- Test prep (graduation, SAT, PSAT, ACT, college placement tests)

on applying for college admission and financial aid; securing academic support; learning how to use campus resources such as the library, advisement, student centers, and faculty office hours; and otherwise negotiating the college environment.

Most colleges and universities also support early college schools by providing a college liaison, a key role responsible for helping to manage the partnership. The college liaison acts as a bridge between the school and postsecondary institution and helps to resolve problems, identify resources, and foster communication about early college with the college community. While more than 80 percent of schools report the presence of a college liaison, only half are funded positions. Liaisons are often college administrators with other major responsibilities.

A Radical Idea Takes Root: The History of Early College

The early college movement began in 2002 as a strategy to reinvent high school for students with low academic performance and little chance of college or career success. Despite decades of education reform efforts, traditional public high schools were not meeting the needs of a large number of students, especially young people of color and youth from low-income families. Their graduation rates were abysmal, and few went on to higher education. A national commission's report "The Lost Opportunity of the Senior Year" resonated with educators who were seeking new solutions. The early college model was based on the radical idea that schools could motivate struggling students by raising expectations, and providing supports for them to do more challenging work, rather than placing them in remedial classes.

Combining high school and the first two years of college, early college schools provide the opportunity for students to take college courses as soon as they are ready and to earn an Associate's degree or transferable credit with their diploma. Each school is a partnership between a school district and a postsecondary institution. Often located on college campuses, early colleges immerse high school students from backgrounds underrepresented in higher education in college life and inspire many for the first time to see themselves as college goers. Early college schools also offer a powerful, practical incentive—the postsecondary courses are offered at no cost to students. Graduates move on to four-year colleges, two-year colleges, and careers at a substantial savings.

First Early College School Targeted High Achievers

The early college model was rooted in two alternative high schools started in the 1960s and 70s. The first, Simon's Rock Early College, was founded in Great Barrington, Massachusetts, in 1966 as a small private high school offering college courses in grades 11 and 12 to high academic performers constrained by the traditional high school structure. Most graduated with an Associate's degree, then pursued a four-year degree at another college or university. Now officially part of Bard College (and called Bard College at Simon's Rock), the school no longer offers high school classes, but enrolls high-achieving 16- and 17-year-olds ready to start college early. Bard Early College High School, opened by Bard College in New York City, has been adapted for implementation in several cities.

New "Middle College" Supported At-risk Students

The founders of Middle College High School, an experimental public school that opened in 1974 in New York City in partnership with LaGuardia Community College, believed the location of a high school on a college campus would constitute a key strategy for improving outcomes of students at risk of not succeeding. Like Simon's Rock, Middle College High School changed the high school paradigm, including the size and the physical setting. Located on LaGuardia's campus in Queens, Middle College High School offered small classes and a wide array of educational programs, including college courses, coupled with personalization and extensive student supports. Dropout rates fell, college attendance soared, and today, nearly 50 middle college schools have been created across the country, forming the Middle College National Consortium.

Foundation Support Fueled Nationwide Initiative

In 2001, the Bill & Melinda Gates Foundation committed the funding necessary to plan and implement early college as a large-scale national reform initiative. To increase its scale and impact, Gates enlisted the involvement of other leading foundations, including the Carnegie Corporation of New York, Ford Foundation, and W.K. Kellogg Foundation. Within the first five years, the initiative drew the support of other major funders, including the Walton Family Foundation, Lumina Foundation, and the Dell Foundation. More than $130 million in private start-up funds helped the movement grow from three schools in 2002 to nearly 250 in 2012. Public school districts provide the ongoing operating budgets for each early college as they do for traditional high schools.

Jobs for the Future was asked to manage the Early College High School Initiative and helped to create a guiding vision, mission, and strategy. Intermediary organizations received funding to develop and establish a network of varied schools anchored by common principles *(see "Core Principles of Early College Schools" on page 5)*. The 13 intermediaries range from professional organizations such as the Middle College National Consortium and

Woodrow Wilson National Fellowship Program, to advocacy groups including SECME, Inc., which aims to increase the diversity of students earning postsecondary degrees in STEM fields and entering the STEM workforce, and the Center for Native Education, which seeks to increase educational opportunities for Native Americans. *(See box, "Early College High School Intermediary Organizations" below.)*

The initiative focused on a limited set of states and cities with the policy conditions and other factors most conducive to show impact. JFF played an integral role in coordinating the initiative across states, providing opportunities for regional and national networking, advocating for new policies favorable to the establishment of early colleges, and educating national, state, and local audiences about early college schools. JFF received additional funding to develop a Student Information System to track student progress in early college and beyond.

Massachusetts School Served as "Learning Laboratory"

In 2004, JFF began a partnership with the University Park Campus School in Worcester to provide a "learning laboratory" for early college educators. The school was founded in 1997 by Clark University and local community development organizations to reverse the economic and social decline of one of the state's most economically distressed neighborhoods. Serving 230 low-income students in grades 7-12, the school soon established an outstanding record of academic achievement and educational opportunity. University Park students take free college classes at Clark, and those who meet the admissions requirements are eligible for university scholarships. More than 95 percent of graduates have gone on to college; nearly all have been the first in their family to do so.

Based on University Park Campus School practices, JFF developed the Common Instructional Framework, a set of six strategies designed to foster deep learning and the skills necessary for all students to succeed in high school and postsecondary education *(see box, "Common Instructional Framework" on page 6)*. In collaboration with JFF, the school established a residency program, drawing hundreds of early college teachers, administrators, counselors, and postsecondary partners to see the strategies in action. The framework remains central to instruction at early colleges across the country.

JFF and Partners Continue to Spread Early College Designs

Today, more than 280 early colleges serve underrepresented youth in 32 states, and dozens more schools are under development. While the original foundation funding for the Early College High School Initiative has ended, JFF continues to expand the network across the country through a range of Early College Design Services funded by federal innovation grants, school districts, states, nonprofit organizations, and corporations. *(See section, "Building on Success" on page 16.)*

Early College High School Intermediary Organizations

The Early College High School Initiative's intermediary organizations received funding from the Gates Foundation and other sources to implement early college schools in partnership with school districts, postsecondary institutions, and community organizations. They provide start-up and ongoing technical support, guidance, and professional development for their networks of schools. Each has a unique focus for its work, such as serving Latino communities, emphasizing the liberal arts, or spreading early college across a particular city or state. The 13 intermediaries are:

- Center for Native Education
- City University of New York
- Educate Texas
- Foundation for California Community Colleges
- Gateway to College National Network
- KnowledgeWorks Foundation
- Middle College National Consortium
- National Council of La Raza
- North Carolina New Schools
- SECME, Inc.
- University System of Georgia Board of Regents
- Utah Partnership Foundation
- Woodrow Wilson National Fellowship Foundation

A DECADE OF SUCCESS: INCREASING HIGH SCHOOL GRADUATION, COLLEGE COMPLETION

The first early college schools opened in 2002, but it wasn't until 2013 that sizable cohorts of early college graduates were two years past high school—long enough to collect a significant amount of meaningful data about their secondary and postsecondary success. This section explores the early college record on major secondary and postsecondary outcomes, including high school graduation rates, college credentials earned in high school, college credits earned in high school, and college enrollment following high school graduation, as well as persistence to a second year in college. The information comes from JFF's Student Information System. (Comparison figures come from federal, state, school, and district sources.) A third-party evaluator using a small, scientific sample has found similar results. *(See box, "Third-party Study Finds Strong Evidence of Early College Effectiveness" on page 15.)*

The early college emphasis on high expectations for all students, combined with intensive academic and personal preparation, pays off. Analysis of early college student outcomes reveals a remarkable record. Early college students outperform peers in their districts, their states, and the nation as a whole. Substantially more early college students graduate high school and get a head start on higher education by earning an Associate's degree or significant college credit than students nationally with similar demographic backgrounds.

HIGH SCHOOL GRADUATION RATES

Early college students are far more likely to graduate high school. 90% of early college students receive a diploma vs. 78% of students nationally.

Graduating high school is no longer sufficient for career success, but it is the essential first step. Early college schools have an excellent track record of high school success for their students. These schools have higher graduation rates than their district, state, and national averages, despite enrollments that comprise a majority of low-income students and students of color. Some 90 percent of early college students graduate high school,[18] compared with 77 percent of students in their respective districts.[19]

The early college graduation rate of 90 percent is also significantly higher than the national average of 78 percent.[20] Early college students also graduated at higher rates than every racial/ethnic group: White students nationally had the highest rate of 83 percent. For African Americans, Latinos, and Native Americans the percentages were 66, 72, and 69 percent, respectively.[21] *(See figure, "Four-year High School Graduation Rates" on page 11.)*

The figure, "State Graduation Rates, 2011-12" on page 11, compares the graduation rates of early college schools, their corresponding districts, and states. The figure shows the five states with the largest concentration of early college schools (two-thirds of the total enrollment): California, New York, North Carolina, Ohio, and Texas.[22]

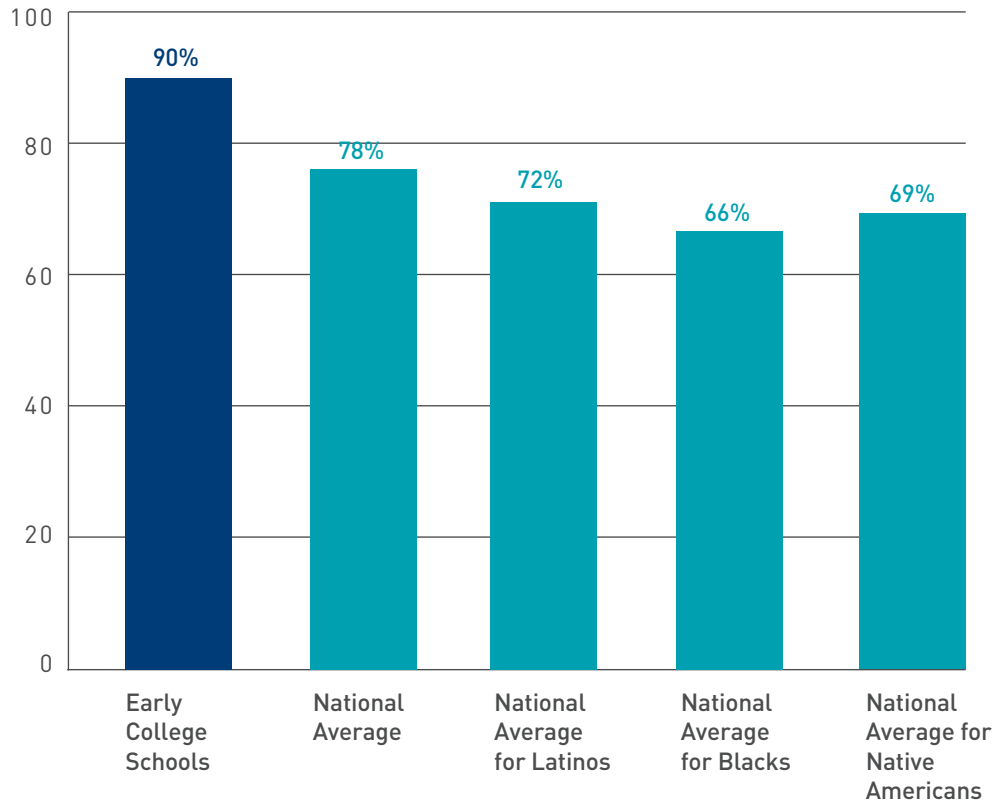
ATTENDANCE

Early college students also have better attendance than their peers in traditional public schools. This may indicate higher engagement in learning.[23] The average daily attendance rate of early college students in 2012-13 was 95 percent,[24] compared with 92 percent nationally.[25]

COLLEGE COURSE GRADES

Early college students do well in college courses they take in high school. The average grade point average for college courses taken by early college students in 2009-10 was 3.06 percent, or a B average.[26]

Four-year High School Graduation Rates

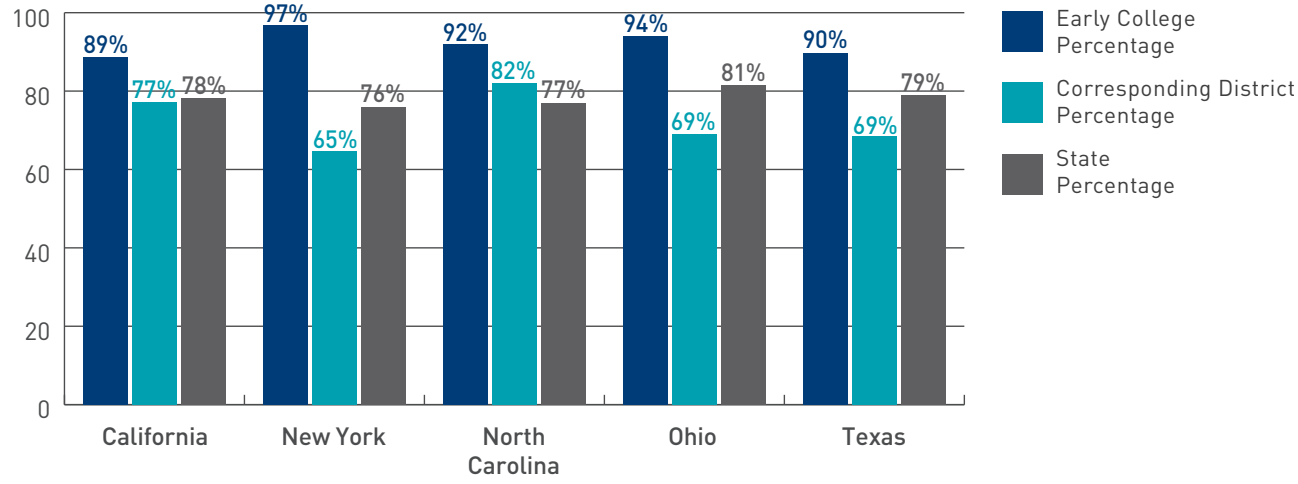


Sources: Early College High School Initiative Student Information System, Jobs for the Future; U.S. Department of Commerce, Census Bureau; and National Center for Education Statistics.

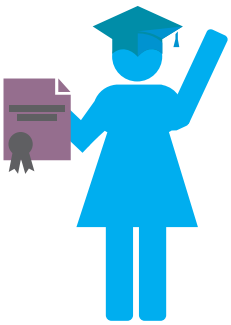
COLLEGE COURSE PASSING RATES

The early college student pass rate for college courses taken in high school has remained consistently high, averaging more than 90 percent. The pass rate is above 90 percent among almost all racial and ethnic groups.[27] Only Native Americans, which comprise a small fraction of all early college students, had a lower pass rate in 2010-11, of 75 percent.[28]

State Graduation Rates, 2011-12

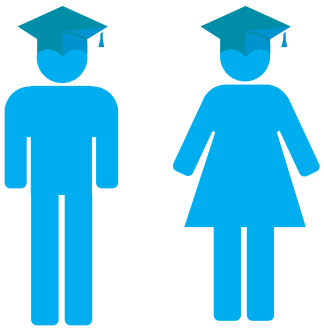


College Credentials Earned in High School



about **1** in every **3** early college students

earns an Associate's degree
or other postsecondary credential
prior to graduating from high school



COLLEGE CREDENTIALS EARNED IN HIGH SCHOOL

Early college students are **far more likely to earn a college degree** by high school graduation. **30%** of early college students earn an Associate's degree or other postsecondary credential prior to graduating from high school vs. **very few students** nationally.

Early college schools are proving a highly effective way to give students who might never have considered attending college–due to their prior academic achievement, financial circumstances, or other factors–a jump start on higher education by supporting their transition to college-level work. Taking any college courses in high school is an important strategy for becoming accustomed to postsecondary-level work. But large numbers of early college students exceed expectations. Starting college classes as early as ninth grade, many are able to complete a full college credential while still enrolled in high school. Nearly one-third of early college students earn an Associate's degree or other college credential prior to high school graduation.[29] Precise national comparison figures do not exist (as typical high school students are not afforded opportunities to earn postsecondary credentials).[30] In a separate, third-party evaluation, 21 percent of early college students earned a postsecondary degree versus 1 percent of a comparision group.[31]

COLLEGE CREDITS EARNED IN HIGH SCHOOL

Early college students are **far more likely to earn substantial college credit** in high school. **94%** of early college students earn college credit in high school vs. **less than 10%** of all high school students nationally.

College Credits Earned in High School

Early College High Schools

94% of early college students earn college credit in high school

versus

High Schools Nationwide

10% of high school students nationally earn college credit in high school

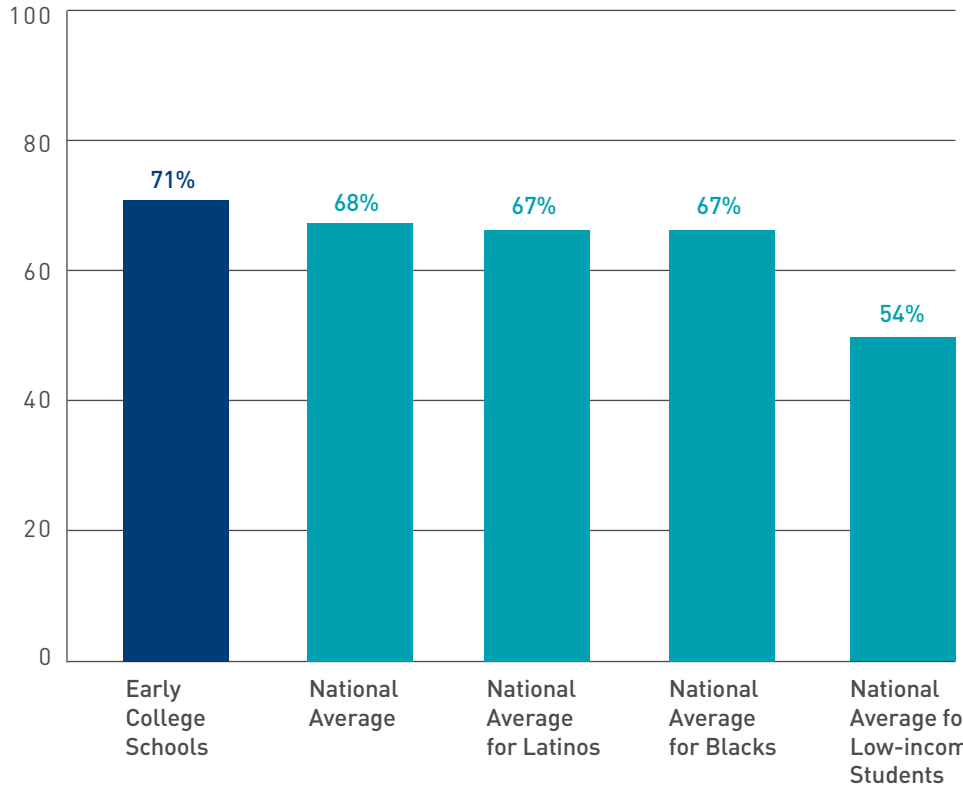
The average number of college credits earned by early college students has increased rapidly since the inception of the Early College High School Initiative. In the 2002-03 school year, students earned an average of approximately 10 credits. Today, nearly all early college students take college classes in high school and earn college credit for them,[32] compared with about 1 in 10 students nationally.[33] The number of credits earned by graduates is equally encouraging—an average of 38 credits per student.[34] That represents more than half of the courses necessary for an Associate's degree and one-third of the courses needed for a Bachelor's degree. Early college graduates accept their diplomas with a significant amount of college work already behind them, making it much easier to envision themselves completing degrees.

COLLEGE ENROLLMENT AFTER HIGH SCHOOL

Early college students are far more likely to enroll in college immediately after high school. 71% of early college graduates enroll in college [35] vs. 54% of low-income graduates nationally.[36]

Getting ready for college by starting it in high school is of course a major goal of early college. But encouraging young people to continue their postsecondary education beyond high school, whether or not they have already earned an Associate's degree, is also vitally important. Indeed, early college students are far more likely to enroll in postsecondary education than their peers nationwide.[37]

Percentage of Graduates Enrolling in College Immediately After High School



Sources: Early College High School Initiative Student Information System, Jobs for the Future; National Student Clearinghouse; and U.S. Department of Commerce, Census Bureau.[38]

Despite serving groups underrepresented in higher education, early college schools achieve college-going results that surpass national averages: Nearly three-fourths of early college graduates enroll in postsecondary education the semester following high school graduation, compared with just over half of low-income high school graduates nationally.

Not only does postsecondary enrollment of early college students exceed that of similar students, but also of middle-income students—of whom 66 percent nationally enroll in college the school year following high school graduation. The enrollment rate for early college graduates also exceeded the overall national rate of 68 percent.[39] Only high-income students nationally enrolled at a higher rate, 82 percent.[40]

ENROLLMENT IN FOUR-YEAR COLLEGES

Early college graduates enter postsecondary education in greater numbers than their peers nationwide and are more likely to attend four-year institutions. Nearly half—47 percent—of early college graduates enrolled in a four-year college or university the following fall,[41] well on their way to earning a Bachelor's degree. This compares to the national average of 42 percent.[42]

COLLEGE PERSISTENCE

Early college students are **far more likely to return to college** for a second year. **86%** of early college graduates who enroll in college persist for a second year[43] vs. **72%** of college students nationally.[44]

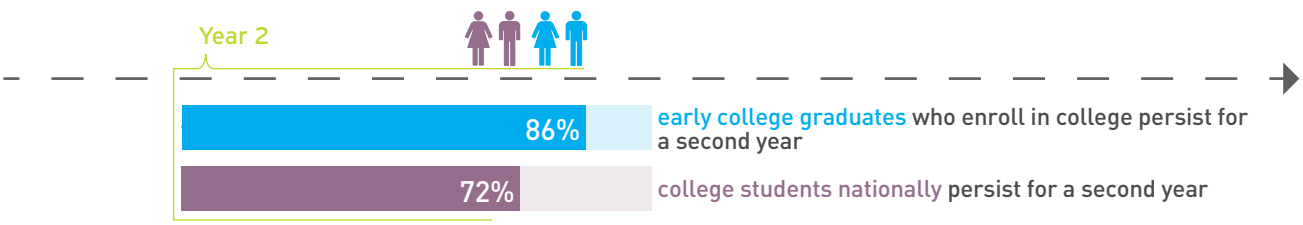
Early college students persist to their second year of college in greater numbers than their peers nationwide (except for peers from higher-income backgrounds)—an important early indicator of their likelihood of college completion.

DEVELOPMENTAL EDUCATION NEEDS

The large number of high school graduates requiring developmental education in college is gaining attention nationwide. Once enrolled in developmental education, few students move on to credit-bearing classes. JFF conducted a survey of postsecondary institutions enrolling 2010 and 2011 graduates of 30 early college high schools to assess how prepared those students were for college. Early college students were more prepared for college than the national average, more prepared than the average for their states, and far more prepared than the national average for low-income students or students of color. Early college students are at least 30 percent less likely to need remediation than the national average.[45]

Overall, results were obtained for 2,600 early college graduates enrolled in postsecondary education. For these students, only 14 percent enrolled in remedial coursework. This compares to the most recently reported national average of 23 percent for first-year college students.[46] The percentage distribution of self-reported participation in developmental education among first- and second-year Bachelor's degree-seeking undergraduates in 2011-12 was 26 percent.[47]

College Persistence



Third-party Study Finds Strong Evidence of Early College Effectiveness

A random-assignment study from American Institutes for Research concludes that students who attend early college schools are significantly more likely than their peers to graduate, enroll in college, and earn a degree. The multiyear study released in 2013—and an update published in January 2014—tracked the outcomes of students at 10 schools in the Early College High School Initiative, which JFF managed since the initiative's launch in 2002. The Bill & Melinda Gates Foundation, which funded the initiative, selected AIR to conduct independent third-party evaluations each year.

Among the major findings:

- Early college students had significantly higher English language arts assessment scores in high school than comparison students.
- Early college schools had significant impacts on students from backgrounds underrepresented in higher education.
- Early college schools were particularly effective at helping female students, students of color, and lower-income students earn college degrees.
- 86% of early college students graduated from high school, compared to 81% of comparison students in surrounding districts.
- 81% of early college students enrolled in college, compared to 72% of comparison students.
- One year past high school, 21% of early college students had earned a college degree versus 1% of comparison students. Two years past high school, 25% had earned a degree versus 5% of comparison students.

The study compared early college students with students who wanted to attend an early college school but lost out in an admissions lottery. The randomized design allowed researchers to conclude that early college schools help students succeed—and do better than similar youth at traditional high schools who were just as motivated but did not get the chance to enroll.

Sources: Andrea Berger et al. 2013. Early College, Early Success: Early College High School Initiative Impact Study. Washington, DC: American Institutes for Research. Available at http://www.air.org/resource/early-college-early-success-early-college-high-school-initiative-impact-study-2013
Andrea Berger et al. 2014. Early College, Continued Success: Early College High School Initiative Impact Study. Washington, DC: American Institutes for Research. Available at http://www.air.org/files/AIR_ECHSI_Impact_Study_Report-_NSC_Update_01-14-14.pdf

BUILDING ON SUCCESS: BRINGING EARLY COLLEGE TO MORE STUDENTS NEAR YOU

JFF and partners in the early college movement are building on the success of the Early College High School Initiative and spreading Early College Designs around the country through district, state, federal, and corporate initiatives. The expansion includes early college schools, early college STEM schools, some of the country's first early college districts, and designs that integrate career pathways, reengage out-of-school youth, and support large groups of English language learners. Notable expansion efforts include the New York State Smart Scholars Program, Massachusetts early college STEM high schools, and schools in Connecticut and Michigan, in addition to $27 million in Investing in Innovation grants from the U.S. Department of Education.

Public school districts provide the ongoing operating budgets for each early college as they do for traditional high schools. While district, postsecondary institution, and state sources cover the bulk of the annual costs, public and private grant funding has been crucial for the start-up and development phase of each school.

FEDERAL INNOVATION GRANTS FOR FOUR STATES

In 2012, JFF won a $15 million highly competitive Investing in Innovation (i3) grant from the U.S. Department of Education to expand Early College Designs districtwide in Denver and two areas of the Lower Rio Grande Valley in South Texas. The regions represent the nation's changing demographics—both are fast-growing with large populations of low-income and minority students—and local districts have often struggled to adequately serve high-need students. The partnership will address the challenges of large English language learner populations in all three districts—34 percent in Denver, 41 percent in Pharr-San Juan-Alamo, and 33 percent in Brownsville.[48]

A 2009 third-party study by AIR found that students from homes where English is not the primary language spoken "seem to have a particularly strong affinity with" the early college culture.[49]

By scaling up early college efforts in these regions, and making them districtwide school improvement strategies, the partnership will create exemplars for future expansion by districts elsewhere with similar demographic trends. During the five-year grant period, the partners plan to work with 22 high school and feeder middle schools, reaching 30,000 students in Colorado and Texas. The three participating districts already had thousands of students enrolled in college courses and are building on this foundation to convert high schools into early colleges.

The i3 programs will enable high school students to earn at least 12 college credits, including English and math "gatekeeper" courses required for all undergraduates, as well as STEM and career and technical education classes, getting a substantial head start on college at no cost to their families. JFF's partners in this work are Denver Public Schools, Educate Texas, Brownsville Independent School District, and Pharr-San Juan-Alamo Independent School District. The focus is to help schools to incorporate the Common Instructional Framework, JFF's six strategies to increase college readiness, and provide coaching to support teacher and student development *(see box, "Common Instructional Framework" on page 6)*.

JFF is also a partner with the National Center for Restructuring Education, Schools & Teaching at Teachers College, Columbia University, on a $12 million Investing in Innovation grant to boost enrollment of high-need students in STEM disciplines utilizing Early College Designs. The partner districts are Bridgeport Public Schools in Connecticut and four districts in Michigan. In addition to serving 20,000 students in 34 schools, the goal is to create a blueprint for STEM and early college schools for other school systems.

CHICAGO STEM SCHOOLS WITH CAREER PATHWAYS

The early college model was a major building block in the development of P-TECH, Pathways in Technology Early College High School, a partnership between IBM, the City University of New York, and the New York City Department of Education, that has inspired accolades and national attention, including a visit from President Obama. This five-year school provides STEM pathways that enable students to gain the skills, experiences, practical training, and an Associate's degree upon graduation leading to high-demand jobs.

With JFF's assistance, Chicago Public Schools is adopting these same strategies to raise college and career success, working with City Colleges of Chicago and five major U.S. companies—Cisco, IBM, Microsoft, Motorola, and Verizon Wireless. JFF will help convert five existing public schools to STEM early college schools. Each school will include an information technology career pathway.

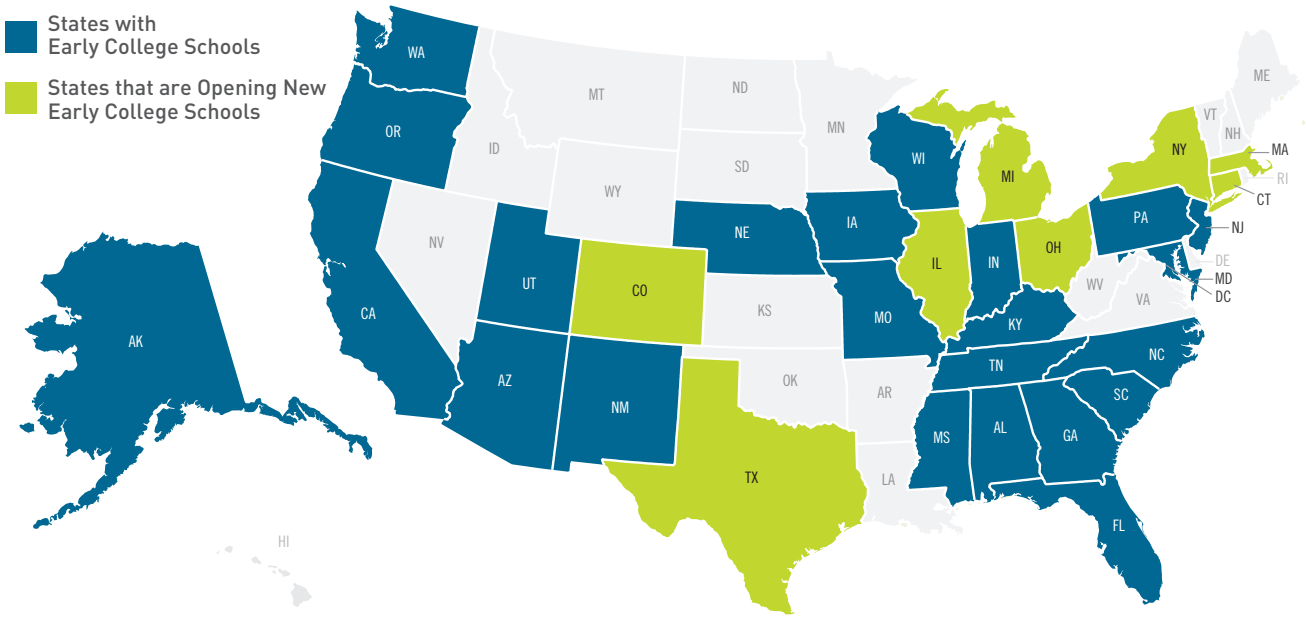
DAYTON PUBLIC SCHOOLS

In Dayton, Ohio, JFF is working with the public school district and Sinclair Community College to transform one of the city's underperforming high schools into an early college. Dunbar Early College High School officially opened its doors to more than 500 students in August 2013 and became the first early college in Dayton Public Schools. Approximately two dozen 11th- and 12th-graders have already enrolled in a college-level English course. This number will expand as more students become eligible to take college courses.

The goal is to enable every high school student in Dayton to receive a minimum of 12 transferable college credits and develop a clear path to postsecondary education and a career. Dunbar will serve as a model for redesigning all of Dayton's high schools to incorporate early college. District leaders are seeking other postsecondary partnerships to help with the expansion, including Central State University, a historically black college, as well as several business partners, including some in the medical community.

Early college high schools and early college districts are under development in:

- > Boston, Massachusetts
- > Bridgeport, Connecticut
- > Chicago, Illinois
- > Dayton, Ohio
- > Denver, Colorado
- > New York State
- > Michigan
- > South Texas



Note: All blue states have early college schools that were part of the Early College High School Initiative. All green states currently have one or more early college schools and are opening more.

CONCLUSION

Early college schools are proof that acceleration, not remediation, is a key to academic success for students from groups underrepresented in higher education. Data from the first decade of early college schools demonstrate clear evidence of effectiveness. Throughout the United States, states and school districts are increasingly viewing early college as a strategy for accelerating the personal and academic development of a wide range of students in a variety of settings, including large comprehensive high schools and entire districts.

Early College Designs can be particularly valuable for the many school districts implementing the Common Core State Standards. Adopted by almost every state, the standards require schools to improve teaching and learning in ways that encourage all students to master high-level problem-solving skills and gain a deep understanding of subject matter, in order to prepare all students for college and careers. Early college schools use proven strategies to prepare at-risk students for college coursework as juniors or seniors, such as creation of a "college for all" culture, engaging instruction, individualized academic supports, and explicit lessons in behaviors and mindsets required for college success.

As early college is scaled and adapted, important questions will emerge. For example, which variations in design matter? Will the new variations work as well (i.e., fewer college credits, differences in college course delivery, whole-district approaches, more diverse dual-credit pathways, including STEM and career or technical education)? Will policymakers create the conditions to encourage the secondary and postsecondary sectors to remake the transition from high school to college in the early college mold, so that all students can benefit?

Future research and evaluation will examine the impact of these current efforts, including results from projects supported by the U.S. Department of Education's Investing in Innovation Fund. In the coming years, much more will be learned about the value of Early College Designs in various school and district settings and provide new evidence to inform education policy and practice.

What is evident today is that early college represents a potent new paradigm for blending secondary and postsecondary education leading to improved career and life opportunities for thousands of students.

ENDNOTES

[1] Much of the information in this report comes from the Early College High School Initiative Student Information System, or SIS, which includes demographic, transcript, assessment, and other information for more than 100 early college schools. Data on college course taking, college GPA, and college course passing rates derive from college transcript data in the SIS and the ECHS/SIS Annual Integrated Survey.

[2] The early college graduation rate is compiled from State Education Agency public data and includes 88% of schools with graduates. The national overall averaged freshman graduate rate (AFGR) for 2009-10, the most recent year for which there is data, was 78.2%. U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Dropout and Completion Data File," 2009-10. *Digest of Education Statistics 2012*, table 125.

[3] Early College High School Initiative Student Information System (SIS). 2012. Data are for 2010-2012 graduates.

[4] U.S. Department of Education. Investing in Innovation Fund (i3) Highest-Rated Validation Applications, 2012. See "Abstract" for Early College Expansion Partnership by applicant Jobs for the Future. https://www2.ed.gov/programs/innovation/2012/applications.html

[5] A January 2014 Internet search resulted in the identification of 159 other early college schools that are not affiliated with the Early College High School Initiative partner organizations.

[6] Further, young adults with postsecondary credentials earn considerably more than those without. College graduates with a Bachelor's degree had median earnings of $45,000 in 2011, while Associate's degree holders had median earnings of $37,000. Both were significantly higher than high school graduates, who had median earnings of $30,000. Students without a high school diploma fared much worse, with median earnings of $22,900 (U.S. Department of Commerce, Census Bureau, Current Population Survey, March 1996 through March 2012, table 439. Table prepared November 2012). In other words, young adults with an Associate's degree earned about 23 percent more than high school graduates, while Bachelor's degree holders earned 50 percent more.

[7] 2010 data from the National Center for Higher Education Management Systems (NCHEMS) Information Center for State Higher Education Policymaking and Analysis. Postsecondary degree refers to Associate's degrees and Bachelor's degrees. For an Associate's degree, 150% of standard program completion time is three years. For a Bachelor's degree, 150% of standard program completion time is six years. Accessed February 27, 2014 at http://www.higheredinfo.org/dbrowser/index.php?submeasure=119&year=2010&level=nation&mode=data&state=0

[8] U.S. Department of Commerce, Census Bureau, Current Population Survey, Annual Social and Economic Supplement, selected years 1991–2011. Accessed March 11, 2014 at http://nces.ed.gov/pubs2011/2011033.pdf. Some 65% of all young people in the labor force with at least an Associate's degree were working full time in 2009, and 69% of those with a Bachelor's degree were working full time. Both groups fared significantly better than young people with less education. About 55% of high school diploma holders and only 47% of young people who hadn't completed high school had full-time work.

[9] For more information on the Investing in Innovation (i3) grants supporting early college expansion efforts by JFF, see http://www2.ed.gov/programs/innovation/index.html

[10] SIS. Percentage based on three-year average: 2010-11, 2011-12, 2012-13 Annual ECHS/SIS Integrated Surveys. The three-year average is an arithmetic average of the three most recent years, 2010-11, 2011-12, 2012-13. The three-year average includes more than 90 percent of Early College High School Initiative schools and is used to produce more stable percentages.

[11] The SIS includes demographic, assessment, and other data for early college schools' corresponding school districts and states.

[12] SIS. Based on free and reduced-price lunch data collected through the Annual ECHS/SIS Integrated Survey. Percentage based on three-year average (2010-2013). See endnote #10 for further explanation.

[13] For the period July 1, 2013, through June 30, 2014, 130 percent of the poverty level is $30,615 for a family of four; 185 percent is $43,568. USDA Food & Nutrition Service website, http://www.fns.usda.gov/sites/default/files/NSLPFactSheet.pdf

[14] SIS. Three-year average (2010-2013). See endnote #10 for further explanation.

[15] SIS. Based on free and reduced-price lunch data collected through the Annual ECHS/SIS Integrated Survey. Percentage based on three-year average (2010-2013). See endnote #10 for further explanation.

[16] SIS. Three-year average (2010-2013). See endnote #10 for further explanation.

[17] *Ibid.*

[18] The early college graduation rate is compiled from State Education Agency public data and includes 88% of schools with graduates.

[19] Two data sources were used to compare early college high school graduates to those in their own districts. The annual ECHS/SIS Integrated Survey includes questions related to the previous year graduates. In addition, each state publishes school-level graduation data, including district and state comparisons. Based on these sources, early college schools have a higher graduation rate than the corresponding district, state, and national average percentages, despite the large number of low-income students and students of color in the schools.

[20] The national overall averaged freshman graduate rate (AFGR) for 2009-10, the most recent year for which there is data, was 78.2% (U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "State Dropout and Completion Data File," 2009–10; and "State Nonfiscal Survey of Public Elementary/Secondary Education," 2005–06, 2006–07, and 2007–08, table 125. Table prepared November 2012.). AFGR is an estimate of the percentage of an entering freshman class graduating in four years.

[21] U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "State Dropout and Completion Data File," 2009–10; and "State Nonfiscal Survey of Public Elementary/Secondary Education," 2005–06, 2006–07, and 2007–08, table 125. Table prepared November 2012.). AFGR is an estimate of the percentage of an entering freshman class graduating in four years.

[22] U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "State Dropout and Completion Data File," 2009-10. *Digest of Education Statistics 2012*, table 125. California Department of Education, Cohort Outcome Data for the Class of 2011-12. New York State Education Department, The New York State Report Card, 2012. North Carolina Department of Public Instruction, North Carolina School Report Cards, 2012. Ohio Department of Education, Ohio School Report Cards, 2012-2013. Texas Education Agency, Four-Year Graduation and Dropout Data by Campus, Class of 2012.

[23] Julie A. Edmunds, John Willse, Nina Arshavsky & Andrew Dallas. 2013. "Mandated Engagement: The Impact of Early College High Schools." *Teachers College Record*. New York, NY: Teachers College, Columbia University.

[24] SIS. Three-year average (2010-2013). See endnote #10 for further explanation.

[25] U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Data File," 2007-08 and 2011-12, table 203.90. Table prepared May 2013.

[26] SIS. 2013. Average College GPA by Grade Report generated October 13.

[27] SIS. 2013. Percent of College Courses Passed by Ethnicity Report generated October 13. Percents for all demographics (2010-11 data) are as follows: African American 92.6%, white 94.5%, Asian American 100%, Latino 94.2%, Native American 75%, Pacific Islander 96.5%.

[28] *Ibid.*

[29] Of the 30%, 28% earned an Associate's degree, and 2% earned another college credential (SIS 2012).

[30] Some available data are that, nationally, among high schools with students enrolled in dual credit courses, 14% reported that some students earned postsecondary certificates and 7% reported some students earned Associate's degrees by taking dual credit courses (National Center for Education Statistics. 2013. *Dual Enrollment Programs and Courses for High School Students at Postsecondary Institutions: 2010-2011*).

[31] Andrea Berger et al. 2013. *Early College, Early Success: Early College High School Initiative Impact Study*. Washington, DC: AIR. Available at http://www.air.org/resource/early-college-early-success-early-college-high-school-initiative-impact-study-2013. *(For more information on the AIR study, see box, "Third-party Study Finds Strong Evidence of Early College Effectiveness" on page 15.)*

[32] 94% of early college students earn college credit before graduating (SIS, the 2010 and 2011 ECHS/SIS Integrated Surveys).

[33] U.S. Department of Education, National Center for Education Statistics, 2005 and 2009 High School Transcript Study (HSTS), table 163. Table prepared October 2011.

[34] SIS. Three-year average (2010-2013). See endnote #10 for further explanation.

[35] Two data sources were used to determine the percent of recent early college graduates who soon enroll in a college or university. The annual ECHS/SIS Integrated Survey (2010-2013) includes questions related to the previous year graduates, including how many enrolled, how many earned an Associate's degree or other postsecondary credential prior to graduation, and how many college credits they earned. The other source is the National Student Clearinghouse reports on the number of students in the graduating class and percentage who enroll in a postsecondary institution. Early college graduates" indicates "four-year early college cohort graduates."

[36] U.S. Department of Commerce, Census Bureau, Current Population Survey, October 1975-2011, table 236. Table prepared June 2012. The term "low-income" is based on free and reduced-price lunch data. Youth from families with incomes at or below 130% of the poverty level are eligible for free meals. Those with incomes 130-185% percent of the poverty level are eligible for reduced-price meals. For more information, see endnote #13.

[37] Berger et al. 2013; J.A. Edmunds, L. Bernstein, F. Unlu, E. Glennie, A. Smith, & N. Arshavsky. 2013. "Keeping Students In School: Impact of the Early College High School Model on Students' Enrollment in School." Paper presented at the Annual Meeting of the Society for the Research on Educational Effectiveness, Washington, DC, March 7, 2013.

[38] Data on race and ethnicity of recent graduates are derived from U.S. Department of Commerce, Census Bureau, Current Population Survey, October, 1970-2011, table 235. Table prepared June 2012.

[39] U.S. Department of Commerce, Census Bureau, Current Population Survey, October 1975-2011, table 236. Table prepared June 2012.

[40] Data on income of recent graduates are derived from U.S. Department of Commerce, Census Bureau, Current Population Survey, October 1975-2011, table 236. Table was prepared June 2012.

[41] SIS. 2011.

[42] U.S. Department of Commerce, Census Bureau, Current Population Survey, October 1975-2011, table 234. Table prepared June 2012.

[43] 85.5% of early college graduates who enroll return for their second year in college. Early college graduates" indicates "four-year early college cohort graduates." National Student Clearinghouse Report on Early College Student Enrollment, October 15, 2013.

[44] 71.7% of first-time, degree-seeking college students, at all degree-granting institutions in the United States (two-year and four-year public, private, and nonprofit) return for their second year in college. "Retention of First-Time Degree-Seeking Graduates at Degree-Granting Institutions, by Attendance Status, Level and Control of Institution, and Percentage of Applications Accepted," 2006-2011, U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2008 and Spring 2011, Enrollment component, table 378. Table prepared November 2012.

[45] The national average of students needing remedial/developmental coursework in public postsecondary institutions was 23% in the 2007-08 academic year. The percentage was 30% for African-American students, and 29% for Latino students. U.S. Department of Education, National Center for Education Statistics. Statistics in Brief. First-Year Undergraduate Remedial Coursetaking: 1999–2000, 2003–04, 2007–08. IES, Washington, DC: January 2013. 1999-2000, 2003-04, and 2007-08. National Postsecondary Student Aid Studies (NPSAS: 2000, NPSAS: 04, and NPSAS: 08).

[46] *Ibid.*

[47] U.S. Department of Education, National Center for Education Statistics, 2011-12 National Postsecondary Student Aid Study (NPSAS: 12).

[48] U.S. Department of Education. Investing in Innovation Fund (i3) Highest-Rated Validation Applications, 2012. See "PDF" for Early College Expansion Partnership by applicant Jobs for the Future. https://www2.ed.gov/programs/innovation/2012/jobsforthefuturenar.pdf

[49] Andrea Berger & Susan Cole. 2009. *Six Years and Counting: The ECHSI Matures*. Washington, DC: AIR.

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