

Making the Grade

Texas Early College High Schools Prepare Students for College





JOBS FOR THE FUTURE

Jobs for the Future develops, implements, and promotes new education and workforce strategies that help communities, states, and the nation compete in a global economy. In 200 communities in 41 states, JFF improves the pathways leading from high school to college to family-sustaining careers. JFF manages the Early College High School Initiative.

THE EARLY COLLEGE HIGH SCHOOL INITIATIVE

Early college high school is a bold approach, 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 high 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.

Since 2002, the partner organizations of the Early College High School Initiative have started or redesigned more than 230 schools in 28 states and the District of Columbia. The schools are designed so that low-income youth, first-generation college goers, English language learners, students of color, and other young people underrepresented in higher education can simultaneously earn a high school diploma and an Associate's degree or up to two years of credit toward a Bachelor's degree—tuition free.

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To download *Making the Grade*, please visit the JFF website.

For more information about how Texas early college high schools are preparing students for college, contact the Texas High School Project, www.thsp.org.

For information on the national Early College High School Initiative, contact Jobs for the Future, www.jff.org.

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EXECUTIVE SUMMARY

Early college high schools are improving student outcomes in Texas. This performance is being achieved by youth who are underrepresented in college, including Hispanic youth, economically disadvantaged students, and first-generation college goers. In improving readiness for college and careers, early college schools have become an essential part of Texas' strategy to develop a young workforce that can compete in a global, knowledge-based economy. The benefits to taxpayers of having more students progress successfully toward college completion makes the state's support for starting up these sustainable schools a prudent move.

IMPROVING HIGH SCHOOL ACHIEVEMENT

Early college schools serve 10,000 students in 44 early college high schools and 5 T-STEM (Texas Science, Technology, Engineering, and Math) schools throughout Texas. Their first graduations were held this spring, with 900 graduates at 11 schools across the state. The students have:

- Taken rigorous academic courses, including college classes;
- Outperformed their peers in their districts as a whole on the Texas Assessment of Knowledge and Skills (TAKS) in "commended performance" on math and reading;
- Accumulated an average of 24 college credits for schools in the Early College High School Student Information System, which is more than a semester.

SERVING STUDENTS WHO ARE UNDERREPRESENTED IN COLLEGE

About 66 percent of early college students in Texas are Hispanic, compared with a statewide average of 49 percent. About 63 percent of early college students are economically disadvantaged, and 74 percent are first-generation college goers.

IMPROVING COLLEGE ACCESS AND SUCCESS: A HEAD START ON COLLEGE

Of the 900 students who graduated from early college schools in Texas in 2010, about 95 percent had already earned at least some college credits. More than a third (308) had earned an Associate's degree, which can reduce by half their time to a Bachelor's degree. The graduates earned \$5.6 million in college scholarships (about \$6,220 per graduate).

According to several graduates now enrolled in college, their experiences as early college students helped them go straight to advanced courses in college and avoid remediation—a savings for their families and Texas taxpayers.

EXCEPTIONAL COLLEGE-GOING RATES

At the two early college schools studied, 87 percent of Mission Early College High School graduates and 86 percent of Collegiate High School graduates enrolled immediately in college. In comparison, 57 percent of high school graduates statewide enrolled in college.

HOW EARLY COLLEGE SCHOOLS SUCCEED

Early college schools are part of a national initiative to align high school and college through a rigorous, college-prep curriculum coupled with high expectations and comprehensive student supports. The schools provide all students with direct experience, preparation, and support in taking college classes through a proficiencybased curriculum that moves students into college-level work as they are ready. Students in early college schools take accelerated and advanced classes that lead to and include college courses by their junior or senior years of high school-and some students qualify for college courses as early as their first year. National outcomes for early college schools mirror the positive outcomes in Texas.

Interviews with graduates from early college schools at Mission and EI Paso Community College-schools at opposite ends of the state-reveal more about what their schools did to prepare them for college, including by providing: intensive summer preparation programs; a "college-first" culture and approach; a rigorous curriculum; and extensive student supports.

INTRODUCTION

E arly college high schools are improving student outcomes in Texas—in high school and college. This performance is being achieved by youth who have traditionally not done well in school, including Hispanic and economically disadvantaged students. Because of these outcomes, early college schools have become an essential part of Texas' strategy to improve high school and college success.

The first early college schools in Texas were created in 2004 to improve high school graduation rates, college access, and college success for broad populations of students, particularly those who are underrepresented in college. There are now 44 early college schools and 5 Texas Science, Technology, Engingeering,

and Math (T-STEM) schools serving about 10,000 students throughout the state. The first large cohorts of students graduated this spring, with 900 graduates at 11 schools. This report summarizes their outcomes and examines in detail the results of Mission Early College High School in El Paso and Collegiate High School in Corpus Christi. The achievements of early college graduates suggest that these schools are outperforming peer institutions on many indicators, including preparing students for college success. The benefits to taxpayers of having more students progress successfully toward college completion make the state's support for starting up these sustainable schools a prudent move.

A National Leader in Early College

As a pioneer in opening early college high schools, Texas has been a leader in shaping the development of the national *Early College High School Initiative*. With 50,000 students in more than 230 schools nationwide, early college high schools serve broad populations of students-particularly those who have not traditionally performed well in school. Nationally, about 70 percent of early college students are students of color, and 59 percent are eligible for free or reduced lunch.

IMPROVING HIGH SCHOOL ACHIEVEMENT

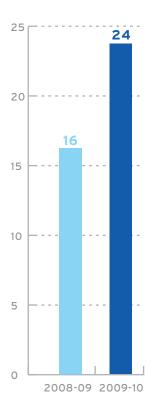
arly college schools expect every student to earn substantial college credits—up to an Associate's degree—while in high school. The schools accomplish this goal by providing a rigorous, college-prep curriculum coupled with high expectations and comprehensive student supports to help students succeed.

The early college design has been effective in improving student outcomes. Based on statewide data, early college students in Texas have:

- Taken rigorous academic courses, including college classes;
- Accumulated an average of 24 college credits, which represents more than a semester of fulltime credits (see Figure 1); and
- Outperformed their peers in host comparison districts on the Texas Assessment of Knowledge and Skills (TAKS) in "commended performance" on math and reading (see Figures 3A and 3B, pages 4 and 5).

These student outcomes are similar to those at early colleges nationally. An evaluation by the American Institutes for Research and SRI International (2009) shows that early college students nationally outperform students in their districts on state-mandated math and English language arts exams. And data from an annual survey indicate that at each school in the Early College High School Initiative students earn an average of 20 to 30 college credits (Webb & Mayka forthcoming).

Figure 1 College Credits Accumulated Per Early College Student in Texas



Data are for all students at 14 schools in 2008-09 and all students at 12 schools in 2009-10.

SOURCE: Early College Student Information System, 2008-09 and 2009-10.

SERVING STUDENTS WHO HAVE TRADITIONALLY UNDERPERFORMED IN SCHOOL

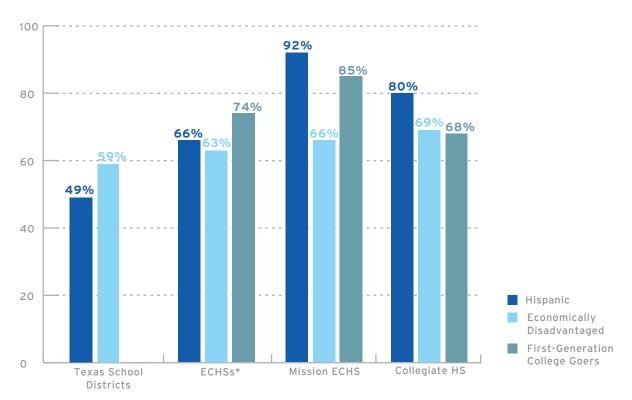
The achievements of early college schools are even more impressive given that they are being accomplished by students who have traditionally not performed well in school—including Hispanic youth, those who are economically disadvantaged, and first-generation college goers (see Figure 2). One of the key challenges of increasing educational attainment in Texas is that some of its fastest-growing groups are underrepresented in college. Because early college schools serve these populations, they are crucial to helping Texas increase the competitiveness of its workforce.

Many Texas leaders know that the state's economic future rests on the ability of its

workforce to do jobs that require skills beyond a high school diploma. These jobs help Texans earn wages that can support a family, and they are increasingly in knowledge-based industries, such as health care, the biosciences, telecommunications, and finance. To compete in these industries nationally and globally, Texas is working to increase the numbers of its workers with education or training beyond high school,² and early college schools are a key part of this overall strategy.

Early college schools prepare all students for a wide range of opportunities: certificate and Associate's degree pathways at community colleges, as well as four-year college programs.

Figure 2 Student Demographics, by Hispanic Origin and Economic Status



^{*}Data are for the 12 early college schools that completed the 2009-10 integrated survey; statewide data are not available for first-generation college goers SOURCE: Texas Education Agency, 2009-10.

IMPROVING ACADEMIC PREPARATION FOR COLLEGE

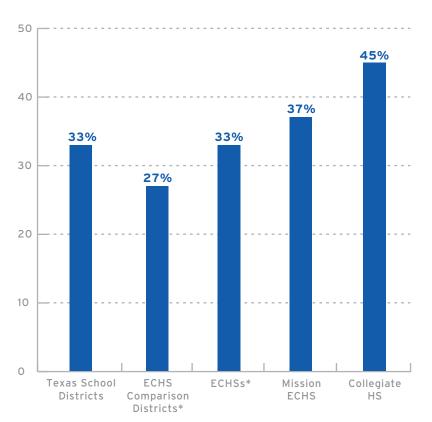
mproving the college readiness of high school students can reduce costs for taxpayers by decreasing the need for remedial courses in college and shortening the time to graduation. In Texas, early college students are performing well on academic indicators of college readiness.

ACHIEVEMENT IN TAKS MATH AND READING

On average, Texas early college schools outperform their host districts in college preparation in math and English, as measured by "commended performance" on the TAKS (see Figures 3A and 3B).³ "Commended performance" represents achievement beyond the minimum required to meet state standards. Even though early college schools serve a population that

Figure 3A

Percentage of Students Earning "Commended Performance" on the TAKS Reading/English Language Arts



^{*}ECHS data are for 38 schools funded by Texas Education Agency. Not all data were available for all schools because some schools started in 2008-09 and 2009-10. Others are programs within schools.

SOURCE: Texas Education Agency. Data are for 2009-10.

has traditionally not performed well in school, their "commended performance" on English is on par with the state average—and slightly better in math. Mission Early College High School and Collegiate High School outperform the state as a whole and other early college schools on these measures.

PERFORMANCE IN RIGOROUS HIGH SCHOOL AND COLLEGE COURSES

Students in early college schools take accelerated and advanced classes that lead to and include college courses by their junior or senior years of high school. While some students qualify for college courses as early as their first year or two at an early college school, others need to catch up during these years. At Collegiate High School,

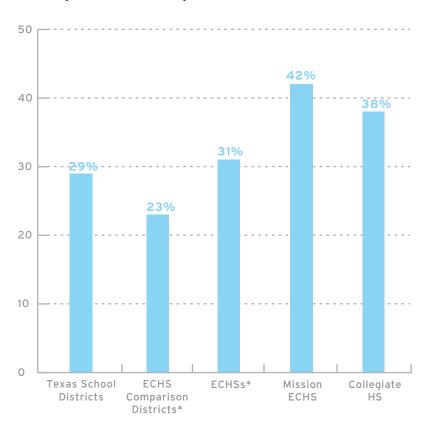
for example, some students enter the ninth grade below grade level in math; these students take an accelerated course to provide them with support in completing Algebra 1 by the end of the year, bringing them to grade level.

Table 1, on page 6, identifies the range of college courses that students take at Mission Early College High School and Collegiate High School. Across Texas, and at Mission and Collegiate, early college students perform well in their advanced coursework, passing college courses with approximately a "B" average.

A HEAD START ON COLLEGE

Early college schools are unique in providing every student with college course-taking experience while in high school. About 95 percent of the 900 students who graduated in

Figure 3B
Percentage of Students Earning "Commended Performance" on the TAKS Math



^{*}ECHS data are for 38 schools funded by Texas Education Agency. Not all data were available for all schools because some schools started in 2008-09 and 2009-10. Others are programs within schools.

SOURCE: Texas Education Agency. Data are for 2009-10.

2010 from Texas early college schools earned at least some college credits while in high school.⁴ More than one-third (308) earned an Associate's degree at the same time as their high school diploma, which can reduce by half their time—and tuition payments—to a Bachelor's degree. The graduates collectively earned \$5.6 million in college scholarships (about \$6,220 per graduate) (Texas Education Agency 2010).

ASSOCIATE'S DEGREES

Many students at early college schools earn Associate's degrees by the time they graduate from high school. At Mission Early College High School, 23 students achieved this feat in May 2009, a full year before earning a high

school diploma. A research study examining the partnership between Mission and El Paso Community College found that several components contributed to this high level of student success: an intensive summer preparation program; a "college-first" culture and approach; a rigorous curriculum; and extensive student supports, including having students attend college classes in cohorts to provide a peer support network. Several community college faculty members reported that they were initially concerned about having high school students in their classes but found that the students were well prepared and organized. As one faculty member said afterwards, "They have the ability and capacity" (Savina, Savina, & Ekal 2010).

Table 1

Examples of College Courses Taken by Mission Early College High School and Collegiate High School Students

Pre-Calculus and Calculus	Expository English Composition	State and Local Governments
Anatomy	Research Writing and Literary	U.S. History
Biology		Introduction to Psychology
Chemistry	Business Computer Applications	Intermediate Spanish
Genetics	Principles of Macroeconomics	
	American Government and Politics	

IMPROVING COLLEGE ACCESS

EXCEPTIONAL COLLEGE-GOING RATES

Nationally, about 86 percent of early college students enroll in college directly after high school. This compares with about 66 percent for public schools nationwide (Nodine 2009).⁵ Compared with national averages, a higher percentage of early college students are students of color and from low-income families, which makes these college-going rates even more striking.

In Texas, 87 percent of graduates at Mission and 86 percent at Collegiate enrolled in college directly after high school. For comparison, about 57 percent of high school graduates statewide enrolled in college right after high school.⁶

Mission Early College High School: Of the 99 students who graduated in 2010, 86 were enrolled in a two- or four-year college in fall 2010.

Collegiate High School: Of the 85 graduates, 73 were enrolled in a two- or four-year college or university in fall 2010.

Quality Assurance and Student Supports

Two important factors underlie the power of college-course taking by high school students as a college- and career-ready strategy. First, the courses must be truly college-level, with students learning the same content and taking the same assessments as "regular" college students—and, in the process, adopting the "habits of mind," behaviors, and knowledge expected of them in college (Conley 2010). Second, for students who are traditionally underrepresented in college, support systems and college-ready instructional strategies must be integral to the school design so that all students are prepared for college courses by the eleventh and twelfth grades. Both factors are in evidence at Mission Early College High School and Collegiate High School.

Quality. When taking college courses, all early college students are expected to accomplish the same level of performance as other college students, and there are mechanisms in place at the colleges, primarily at the departmental level, to ensure high standards. As reported in focus groups of professors at EI Paso Community College, the college instructors said they maintained the same expectations regardless of student status. As one instructor said, "I did not treat them as any different [than other college students]. I really did not want to know [who was in high school]; they are all college students" (Savina, Savina, & Ekal 2010).

Student Supports. Early colleges provide additional supports to help high school students succeed in college courses. For example, at Mission Early College High School and Collegiate High School: students can receive tutoring before, during and after school; they participate in peer-based learning communities; they take AVID classes (a program designed to develop effective learning skills); classes are organized in block scheduling to accommodate college attendance; and intensive bridge programs are offered to help accelerate learning in the summer.

IMPROVING COLLEGE SUCCESS: STUDENT PERSPECTIVES

Paso, and Collegiate High School, in El Paso, and Collegiate High School, in Corpus Christi, are almost 700 miles apart, yet they share the key goals and design features of all early colleges. As well as offering rigorous college curricula and student supports, both are small schools located on community college campuses. Mission, with 483 students, is on the campus of El Paso Community College. Collegiate, with about 400 students, is at Del Mar College.

According to several graduates of these schools who are now enrolled in college, their experiences as early college students helped them steer clear of remedial classes and go straight to advanced courses in college. Most of the students, in discussing their preparation for college, said that they were not surprised by what was expected of them at the university, and all pointed to their experiences taking college classes in high school. As one student said, "I don't think I had to adapt because I already had college experience over at Mission."

The students' responses also indicated that their preparation for college spanned all the key areas that have been identified as critical for success in college. High schools that prepare students in each of these areas provide them with better chances for college completion (Conley 2010).

1. ACADEMIC CONTENT

"I was actually taking calculus classes my [high school] junior year. So just that level of difficulty has stayed with me. When I got to UTEP [University of Texas at El Paso], it wasn't so much of a change, a harsh change, as it would have been since I was already taking these upper math classes."

-Texas early college graduate

All five of the graduates interviewed had succeeded in sequences of advanced courses leading from high school and into college, including English, mathematics, science, and social studies. Several students, while in high school, passed college-level biology, chemistry, or calculus. One student completed organic chemistry, genetics, and anatomy. All took college-level courses in expository writing and English, as well as history or government. In addition, all five earned an Associate's degree with their high school diploma. The students said that high expectations throughout high school helped them-not just one course or instructor. For example, a graduate of Collegiate said, "A lot of [high school] classes helped me. Each one in different areas or different ways." A graduate of Mission said, "Every class, especially the dual credit ones, took extra effort. . . . I think every class prepared me."

2. COGNITIVE STRATEGIES

"You would get your own [math] proof and then you would work on it and see how the steps go. You would teach it to the class, so that helped you learn how to explain those problems to others so that they saw that you really understood what you were talking about."

-Texas early college graduate

To apply what they know, students need cognitive skills-particularly in conducting research, interpreting information, solving problems, and communicating their findings to peers. Each of the graduates demonstrated preparation in these areas by providing multiple examples of projects they completed in high school-both individual research projects and group projects-that required them to gather data, develop a thesis or

topic, interpret their findings, and present results through written and oral presentations, including the development of websites, PowerPoints, and video.

Projects included hands-on experiments (science), conference planning (social studies), or plays (English) that required applying what the students learned in class. As one student said about a school-wide conference he helped direct:

"We had to organize. Basically it was a student-led conference, so the teacher was a facilitator. We made decisions about what tracks we would put in. That took a lot of decision making and planning. Those skills are hard to come by just from schoolwork. We also had to handle a budget and grant writing. We got a grant from Walmart [Foundation]."

3. ACADEMIC BEHAVIORS AND SKILLS

"Sophomore year [is] when I started feeling the amount of work that I had because I took three college classes. There was chemistry, English, and history, so I had to manage my time like work during the weekdays and have the weekends pretty much to myself. If I had a test and it was a difficult test, I would study for it—like drop everything and study for it. I carried that study habit here in college. . . . I came in with a pretty solid work ethic and time management. I know when to drop everything and just study or do homework and when to have fun. You need some balance."

-Texas early college graduate

The challenging courses and tutoring that students received in high school helped them develop important academic habits, such as managing their time, understanding what they needed to know and how to study for it, and persisting in the face of complex problems. As they took on the challenges of college classes (from calculus to literary analysis, and from macroeconomics to psychology), their teachers provided them with assistance before, during, and after school. They also learned to form study

groups with their peers and provide one another with feedback. As one student said, "We learned how to teach each other or help each other out.... We learned how to cope."

In the process, students learned the crucial skill-for college and work-of managing time independently. All five students emphasized the importance of this, and said that their teachers and their academic load in high school taught them to balance their time carefully. As one student said, the workload of college classes made it so that "You couldn't just stay up the night before and hope to get it done. You had to figure out a timeline. . . . I had to manage my time and figure out when to solve all of these problems."

4. COLLEGE KNOWLEDGE

"The support system at Collegiate High School is really good. The counselors are really helpful. The principal even talks to us about college and invites speakers from UT, from Texas A&M, College Station, from all the colleges in the state. I even went to a class session with more prominent colleges like Stanford, UPenn, and Brown.... So the counselors were definitely helpful about keeping us in check and seeing if we're on the right track for applications and FAFSA, all of those admissions requirements."

-Texas early college graduate

The early college schools provided all the students with valuable contextual information about college—which is particularly important for first-generation college goers. The students received assistance with college applications and financial aid forms through high school counselors as well as special classes and meetings. They received advice and direction from English teachers on college essays. By enrolling in college classes, they also learned how to ask questions in class and follow up with professors outside of class. As one graduate said of her high school experience, "You were actually in a college environment, so you had to act like a college student."

AFTER EARLY COLLEGE HIGH SCHOOL: STRAIGHT TO ADVANCED COURSES

II [Early college has] definitely prepared me for the college experience. It's given me a higher education than I normally would have at a regular high school. By the time I finished, I was already learning most things that people don't learn until they're twenty-something. So I think that jump on education was really important."

-Texas early college graduate

For all the students interviewed, their early college experiences affected their lives substantially in terms of preparing them for college. When they enrolled in college after graduating, none of the students needed to take remedial classes; they qualified for advanced courses immediately. Several said that in some ways, college seemed easier than high school because they did not have to carry both a college and a high school academic load. Three of the five said they planned to enroll in graduate school after completing their Bachelor's degrees.

COST SAVINGS

In addition, this jumpstart on higher education resulted in substantial savings on college costs for students and their families—decreasing it almost in half. As one student said, "If I hadn't gone to Mission, it would have been tough to pay for college." In turn, early colleges help Texas taxpayers save money by reducing the high costs of remediation in college and shortening the time to graduation for students.

Early college schools, in turn, help districts graduate more students who are college and career ready. They help colleges reach and prepare students earlier for credit-bearing courses. And they ensure that Texas taxpayers save money by reducing the high costs of remediation in college and shortening the time to graduation for students. For example, students

at Mission Early College High School earned an average of 40 college credits in 2009-10, which will result in an estimated cost savings for Texas of about \$6,800 per student completing an Associate's degree. The state's savings would be even greater for students who complete a Bachelor's degree: \$10,500 per student.8

EARLY COLLEGE EXPERIENCES FOR ALL?

Texas is a national leader in reaching students through early college schools. Ideally, all students should be able to begin college-level work as soon as they are ready-and before they graduate high school. Early college schools hold lessons for replicating the strategies that have led to success for early college schools in order to help many more young people in Texas-wherever they may go to high schoolbecome college and career ready. For example, schools following the design principles of early college schools can adapt dual enrollment as a school-wide strategy, but unlike traditional dual enrollment programs, they would focus on supporting underprepared students, not just high achievers. And in contrast to traditional dual enrollment programs in which the courses taken may depend only on student choice, the college courses that students in schools with an early college design take would be part of a curricular pathway culminating in college courses that lead toward a credential.

The strategies that early college schools use and how state policy can support their replication are described in a recent Jobs for the Future report, A Policymaker's Guide to Early College Designs: Expanding a Strategy for Achieving College Readiness for All. Texas is in a prime position to expand such strategies statewide.

CONCLUSION: EARLY COLLEGE SCHOOL WORKS FOR TEXAS

n 2009-10, early college students in Texas achieved an important milestone. On average, students for which data are available in the Student Information System accumulated 24 college credits, which saves them more than a semester of time in college. More than one-third of all of these students will earn an Associate's degree by the time they graduate from high school. Some will decide to attend a two-year or a four-year college. Some will choose to enter business training programs, community college programs, or the military. Some will begin working right after high school and combine that with further education.

Early college schools provide students with important knowledge and skills that have the potential to change their lives by helping them be better prepared for ongoing education and family-sustaining careers. In turn, Texas saves money by reducing the need for remediation and shortening the time to graduation. For example, students at Mission Early College High School earned an average of 40 college credits in 2009-10, which will result in an estimated cost savings for Texas of \$6,800 per student completing an Associate's degree. Savings are greater for students completing a Bachelor's degree: the state will save as much as \$10,500 per student. And Texas will gain a young workforce that is better equipped to compete in a global knowledge-based economy.

"My parents think it was a great opportunity. . . . If I hadn't gone to Mission, it would have been tough to pay for college. So they found it a great opportunity, and they're very grateful for it. They're proud of what I have accomplished. . . . My little sister . . . saw what I was able to accomplish, and I think she wants to accomplish that, too."

-Texas early college graduate

"A major goal, of course, is finishing my Bachelor's.... It's just one more semester, so I'm going to go for it. Then from there... if I'm financially stable, I would like to do my Master's at [the University of Texas at] Austin.... Basically, one of my major goals right now is finishing my degree no matter what it takes."

-Texas early college graduate

REFERENCES & ENDNOTES

REFERENCES

American Institute Research and SRI International. 2009. "Six Years and Counting: The ECHSI Matures. Fifth Annual Early College High School Initiative Evaluation Synthesis Report." August. Available at http://www.air.org/files/ECHSI_Eval_Report_2009_081309.pdf.

Conley, David. 2010. College and Career Ready: Helping All Students Succeed Beyond High School. San Francisco, CA: Jossey-Bass.

Nodine, Thad. 2009. Innovations in College Readiness. Boston: Jobs for the Future.

Savina, Francisco J., Ivette Savina, & Donna Ekal. 2010. "The Twenty-Three: A Study on the Accelerated Early Graduates of Mission Early College High School." El Paso, TX: Socorro Independent School District. November.

Texas Education Agency. 2010. "State Initiatives: Early College High School." September 1.

Webb, Michael & Lia Mayka. Forthcoming. "Unconventional Wisdom: A Profile of the Graduates of Early College High Schools." Boston, MA: Jobs for the Future.

Young, Viki et al. 2010. **Evaluation of the Texas High School Project: First Comprehensive Annual Report.** Austin, TX: Texas Education Agency.

ENDNOTES

- ¹ Source: Early College High School Student Information System, 2009–10, and Texas Education Agency, 2009–10.
- ² See Texas Higher Education Coordinating Board. "Closing the Gaps by 2015," available at http://www.thecb.state.tx.us/index.cfm?objectid=858D2E7C-F5C8-97E9-OCDEB3037C1C2CA3.
- ³ An independent study conducted by MRI for the Texas Education Agency found statistically significant differences in TAKS scores for those who attended early colleges and those in comparison schools; students at early colleges scored about 26 points

higher than their peers in TAKS math and 25 points higher in social studies (as per Young et al. 2010).

- ⁴ Source: Early College High School Initiative Annual Survey, 2010.
- ⁵ These national data are for 2008 or earlier.
- ⁶ Early college data are from reports to JFF from Mission Early College High School and Collegiate High School. State data are for 2008 and are from NCHEMS Information Center, "College-Going Rates of High School Graduates Directly from High School," available at http://www.higheredinfo.org/dbrowser/index.php?submeasure=63&year=2008&level=nation&mode=data&state=0, visited 2/10/11.
- ⁷ Interviews with five early college graduates were conducted by phone in January 2011. Three students from Mission Early College High School were interviewed; all were enrolled at the University of Texas at El Paso. Two graduates of Collegiate High School were interviewed; one was at the University of Texas at Austin, the other at Baylor University. Four of the students were Hispanic and one was Filipino. Three were women, and one of the five was first in her family to attend college. All five had earned Associate's degrees by high school graduation, and they enrolled in college as juniors. The students represented a wide range of college majors (biology, business, mathematics, and psychology) and career goals (medical school, business administration, teaching, occupational therapy, and clinical psychology).
- B The cost savings were calculated based on a model developed for JFF by school finance experts Augenblick, Palaich, and Associates. The model estimates the cost-benefit to states of graduating more students college ready in schools that adopt an early college design. The projections here are based on figures from state and national sources about Mission Early College and its home school district, Socorro ISD. They include: free/reduced lunch rates; rates of "Commended Performance" on TAKS math and reading assessments in 2009-10; high school graduation rates; college credits earned; and the average start-up costs of early college.



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