Improving Outcomes for Traditionally Underserved Students Through Early College High Schools

By Jennifer Dounay

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Introduction

Ever-increasing numbers of students — including traditionally underserved students — express the desire to go to college. Workforce projections by the Bureau of Labor Statistics support these aspirations, noting that many of the fastest growing jobs (and jobs with the largest net employment growth) are in health sciences, information technology and other technical fields that require at least technical certification or an associate’s degree (or beyond). Yet some observers suggest that the United States is not graduating enough college- and/or work-ready students to fill these positions. This worker shortage is further exacerbated by the fact that an increasing number of cities, counties and states are becoming majority-minority, at the same time that the high school graduation and postsecondary participation rates of minority and low-income students trail those of white and more affluent students. This convergence of circumstances suggests that the nation will graduate a greater shortage of students who are college- and work-ready, which poses clear economic development challenges.

Early college high schools are one emerging method of increasing the rates of high school completion and postsecondary participation of traditionally underserved students and meeting projected workforce development needs. This policy brief, building upon the state policy research in the ECS database on early/middle college high schools, seeks to:

- Define early college high schools
- Clarify how they differ from traditional dual enrollment programs
- Provide the most recent research on the positive impact on academic outcomes for traditionally underserved students who participate in such programs
- Set forth the model state policy components that undergird quality programs.

What’s an early college high school?

Jobs for the Future (JFF) indicates that early college high schools most commonly follow four basic models, with “high school into college” programs serving students in grades 9-12, “middle college early college” serving grades 9-13, “middle school into college” serving grades 6 or 7 to 12, and ungraded “gateway to college” programs allowing at-risk students or returning dropouts to complete one to two semesters in a “gateway” program located at a community college.

However, for purposes of this paper, early college high schools are defined as programs — typically geared towards serving low-income, Latino, African American, Native American and first-generation college students, and English language learners — that offer students the opportunity to earn secondary and postsecondary credit. Such programs start in grade 9, with the potential for students, five years after entering high school, to have amassed enough credits to earn a high school diploma and either technical certification, an associate’s degree or enough credits to enter a four-year postsecondary program as a junior.

Programs may be located on a high school campus (in a school-within-a-school), on a two- or four-year postsecondary campus, or at a third-party location. According to JFF, programs typically offer small, individualized learning environments (fewer than 100 students per grade) and provide “academic and
social supports that help students succeed in a challenging course of study,” as well as “[t]ime for staff collaboration and for including parents and the community in an education partnership.”

Some may question whether students who enter high school behind grade level or disengaged from school are truly capable of completing coursework equal in rigor to traditional entry-level postsecondary courses. JFF indicates that some of the best early college high school programs successfully address prior poor student achievement and enhance student engagement by “adopting school-wide literacy practices, focusing on inquiry-based instruction across grade levels and content areas, and creating ‘shadow’ or ‘lab’ courses to complement college courses.”

The number of early college high schools in the JFF initiative has expanded from just three in 2002-03 to 159 in the 2007-08 school year. Many are established through local partnerships between a high school and postsecondary institution, and are governed by state policies designed to regulate charter schools or dual enrollment programs. However, a small but growing number of states have enacted policies specific to early college high schools. These state policies not only provide state funds but also institutionalize practice, so that programs are not based on the impetus of an extraordinary leader or “go away” if and when external funding streams are no longer available.

**How do early colleges differ from traditional dual enrollment programs?**

<table>
<thead>
<tr>
<th>Program characteristics</th>
<th>Dual enrollment</th>
<th>Early college high school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student grade level</td>
<td>Students typically begin in grades 11-12.</td>
<td>Students typically begin in grade 9.</td>
</tr>
<tr>
<td>Eligibility criteria</td>
<td>Students must demonstrate academic potential through GPA, teacher recommendation, etc.</td>
<td>Students are typically not required to meet academic eligibility criteria to participate.</td>
</tr>
<tr>
<td>Target population</td>
<td>Target population is mid- to high-achieving students.</td>
<td>Target population is students not being well-served by traditional high schools such as minority and at-risk students.</td>
</tr>
<tr>
<td>Curriculum/course selection</td>
<td>Students select individual courses that earn them high school and (hopefully) postsecondary credit.</td>
<td>“The curriculum is designed as a coherent unit, with high school and college-level work blended into a single academic program.”</td>
</tr>
<tr>
<td>Credit accumulation</td>
<td>Students earn some postsecondary credit. Some states set a cap on the maximum number of postsecondary credits a student may earn.</td>
<td>Structures are established so that students may earn technical certification, an associate’s degree or enough credit to enter a four-year institution as a junior.</td>
</tr>
<tr>
<td>Area of program focus</td>
<td>Students may take courses in core and elective subject areas.</td>
<td>Postsecondary courses may be focused on a specific area, such as health sciences or engineering.</td>
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<tr>
<td>Guidance</td>
<td>Students may or may not receive guidance and support from the high school and/or postsecondary institution.</td>
<td>All students receive guidance and support.</td>
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</tbody>
</table>

**Positive student outcomes**

Data to date suggest that students participating in early college high school programs achieve greater academic success than underserved students in traditional high school programs. According to recent research by the American Institutes for Research (AIR):

**Participating students:**

- On average, 67% percent of early college students in 2006-07 were minority, as opposed to 61% of the students in the local school district.
- An average of 60% of early college students were low-income in 2006-07, as opposed to 58% of students in the local school district.
- Forty-four percent of early college students in a spring 2007 survey were first-generation college students.
Academic success:

- Early college high schools had an average 94% attendance rate in 2005-06.
- An average of 82% of students scored at the proficient level on their state’s English language arts assessment, and an average of 68% scored at the proficient level on their state’s math assessment. Early college students, on average, were achieving better results than their peers in the local district.
- Sixty-five percent of early college students in 2006-07 (including 84% of 12th graders) had taken at least one college class, as opposed to 5% of high school students nationwide in 2002-03.
- An average of 85% of early college students stay in their program for the following school year.
- The graduation rate in “eight of the most mature” early college high schools averaged 70%.8

JFF data likewise indicate that on average, early college high school attendance rates are over 90%, and that more than 60% of early college graduates enroll in four-year postsecondary institutions, exceeding the nationwide average for their peers.7

Model state policy components

This section recommends policy aspects that state policymakers should consider as they seek to develop or build upon state-level supports for early college high schools. Because of the unique target student population, curriculum and goals of early college high schools, various aspects of state policy need to be taken into consideration:

- Access and support
- Program quality
- Finance and facilities
- Addressing alignment for greater success
- Program accountability and evaluation
- “Other” areas.

Access and support

Underserved students and their families typically are less connected in their local school community and less likely to be aware of beneficial opportunities. They are more likely to be first-generation college students whose parents are less equipped to guide them academically and emotionally as they begin to consider college options. Parents of early college high school students may also want to be more involved in their child’s education but unsure as to what that involvement might look like.

Policies that foster access to and provide support to students in early college high school programs include the following elements:

Outreach and notification beginning in the middle grades. Because students (in the ECS model) may start early college programs as early as grade 9, they and their parents should ideally be informed of the availability of early college programs — and of the benefits to students of program participation — in the middle grades. North Carolina and Tennessee require programs to develop methods for early identification of potential participating students in the middle grades, and continuing on through high school.8

Requirement that all eligible students be notified. Underserved students and their parents are less likely to be “connected” in the school community, and are consequently less likely to be aware of programs that may benefit them. Two states currently require all students to receive notification of the availability of local early college high school programs. Colorado provides that all students in target high schools (and their parents) must be annually notified of the availability and requirements of the program.9 Texas requires all students in grades 9-12 and their parents to be notified of opportunities to earn college credit, including through early college high school programs.10

Counseling, guidance and support. Underserved students are more likely to be first-generation college-goers, and as such, their parents may be less prepared to provide the guidance and support students need to complete college-level courses and identify college services that may be available to them. Five states require early college high school programs to provide students with counseling or support. Colorado requires districts to ensure that any Fast College Fast Jobs program includes regularly scheduled counseling and other appropriate student support services throughout the five years in which
students participate in the program. North Carolina and Tennessee direct programs to provide consistent counseling and advising so that parents and students can make responsible decisions regarding course taking and can track the students’ academic progress and success. Texas requires early college programs to provide academic mentoring. Michigan applies the term “middle college” to early college high school programs as well. District/postsecondary partnerships that receive grants to support middle colleges focused on health sciences must ensure that an individualized education plan is developed for each participating student.

Parental involvement. Early college high school programs need to keep in mind that parents of many participating students will want to support their child’s college aspirations, but may not have the experience, tools or encouragement from the school system to effectively do so. Colorado requires eligible school districts establishing Fast College Fast Jobs programs to set additional student participation requirements as deemed appropriate, including requiring a specified level of participation by students’ parents. (A state following Colorado’s example will need to ensure that such parental involvement requirements provide flexibility and supports for working parents, parents for whom transportation or child care may be an issue, or parents who are not fluent in English.) North Carolina and Tennessee programs must emphasize parental involvement and provide consistent parent conferencing to ensure parents play an active role in their child’s early college experience. Each district/postsecondary partnership application to develop an early college program must indicate the process the program will follow to ensure parental involvement.

Program quality: Instructional and curricular quality with a strategic focus

States need to ensure that early college high schools provide high-quality instruction aligned with state standards that reduces (or eliminates) students’ need for remedial instruction upon postsecondary entry. States also should ensure that programs are strategically focused on preparing students for high-demand, high-skill professions.

Instructional quality. While no state specifies that high school or postsecondary instructors in early college high school programs must meet additional certification or professional development requirements, North Carolina and Tennessee require early college programs to encourage the use of different and innovative teaching methods, and to provide flexible, customized instruction. Both states require program applications to describe the qualifications required for individuals employed in the program. Texas, meanwhile, designates the postsecondary partner as the staff selecting body. These instructors must either be regularly employed faculty members at the postsecondary institution or meet equivalent standards. Individuals providing college-level instruction at early colleges must be supervised and evaluated in the same way as traditional postsecondary instructors at the institution.

Curricular quality. To maximize their potential, high school-level courses provided in early college settings should be aligned with state standards. High school and college-level courses offered through early college programs should be aimed at reducing students’ need to remedial instruction upon postsecondary entry. College-level courses should be equivalent to that provided in traditional postsecondary courses. Programs likewise should strive to integrate academic and technical instruction, and provide real-world, hands-on learning experiences.

Standards-based alignment: North Carolina and Tennessee make clear that early college programs must be centered on the core academic standards as set forth in the state-set graduation requirements.

Elimination of the need for postsecondary remediation: Colorado specifies that Fast College Fast Jobs courses must be at a sufficient level of rigor to ensure that a participating student will not need remediation upon entry to postsecondary education. North Carolina and Tennessee require early college programs to adequately prepare students for future learning, either in the workforce or in an institution of higher education, and reduce the percentage of students needing developmental courses upon entry into postsecondary education.

Postsecondary alignment: Pennsylvania and Texas specify that early college courses, just as regular concurrent enrollment courses in the state, must be identical to those offered traditional postsecondary students, and must use the same curriculum, assessments and instructional materials.
Integration of academic and technical instruction: To receive health sciences grant awards, Michigan programs must provide language arts, math and science instruction that is integrated, where appropriate, into the health sciences courses. North Carolina and Tennessee’s standards for early college programs specify that programs must integrate and emphasize both the academic and technical skills students need to be successful in a more demanding and challenging workplace.

High-demand, career-wage focus. In addition to readying students to ultimately enter the workforce, programs also should focus on preparing students for career areas in which graduating students will be able to find jobs that are in high demand and that will allow them to earn a family-supporting wage. Michigan provides awards to support early college programs focused on health sciences. North Carolina and Tennessee provide that early colleges must enable students to complete a technical or academic program in a field that is in high demand and has high wages. Programs must lead to advanced programs or employment opportunities in engineering, health sciences or teaching. In both states, applications for a district and postsecondary partner(s) to establish an early college program must include a statement of how the program relates to the economic development of the region in which the program will be located. North Carolina and Tennessee both allow a private business or organization and/or the local county board of commissioners (“county legislative body” in Tennessee) to serve as a partner in developing an early college high school. In both states, priority must be given to programs that are most likely to address the economic development needs of the regions in which they are located.

North Carolina and Tennessee allow early college programs to be operated in a facility owned by an education partner (i.e., private business or organization, or county board of commissioners). Michigan programs receiving health sciences grant awards must provide clinical rotations that give students the opportunity to observe careers in the health sciences.

In North Carolina and Tennessee, early colleges must enable students who complete such programs to enter high-skilled employment and pass employer exams, if applicable.

Finance and facilities

Funding distribution
As stated in the 2008 ECS policy brief, Issues in Funding Early & Middle College High Schools, not all states award high schools and postsecondary institutions the same amount of funding for early college students as they do for traditional high school or postsecondary students. Lower funding amounts to districts or postsecondary institutions may disincentivize program participation. Four states — Colorado, Michigan, Tennessee and Texas — appear to provide the same levels of funding to high schools and postsecondary institutions for serving early college students as they do for serving traditional students.

Tuition costs
States that do not cover early college students’ postsecondary tuition costs could deter student participation, especially among low-income students, the target population of many early college high schools. Four states — Colorado, North Carolina, Tennessee and Texas — provide that early college students do not pay postsecondary tuition costs.

Saving through sharing
Policies in some states make clear that district and postsecondary partners should strive to share existing facilities and resources. North Carolina and Tennessee direct early colleges to encourage the cooperative or shared use of resources, personnel and facilities between public schools and postsecondary partners, and effectively use existing funding sources for high school, vocational and postsecondary programs.

Seeking nontraditional sources
Some state policies also encourage early colleges to seek funding sources in addition to traditional (local, state, federal) revenue streams. As mentioned, North Carolina and Tennessee allow early college programs to be operated in a facility owned or leased by a private business or organization, or the county board of commissioners, if one or more of these is included as a partner in a written early college program.
agreement. Both states provide that if an education partner is a public body, the program may use state, federal and local funds allocated to that body. North Carolina and Tennessee also provide that a county board of commissioners that is not an education partner may nevertheless appropriate funds to an early college program.31

Laws in North Carolina and Tennessee strongly encourage districts and postsecondary partners to seek funds from sources other than federal, state and local appropriations.32

**Addressing alignment for greater success**

Because underserved students are less likely to be able to afford to re-take postsecondary credits that do not transfer to another institution, states should seek to ensure that postsecondary credits earned through early college programs transfer to other public two- and four-year institutions in the state. States should also consider financial supports to help students who have earned some postsecondary credits through early college programs complete a four-year degree program.

**Credit transferability.** Ideally, state policy should clearly allow students completing postsecondary credits at “College A” to transfer those credits (as “real” credits, not elective credits) to “College B.” Two states — Colorado and North Carolina — have developed articulation agreements that ensure the transfer of credits at public two- and four-year institutions in the state, provided the student earned a “C” or higher in the course.33

**Financial supports for students to complete four-year degrees.** North Carolina EARN [Education Access Rewards North Carolina] grant funds are not limited to students who have participated in the state’s Learn and Earn early college high school program, but allow students who have already earned two years of college credit through Learn and Earn to graduate from a four-year program with no college debt. Eligible students must be North Carolina residents (and U.S. citizens); have graduated from a North Carolina high school within seven months of receiving the grant; be enrolled full-time as an undergraduate at a community college, University of North Carolina campus or other eligible North Carolina postsecondary institution; be a dependent on the family’s most recent tax return; have a family income no more than 200% above the federal poverty level (approximately $40,000 for a family of four); and be in good academic standing. Award amounts are in addition to other types of assistance. Because award amounts are up to $4,000 per academic year, the EARN grants Web site suggests recipients likely will need to work 10 hours a week or during the summer to graduate from college without student loans.34

**Program accountability and evaluation**

Programs should be held accountable for performance, and such accountability must be shared by both secondary and postsecondary partners. North Carolina and Tennessee require early colleges to be held accountable for meeting student achievement results. Tennessee specifies that these accountability results must be established by the state board of education, the board of regents and the University of Tennessee system. Both states specify that early colleges must establish joint institutional responsibility and accountability for student support and success.35

Texas early college high schools must seek re-approval each year. Administrative code sets forth criteria for which the commissioner of education may deny renewal or revoke an early college’s authorization, including a lack of program success as indicated by progress reports and program data.36

Even good early college high schools can improve when state policy insists on the monitoring of outcomes, recalibration and improving alignment. Three states — North Carolina, Pennsylvania, Tennessee and Texas — require early college programs to undergo an explicit evaluation process, while one additional state — Colorado — requires early college programs to report on the number of participating students and other program indicators, but does not explicitly require programs to undergo an evaluation process.

Texas requires each district and postsecondary partner to develop and implement an evaluation process to determine early college program effectiveness. Measures of effectiveness must include student results on state-level accountability assessments and success indicators of graduates at public postsecondary institutions in the state (such as student participation, retention and graduation rates). Beginning with the 2008-09 school year, the commissioner of education must adopt measures, performance standards and
an appeals process to evaluate early college programs. Failure to meet standards may result in sanctions, including a program’s closure.37

In North Carolina and Tennessee, program success must be measured by:
- High school retention, completion and dropout rates
- Certification and associate degree completion (Tennessee also includes baccalaureate degree completion as an evaluation measure)
- Admission to four-year institutions
- Postgraduation employment in career or study-related fields
- Employer satisfaction of employees who participated in and graduated from early college programs
- Other measures as deemed appropriate by the state-level consortium administering the early college program (Tennessee only).

North Carolina requires the state board and postsecondary governing boards to annually report the results of program evaluations to the joint legislative oversight committee. Once the boards determine which programs have been most successful, they must jointly develop a prototype plan for similar programs that could be expanded across the state.38

Similarly, Tennessee directs the consortium to evaluate programs for success and establish best practices and lessons learned from successful programs.39

Furthermore, applications to develop early colleges in North Carolina and Tennessee must provide a description of how the program’s effectiveness in addressing the tenets of early college high schools, as defined in legislation, will be measured. These tenets include early and ongoing identification of prospective students, parental involvement, counseling/advising, teacher and curricular quality, and shared use of resources.40

“Other” areas

Policymakers may also wish to consider online early college and technical assistance to local programs as they develop state-level policies to support early college high schools.

Online early college high school courses. A 2007 legislative appropriation led to the development of “Learn and Earn Online,” through which North Carolina is extending early college course offerings to high schools statewide. Learn and Earn Online courses are offered in a variety of disciplines through the University of North Carolina Greenboro and the community college system. Any student in grades 9-12 attending a participating high school who meets course prerequisites is eligible to enroll. As of fall 2008, 325 high schools in the state are participating in Learn and Earn Online, with more high schools anticipated to adopt the program in spring 2009.41

Technical assistance. Policies in some states require state-level entities to provide technical assistance to districts and/or postsecondary partners as they develop and implement early college high school programs. In Tennessee, that technical assistance must be provided by the consortium that oversees early college programs (in practice, the state’s P-16 council), and must rely on data from evaluation and best practices.42

Conclusion

In an era when growing numbers of traditionally underserved students are setting their sights on college — and economic projections suggest a growing need for workers in health care, information technology, and other fields that require technical certification, an associate’s or four-year degree, or more — early college high schools appear to be a viable means of providing improved access to postsecondary education, by maximizing efficiencies through the reduction of postsecondary remediation and the sharing of existing resources, while meeting emerging workforce development needs.

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4 ibid.

5 ibid.


8 N.C. GEN. STAT. § 115C-238.50(b)(11) ; TENN. CODE ANN. § 49-15-101(b)(11)

9 COLO. REV. STAT. ANN. § 22-35.5-105(5)

10 TEX. EDUC. CODE ANN. § 28.010

11 COLO. REV. STAT. ANN. § 22-35.5-105(4)

12 N.C. GEN. STAT. § 115C-238.50(b)(6); TENN. CODE ANN. § 49-15-101(b)(6)

13 TEX. EDUC. CODE ANN. § 29.908(b)(4)

14 MICH. COMP. LAWS § 388.1664

15 COLO. REV. STAT. ANN. § 22-35.5-105(3)

16 N.C. GEN. STAT. § 115C-238.50(b)(6) and .51(b)(6); TENN. CODE ANN. § 49-15-101(b)(6) and -104(b)(7)

17 N.C. GEN. STAT. § 115C-238.50(b)(8) and (d)(1), -238.51(b)(9); TENN. CODE ANN. § 49-15-101(b)(8) and (d)(1), -104(b)(10)

18 19 TEX. ADMIN. CODE § 4.156

19 N.C. GEN. STAT. § 115C-238.50(b)(3); ); TENN. CODE ANN. § 49-15-101(b)(3)

20 COLO. REV. STAT. ANN. § 22-35.5-105(2)

21 N.C. GEN. STAT. § 115C-238.50(b)(1) AND (12); TENN. CODE ANN. § 49-15-101(b)(1) and (12)

22 24 PA. CONS. STAT. § 16-1613-B; 19 TEX. ADMIN. CODE § 4.157

23 MICH. COMP. LAWS § 388.1664(2)(e)

24 N.C. GEN. STAT. § 115C-238.50(b)(5); TENN. CODE ANN. § 49-15-101(b)(5)

25 MICH. COMP. LAWS § 388.1664

26 N.C. GEN. STAT. § 115C-238.50(c)(2) and (d)(3), .51(b)(2) and (d), .52(a); TENN. CODE ANN. § 49-15-101(c)(2) and (d)(3), -104(b)(2) and (d), -105(a)

27 N.C. GEN. STAT. § 115C-238.52(a), .53(C); TENN. CODE ANN. § 49-15-105(a), -106(d)

28 MICH. COMP. LAWS § 388.1664(2)(d)

29 N.C. GEN. STAT. § 115C-238.50(c)(1) and (4); TENN. CODE ANN. § 49-15-101(c)(1) and (4)

30 N.C. GEN. STAT. § 115C-238.50(b)(4) and (10); TENN. CODE ANN. § 49-15-101(b)(4) and (10)

31 N.C. GEN. STAT. § 115C-238.53 and .54; TENN. CODE ANN. § 49-15-105 and -106(f)

32 N.C. GEN. STAT. § 115C-238.54; TENN. CODE ANN. § 49-15-107


34 N.C. GEN. STAT. § 116-209.26; Earn Grants Web site: http://www.learnandearn.nc.gov/earnGrants.htm
35 N.C. GEN. STAT. § 115C-238.50(b)(7) and (9); TENN. CODE ANN. § 49-15-101(b)(7) and (9)
36 19 TEX. ADMIN. CODE § 102.1091
37 19 TEX. ADMIN. CODE § 4.159, 102.1091
38 N.C. GEN. STAT. § 115C-238.55
39 TENN. CODE ANN. § 49-15-108
40 N.C. GEN. STAT. § 115C-238.51(b)(11); TENN. CODE ANN. § 49-15-104(b)(12)
41 N.C. GEN. STAT. § 115D-1.2, 2007 H.B. 1473 (Chapter 323); Learn and Earn Online Web site, accessed
17 October, 2008: http://www.dpi.state.nc.us/learnandearnonline/; John Brim, Assistant Director/Chief
Operating Officer, North Carolina Virtual Public School.
42 TENN. CODE ANN. § 49-15-108(a)