



A POLICYMAKER'S GUIDE TO EARLY COLLEGE DESIGNS

Expanding a Strategy
for Achieving College
Readiness for All

By Nancy Hoffman and Joel Vargas

October 2010



JOBS FOR THE FUTURE



**EARLY COLLEGE
HIGH SCHOOL
INITIATIVE**



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.

WWW.JFF.ORG

ABOUT THE AUTHORS

Nancy Hoffman, vice president and senior advisor at Jobs for the Future, works on state policy, higher education, and the transition to postsecondary education. She has been deeply engaged in JFF's work to develop early college high schools and to expand opportunities for college-level work in high school to a wide range of students. She writes and speaks on the topic of college and career preparation, and is an editor of two JFF books: *Double the Numbers: Increasing Postsecondary Credentials for Underrepresented Youth*; and *Minding the Gap: Why Integrating High School with College Makes Sense and How to Do It*, both published by the Harvard Education Press. She serves on the Massachusetts Board of Higher Education. She has also served as a consultant for the Organization for Economic Cooperation and Development on its 17-country study of vocational education and training, "Learning for Jobs." Dr. Hoffman is working on a book on what the United States might learn from countries that have strong secondary and postsecondary career pathways serving the majority of young people.

Joel Vargas, a vice president at Jobs for the Future, leads the work of JFF's "High School through College" team and helps to set the organization's priorities and direction. He also researches and advises on state policies that promote improved high school and postsecondary success for underserved students. He has helped policymakers and intermediary organizations develop state and federal policies that expand early college schools and other school designs incorporating college coursework into high school. Since joining JFF in 2002, Dr. Vargas has designed and implemented a research and state policy agenda for implementing early college designs; created policy frameworks, tools, and model legislation; written and edited white papers, research, and national publications; provided technical assistance to state task forces and policy working groups; served on a number of national advisory groups; and organized and presented at national policy conferences. In 2005, Dr. Vargas was featured in *The Chronicle of Higher Education* as one of "Higher Education's Next Generation of Thinkers."

ACKNOWLEDGMENTS

The authors are grateful to their colleagues at Jobs for the Future for their contributions to the guide: our editors, Marc S. Miller, Carol Gerwin, and Jayme Rubenstein; our designers, Rochelle Fontaine and Jean-Pierre LeGuillou; and our collaborators, Janet Santos, Jason Quiara, and Jill Frankfort for their research and early advice about the guide's key ideas. They and Richard Kazis also kindly reviewed and improved upon key drafts of the paper. Our colleagues, Ryan Reyna of the National Governors Association, Bi Vuong of the Data Quality Campaign, and partners from the Texas High School Project and the North Carolina New Schools Project also generously provided fact checking and feedback. We thank these organizations, the 11 other intermediary organizations of the *Early College High School Initiative*, and countless local education leaders who have helped support the implementation of early college schools nationwide—whose successes are the inspiration for the ideas in this guide.

TABLE OF CONTENTS

INTRODUCTION: EARLY COLLEGE EXPERIENCES FOR ALL AS A STATE STRATEGY FOR COLLEGE READINESS AND SUCCESS	1
> Harbingers of Progress in College and Career Readiness	1
> Early College Experiences for All	2
> The Early College Vision	2
> The Challenge	3
> The Goal of this Guide	3
> Organization of the Guide	3
PART I. EARLY COLLEGE DESIGNS AND POLICIES	4
PART IA. EARLY COLLEGE DESIGNS DEFINED: SUPPORTING ALL HIGH SCHOOL STUDENTS TO COMPLETE KEY COLLEGE COURSES	5
> Early Proof Points of Success: Early College High Schools	5
> The Next Wave of Expansion: Early College Designs for Traditional High Schools and Their Districts	6
> The Elements of Success: School Characteristics	8
PART IB. STATE POLICIES TO HELP CONNECT ALL HIGH SCHOOL STUDENTS TO COLLEGE	9
> What Purposes of Early College Designs Should Inform Policy?	9
> Principles for Policy Development	9
> Incentives Motivating Students to Participate	10
> Implementing Early College Designs: State Examples	11
PART II. STATE STRATEGIES FOR ENABLING EARLY COLLEGE DESIGNS	14
PART IIA. PUBLIC-PRIVATE PARTNERSHIPS TO MANAGE EXPANSION OF EARLY COLLEGE DESIGNS	15
> Intermediaries: Owning and Managing the Early College Design Innovation Process	15
> Snapshots: Two Statewide Intermediaries	16
PART IIB. ENSURING COLLEGE-LEVEL QUALITY IN HIGH SCHOOLS	19
> Standards of Quality	19
> Eligibility Criteria	21
> Design Integrity	22

PART IIC. FINANCING EARLY COLLEGE DESIGNS: A COST-EFFECTIVE, SCALABLE APPROACH	26
> Hold Harmless: Incentives for K-12 and Postsecondary	26
> Flexible Strategies: Promoting a Cost-Efficient Mix of College Courses	27
> Startup Funding	29
> Putting It Together: How Two States Fund Early College Designs	33
PART IID. SETTING GOALS, COLLECTING DATA, MEASURING OUTCOMES	35
> Setting Goals	35
> Collecting Data	36
> Measuring Outcomes	37
ENDNOTES	39
REFERENCES	41

INTRODUCTION: EARLY COLLEGE EXPERIENCES FOR ALL AS A STATE STRATEGY FOR COLLEGE READINESS AND SUCCESS

States have an urgent need to increase high school graduation rates for all students and propel more young people to complete a college credential. This goal is particularly important for youth from low-income backgrounds, many of whom would be the first in their family to attend college. Today, it is earning a postsecondary credential—not just taking a few college classes—that matters in getting a job and starting a career that pays a living wage. For low-income young people, a college credential is the best insurance policy for securing a future with middle-class advantages.

Without a recognized set of postsecondary skills and knowledge, low-income jobseekers are shut out of the highly competitive global economy, at great cost to themselves, their communities, and their states. Educational investments diminish when students drop out of college after a semester or two, even if they have earned some credits. Low-income students, who disproportionately need remedial classes, often get slowed down by placement into developmental education courses and are the least likely to earn a degree or credential.

The demand is clear: we must design ways to graduate substantially more low-income young people from high school and ensure that they are truly ready for college and career success. One critical strategy for doing so is to ensure more of these young people experience success in college coursework before leaving high school. This guide is about what policymakers can do to expand this strategy through efforts that promote the adoption and adaptation by all high schools of the key features of successful early college high schools.

To meet the imperative for a more highly skilled workforce and citizenry, state and federal policymakers are working to align the academic expectations of secondary and postsecondary education. The goal is for high schools to prepare every graduate for some form of postsecondary education immediately after high school and to ensure that they start with credit-level courses, not remedial work. A strong predictor of credential completion is the accumulation of 20 credits within the first year of college. Earning substantial college credits in high school can give young people an invaluable head start. With about 60 percent of community college entrants and 33 percent of *all* college entrants now placed into noncredit, developmental education courses, relatively few low-income students can achieve the critical first-year goal.

HARBINGERS OF PROGRESS IN COLLEGE AND CAREER READINESS

The country is now engaged in placing standards that define the math, reading, and writing skills and knowledge students must acquire to graduate ready to succeed in college and careers. Students meeting their states' standards would be fully prepared for non-remedial, credit-bearing college courses and workforce training programs.

Over the last several decades, educators and policymakers have laid groundwork for redefining the boundaries between secondary and postsecondary institutions in order to create a seamless—and more effective—educational system from ninth grade through at least the second year of college. With so many states raising their standards to college- and career-ready levels either on their own or in signing onto the Common Core State Standards, the country is poised to close the long-standing gap between high school and college.¹

States also are expanding access to educational pathways that formally incorporate college-level expectations into high school, enabling students to earn significant college credit before they earn a diploma. For example, more states and districts are implementing high school Advanced Placement and International Baccalaureate programs, both of which are widely recognized by higher education as college-level curricula and assessments. The number of high school students taking official college courses through dual enrollment partnerships with postsecondary institutions is on the rise as well. And online college courses are providing access to many motivated students.

All these policy and practice developments share one important premise: students should be able to advance from high school classes into college coursework as soon as they show colleges that they are ready. In the current time- and cost-sensitive environment, students are eager to demonstrate their academic abilities and potential.

EARLY COLLEGE EXPERIENCES FOR ALL

The best way to prepare young people to succeed in college is to provide them with substantial college experiences while still in high school. Dual enrollment, Advanced Placement, and other programs are a start. However, they are more likely to advantage high-achieving students who want to get a head start on accumulating college credits than to open doors for underserved populations.

College courses in high school can no longer be the exclusive province of advanced students. Ideally, *all* students should be able to begin college-level work as soon as they are ready—and before they graduate high school. Through the development of new school models across the country, and now with substantial confirming research, Jobs for the Future is confident in concluding that “early college designs” offer unique opportunities for youth currently underrepresented in higher education to complete a postsecondary credential.

Early college designs adapt dual enrollment as a school-wide strategy; unlike traditional dual enrollment programs, their primary focus is the underprepared student, rather than the high achiever. The goal is to support low-income high school students who, without significant assistance, may lack the skills and knowledge to enter and persist through college. After years of extra academic support, early college students start taking postsecondary courses in high school, resulting in dual credit—*all tuition free*.

We believe that early college designs could eventually be the norm in every secondary school in the country, ensuring that all high school students—and especially youth currently underrepresented in higher education—can prepare for, do, and benefit from college-level work. A free head start on college is huge motivation for young people to complete a degree. Saving time and money are strong incentives for young adults struggling to pay bills and eager to start jobs. The opportunity to receive crucial supports from staff who understand students’ academic and personal challenges makes success possible.

THE EARLY COLLEGE VISION

Every state adopts early college designs to ensure that every student can graduate from high school prepared to earn a postsecondary credential or degree.

Over the last decade with partner organizations, Jobs for the Future has guided and supported the national *Early College High School Initiative*, while also helping states build on dual enrollment legislation to serve as an “on ramp” to college for low-income and other underserved young people. Now with positive research and evaluation data about the results, JFF feels confident in pursuing the following vision:

- > Every student in the United States will have the opportunity to graduate from high school having completed at least 12 college credits (the equivalent of one semester) including college math and college composition. The courses will be aligned with a state’s college-readiness standards so that every student has a high minimum skill level that is roughly uniform across postsecondary sectors.
- > All colleges in a state’s public higher education system will accept all college course credits earned in high school, agreeing that students can start college without remediation.
- > As strong predictors of retention, passing grades in college math and college composition in the first year of postsecondary education will decrease remediation and improve retention through the second year of college and eventual completion.
- > Institutions will use the money formerly set aside for developmental education to make college-level work available to high school students.

THE CHALLENGE

The challenge for states is to enact policies that ensure that all underserved students have the academic, financial, and social supports they need to succeed in the schools and districts adopting early college designs. Nearly 1.5 million off-track young people and struggling students need access to routes proven to enhance college readiness and success. By JFF's estimate, 475,000 low-income students who enter high school each year will fail to graduate; over 900,000 low-income students will graduate unprepared for college work; and another 90,000 college-ready, low-income high school graduates will start college but fail to complete a degree.²

The viability of national high school and college reforms—practically and politically—will hinge on the success of these young people. They disproportionately include the fastest-growing demographic in the country—Latinos—that has some of the lowest rates of educational success.³ That the United States has fallen from #1 to #12 among OECD countries in college graduation rates signals the urgency of the college completion problem.⁴ If these young people do not attain at least the higher rates of their affluent peers, our country will not have the highly skilled workforce or citizenry it needs to compete in the global marketplace, nor to regain its educational standing internationally.

THE GOAL OF THIS GUIDE

Today, states and the federal government recognize the potential of early college designs to improve the economic prospects of future generations. But we are just beginning to put in place public policies that promote and support early college designs on a significant scale. Jobs for the Future prepared this guide to help policymakers make informed decisions as they plan for and implement early college designs. It outlines what it would take to systematize and scale up early college course taking, extending the benefits to all high school students, secondary schools, and colleges across the country.

JFF developed the advice and recommendations seen here from our collaborations with many talented and committed school and college leaders, teachers, other experts in practice and policy, and state policymakers. Our goal is to spur policymakers to adopt the lessons learned since the first early college high school opened its doors in 2002.

ORGANIZATION OF THE GUIDE

The guide has two sections. The first section lays the groundwork, explaining early college designs, the policies needed to support them, and the status of efforts to develop these programs in states today. The second section provides the “how to”: implementation vehicles, quality mechanisms, financing strategies, and the data required to track and measure outcomes.

Part I. Early College Designs and Policies

- > **Part IA: Early college designs** defined and evidence of their success in graduating more young people fully prepared for college and careers—particularly those underrepresented in higher education.
- > **Part IB: Public policies** that help states connect all high school students to college—including an update on where states are now, and how they are moving toward early college designs.

Part II. State Strategies for Enabling Early College Designs

- > **Part IIA: Creating public-private partnerships to manage the expansion of early college designs.** Such partnerships help to ensure that these innovative programs are implemented with quality and are sustainable.
- > **Part IIB: Ensuring college-level quality in high schools.** The benefits of early college designs are only reaped when students complete real college courses with authentic college-level demands. States must ensure the quality of college courses as they expand access for high school students.
- > **Part IIC: Financing early college designs.** Scaling up these designs requires policies that encourage local partnerships to take joint responsibility for students from grades 9 to 14 and to maximize the efficiencies of dual crediting so that savings can be reinvested into student support systems.
- > **Part IID: Standardizing goals, measuring success.** Even as states should set targets for raising the number of underrepresented students who complete college courses through early college designs, they must also measure, monitor, and report whether these strategies are having their intended impact.

PART I. EARLY COLLEGE DESIGNS AND POLICIES

PART IA: EARLY COLLEGE DESIGNS DEFINED: SUPPORTING ALL HIGH SCHOOL STUDENTS TO COMPLETE KEY COLLEGE COURSES

With state interest growing in implementing standalone early college high schools, as well as in building more options that open college-level work in high school to a greater number of underserved high school students, one challenge is how to define initiatives that have as a goal *early college experiences for all*. “Early college design” is JFF’s umbrella term for a relatively new type of approach to high school reform that blends secondary and postsecondary education. Early college designs include early college high schools as well as emergent designs that adhere to early college high school principles but are suitable for any high school serving low-income young people.

EARLY PROOF POINTS OF SUCCESS: EARLY COLLEGE HIGH SCHOOLS

Early college high schools are small, autonomous schools, operated in close connection with a postsecondary institution. The schools are designed so that all students have the opportunity to earn an Associate’s degree or up to two years of transferable college credit tuition free along with a high school diploma. The schools are intended for low-income youth, first-generation college goers, English language learners, students of color, and other young people underrepresented in higher education. Students are selected by lottery and/or based on their background and interest in attending. To make up for the social capital that comes from growing up in a college-educated family, students receive academic and social supports to help them prepare for college-level work and complete it successfully.

Districts operate most early college high schools, although some are state-authorized charter schools that operate independently from local districts. Schools can start in grades 6, 7, or 9. Most early college schools are separate schools, but some are small learning communities or academies within another school. Postsecondary partners provide college courses as substitutes for some high school classes starting as early as grade 9, with the bulk of college course-taking during grades 11 and 12. Early college schools enroll about 100 students per grade, making it easier for them to provide individualized supports to each young person than it

Successful Outcomes of Early College High Schools

Outcomes are promising, according to data collected from the *Early College High School Initiative*, a network of over 200 early colleges in 24 states enrolling more than 50,000 students. Since the first one opened in 2002, these schools have served a student population that is primarily low-income and about 70 percent young people of color.⁵

In 2009, 3,000 students graduated from the 64 early college schools that had been open for four or more years:

- > They earned an average of 20 college credits or more.
- > 44 percent earned at least a year of transferable college credit.
- > 25 percent earned two full years of college credit or an Associate’s degree.
- > 86 percent of graduates enrolled immediately in postsecondary education.

These promising outcomes are being affirmed by an experimentally designed research study of early college schools in North Carolina being conducted by the SERVE Center at the University of North Carolina-Greensboro. Early findings show that early college schools are enabling more students to take and complete college preparatory courses in math by the end of ninth grade and are closing the gaps in such performance between minority and non-minority students. The schools are also resulting in reduced absences, suspensions, and higher rates of academic engagement (Edmunds et al. 2010).

is for larger schools. Since 2002, when the first schools opened their doors, early college high schools have adhered to a set of core principles such as the commitment to serve students underrepresented in higher education and to provide a comprehensive support system that develops their academic and social skills as well as the behaviors and conditions necessary for college completion.⁶

THE NEXT WAVE OF EXPANSION: EARLY COLLEGE DESIGNS FOR TRADITIONAL HIGH SCHOOLS AND THEIR DISTRICTS

Influenced by positive results from early college high schools and large-scale studies of dual enrollment; states, districts, and schools are experimenting with ways to move dual enrollment from an opportunity for advanced students to a strategy for promoting college and career readiness for low-income students. An emerging set of options is suitable for all students in any high school. These early college designs go substantially beyond simply offering the opportunity for students to take college courses in high school; they build a structured route linking at least grades 11, 12, 13, or the Associate's degree.

Within a traditional high school, students participate in a preselected sequence of college courses (equaling at least 12 credits or one semester of college work). This is sometimes preceded by a "College 101" introduction to study skills. The program includes opportunities for those unlikely to qualify for college courses before graduation—students who are at risk of graduating underprepared for college—to become qualified. In addition, such enhanced programs often reach out to middle school students, offering them programs that familiarize them with the demands of postsecondary education and the adventure of visiting a college campus.

What's in a Name?

JFF has chosen the term "early college designs" as a label for schools that incorporate college coursework into the high school experience and adhere to early college high school design principles but that offer a minimum of 12 credits, not 60, and are not necessarily standalone, small high schools. We do so to make explicit that early college designs derive from the successful practices of the original early college high schools.

However, as states consider naming expansion efforts that build on the design principles and record of successful early college high schools, they will want to consider local context and history. If a state has defined early college high schools in statute (e.g., Texas by law requires early college to offer 60 college credits), it may need to make a clear distinction between schools meeting any legal definitions and expansion efforts. For example, a state could use such terms as "college connected" schools or "supported dual enrollment" programs for their emergent designs.

In such schools, courses are carefully chosen to meet postsecondary career certificate or general education requirements in two- and four-year institutions and to be transferable. For example, high school students might be required to enroll in foundation or "gatekeeper" courses such as first college-level math or English courses, which when successfully completed are highly predictive of earning a credential. The expectation is that students will require and receive substantial academic support but that taxpayers will receive a return on this investment as more young people enter the labor market with a credential, contribute to their states' economies, and pay taxes.

In most early college designs, courses developed through agreements between high schools and postsecondary institutions result in dual credit; the college course replaces a required high school course, and the student earns credit for both. Some approaches for older youth who are off track from graduating or out of school altogether may include college-level developmental courses to reengage them and provide a supported transition into college-level work. Early college designs for these populations can be a powerful strategy for ensuring that they are not only back on track for high school graduation, but also on a path toward a postsecondary credential.⁷

Hidalgo: Early College High School as a District-Wide College Ready Strategy

The Hidalgo Independent School District serves a community on the Texas-Mexico border that is 99.5 percent Hispanic-American, 89 percent economically disadvantaged, and 53 percent limited English proficient. With an enrollment of more than 3,500, Hidalgo ISD transformed its sole high school into an Early College High School designed so that students could earn up to 60 college credits. Students earn college credits in core academic courses and career and technical education classes, while also completing the Texas Recommended High School Program in partnership with South Texas College, Texas State Technical College, and the University of Texas-Pan American.

Because its high school serves all students in the district, JFF sees Hidalgo's success as a proof point for other districts: that early college designs can be used as a strategy for raising the college readiness of all students in a district.

In 2010, more than 95 percent of the first group of Hidalgo early college students graduated with college hours. Other Texas districts are planning similar initiatives.

Graduates Completing a Recommended or Distinguished Plan

	Class of 2007	Class of 2008
Hidalgo	100%	98%
Region 1	89%	91%
State	78%	81%

NOTE: Includes the Recommended High School Program and Distinguished Achievement Program (i.e., college preparatory courses of study)

SOURCE: Texas Education Agency, Public Education Information Management System, 2009-10.

Advanced Course/Dual Enrollment Completion

	Class of 2007	Class of 2008
Hidalgo	37%	48%
Region 1	26%	28%
State	22%	23%

SOURCE: Texas Education Agency

For more information, see Nodine (2010).

Summary of Differences: Dual Enrollment and Early College Designs

	Cost of Credit to Students	Number of Credits	School/Program Structure	Target Population	Student Supports	College Connection
Dual Enrollment	Variable: Regular per-credit cost to discounted to free	Variable	Students arrange as available; no designated courses or sequences	Any student meeting eligibility requirements; usually 11 th and 12 th graders	Not in high school; students may be able to use college support services	College does not have responsibility for work with high school students
Early College High School	Free	Up to 2 years; average 23 credits	Autonomous small school with all students taking college-level courses	Low-income, underrepresented students	Supports integrated into academic program; college support services available	Partnership codified in an MOU; college and high school have joint responsibility for students. Liaison staff works between high school and college
Early College Districts	Free	12 credits minimum, especially math and composition	College course-taking expected of all students by the time they reach 11 th and 12 th grade	Low-income, underrepresented students	Supports integrated into academic program; college support services available	Light touch; college provides some support for college course taking

THE ELEMENTS OF SUCCESS: SCHOOL CHARACTERISTICS

In the ideal form, early college designs have a number of characteristics in addition to those mentioned above:

- > The consistent use of specialized instructional practices enables diverse learners to achieve college-ready standards. These practices include teaching foundation literacy and numeracy skills in the context of intellectually challenging tasks and providing scaffolding so that students advance continuously to higher levels based on proficiency.
- > A set of organizational practices that reinforce an effort-based, college-going culture in which all students are supported as full members of a community of learners striving to achieve high standards.
- > High school students engaged in college coursework benefit from a formal system of tutoring and advising, including instruction on key “college knowledge” academic behaviors such as time management and study skills.
- > Focused counseling on dual enrollment postsecondary options to enable students to make informed choices about their programs of study. In some cases, high schools preselect courses to ensure they meet career certificate or general education requirements for two-year institutions—and are transferable to four-year colleges.

(See Part IIB: *Ensuring College-Level Quality in High Schools*, for additional discussion of sound instructional and academic practices for early college designs.)

Dual Enrollment: The Backbone of Early College Designs

Dual enrollment legislation (also called dual credit, concurrent enrollment, and postsecondary options legislation) encourages, allows, or requires high schools to enroll qualified students in college-level coursework while they are still in high school—generally in their junior and senior years. Almost all states have some form of dual enrollment, and participation is growing. Early college designs depend on the availability of dual enrollment to provide students with a head start on college free of charge.

The National Center for Education Statistics completed a national study of dual enrollment, International Baccalaureate, and Advanced Placement programs in 2007 using data from 2003. *Dual Enrollment of High School Students at Postsecondary Institutions: 2002-03* found that “more than half of all colleges and universities . . . enrolled high school students in courses for college credit which translates into about 813,000 or about 5 percent of high school students.” A second report, *Dual Credit and Exam-Based Courses in U.S. Public High Schools: 2002-03*, found that 71 percent of public high schools offered programs in which students earned credit at both the high school and college levels for the same course.

During the 2002-03 school year, “there were an estimated 1.2 million enrollments in courses for dual credit, 1.8 million enrollments in AP courses, and 165,000 enrollments in IB courses. If a student was enrolled in multiple courses, schools were instructed to count the student for each course in which he or she was enrolled. Thus, enrollments may include duplicated counts of students” (Waits, Setzer, & Lewis 2005). While more recent national data are not available, states report increasing numbers of students participating in dual enrollment.

Research suggests that dual enrollment participation is positively related to outcomes such as high school graduation, college enrollment, and persistence in college.⁸

PART IB: STATE POLICIES TO HELP CONNECT ALL HIGH SCHOOL STUDENTS TO COLLEGE

Scaling up the success of early college designs requires policies that enable any high school or district to replicate or adapt the core design features. While 24 states now have early colleges that are part of the *Early College High School Initiative*, and a number have instituted policies to open dual enrollment opportunities to a wider range of students, only a handful have begun to expand these approaches to benefit all students. A few states are starting to adapt the lessons and successes of various early college strategies to provide college-level work in high school as suggested above—that is, by restructuring existing high schools to provide a selected set of college courses and supports for all students.

Scaling up early college designs requires understanding what a good early college design looks like in practice and having in place the right policies to enable implementation. This chapter presents a set of purposes and principles developed by JFF that undergird the policies needed to execute early college designs. A number of states have used an earlier and similar set of purposes and principles as they have formulated policies to open up dual enrollment to a broad range of students.

WHAT PURPOSES OF EARLY COLLEGE DESIGNS SHOULD INFORM POLICY?

Good policies start with clear purposes. The following three purposes touch on the three key reasons to implement early college designs:

- > **Ensure a higher college and career readiness success rate:** Early college designs serve as a proven college- and career-ready strategy for students not already college bound and as a head start on college for those already committed to a postsecondary credential.
- > **Improve alignment of standards and curricula:** Early college designs support and reinforce alignment of postsecondary courses with career and college-ready standards and integrate grades 9-14.
- > **Support high school and college teams in sharing accountability for the transition into college:** Early college designs undergird mutual accountability of secondary and postsecondary institutions by providing a feedback loop on student performance and academic standards in the last two years of high school and first two years of postsecondary education.

PRINCIPLES FOR POLICY DEVELOPMENT

Sound principles can help guide effective policymaking. Each of the principles below might form part of the basis for legislation or rulemaking to support early college designs. Each can also serve as an informal audit tool. For example, if a state has barriers to substituting college courses for high school courses, or if state institutions charge all high school students regular per-credit-hour costs for taking a college course, then the state would need to revise its policies to implement early college designs. In subsequent sections, this guide focuses on policies related to quality and finance, the two topics of greatest current concern to states.

Key principles supporting effective policies to scale up early college designs are:

- > **All of the state's public high schools offer equal access to dual enrollment opportunities and provide support through "early**

college designs” as required. High school students can participate in individual college courses based on proficiency in those subjects, even if they are not proficient in others. Eligibility requirements are determined by the secondary and postsecondary sectors together. There are multiple ways to demonstrate readiness, including a combination of tests, end-of-course grades, teacher recommendations, and students’ work portfolios.

- > **Postsecondary institutions must partner with local school districts implementing early college designs, and there are incentives to do so.** The state requires that high school/college partnerships are structured to help students prepare for dual enrollment, including students who need support to become eligible. The partnerships’ responsibilities are encoded in a memorandum of understanding. Credit for participation is encoded in the state’s accountability system. Such mechanisms could include an index or scoring system for high school performance that gives points for the percentage of students completing a dual enrollment course (similar to points often given for Advanced Placement and International Baccalaureate course completion).
- > **College credit substitutes for high school credit, enabling students to accelerate in the specific subjects in which they demonstrate proficiency.** College and high schools together designate a limited sequence of courses that count for general education, career, or college major credit. The state, the higher education partners, and districts together establish quality-control mechanisms ensuring that courses meet college-credit standards.
- > **Funding mechanisms are based on the principle of no cost to students and no financial harm to secondary and postsecondary partners.** Secondary and postsecondary institutions are compensated for each student’s education in such a way that each is “held harmless” for jointly creating pathways with the academic, social, and financial supports to ensure that all students complete key college courses by graduation.
- > **Funding and policy rules are flexible enough to allow for a range of district-wide, school, and program-based early college designs.** Because early college designs are a work in progress and are implemented in already existing high schools, each with individual resources and practices, policies must allow for—and, indeed, encourage—experimentation and innovation within the basic principles.
- > **The state collects individual student, district, and state data on early college designs.** The goal is to assess each program’s impact, provide information that can be used to improve outcomes, and make results public and transparent.

For elaboration of these principles as formulated to expand dual enrollment, see *On Ramp to College*, available from the Jobs for the Future Web site at: <http://www.jff.org/publications/education/ramp-college-state-policy-maker%E2%80%99s-guide-d/210>.

Incentives and Requirements for Schools and Districts to Participate

In Texas, participation is encouraged through House Bill 1 (TEC Sec. 28.009), which makes 12 college credits available to all qualified high school students and provides per student funding of \$275 for college-readiness activities.

In Kentucky, 2008 legislation mandates that high schools offer “AP, IB, dual enrollment dual credit courses, using either or both on-site instruction or electronic instruction through the Kentucky Virtual High School or other on-line alternatives.” Kentucky also requires that information on such opportunities be made available to all students, and that “all students who are willing to accept the challenge of a rigorous academic curriculum shall be admitted to AP courses, . . . IB courses, and dual enrollment courses . . . if they have successfully completed the prerequisites coursework of have otherwise demonstrated mastery of the . . . knowledge and skills as determined by measurable standards”(see *KRS 2008 160-348*).

INCENTIVES MOTIVATING STUDENTS TO PARTICIPATE

Several states have taken care to emphasize incentives that encourage students to participate in early college designs. Incentives of particular interest to students include:

- > Free college credit fully transferable to any of the state’s public higher education systems;
- > Opportunities to move into college-level work based on proficiency in the subject the student wishes to pursue at the college level; and
- > Weighting of a completed dual enrollment course in the same way that honors or AP courses are weighted, with evidence of participation in an advanced course on the student’s transcript.

IMPLEMENTING EARLY COLLEGE DESIGNS: STATE EXAMPLES

Scaled up early college designs can be seen as “next generation” high school reform. They combine the principles of dual enrollment with the crucial supports and clear academic pathways of early college high schools, but without the requirement that the program be launched in a small, autonomous school. A growing number of states are designing and implementing these next-generation designs in a variety of innovative and broad-scale ways. They are pointing the way to what early college designs can accomplish, particularly excellent preparation for the demands of new, higher high school exit standards. In particular, states are encouraging the use of early college designs to ramp up STEM (science, technology, engineering, and math) initiatives. School designers find that working closely with a postsecondary partner, teachers, and professors can provide introductory college-level STEM courses during high school by using resources available on college campuses.

As with any emergent strategy, the forms and structures vary while the goal of creating an “on ramp” to postsecondary institutions remains the single aim. The education community will learn much from their progress.

States are using three types of approach to early college designs:

- > **Transformative strategies:** State policy promotes the creation of early college schools and pathways. The policies provide supports and aggressively remove barriers so that all high school students have access to a culminating sequence of college-level coursework and can complete a minimum of 12 credits—and up to 30 college credits or more.
- > **Dual enrollment enhancement strategies:** Continuing to widen existing dual enrollment approaches, students are required or enabled to take a particular quotient of college credits in high school, with some supports provided though not across the board.
- > **Light-touch, “try it out” strategies:** All qualified students are permitted to “try out” college through the vehicle of one or two free college courses.

States use a variety of these approaches, yet all challenge the status quo regarding what underprepared high school students can and should accomplish to start firmly on the path to a college degree. The entry point depends on states’ governance structure, history of high school reform, resources available, and degree to which they have already invested in dual enrollment and early college strategies.

Transformative Strategies

Several states have placed their bets (or are seriously considering doing so soon) on early college designs as a prime, high-impact college-readiness/postsecondary success strategy. The most intensive initiatives began with generous dual enrollment legislation, then implemented early college high schools, and now use early college outcomes as an attractive wedge to widen the adoption of early college designs to whole schools and districts.

Texas and North Carolina are the frontrunners in adopting college-level work in high school as a statewide, full-scale reform strategy. Texas now has 44 early college high schools, 51 STEM schools, and emerging whole-district, wall-to-wall early college designs. North Carolina has established 70 early college high schools, most partnered with community college campuses but some also partnered with four-year schools. Both states are expanding their initiatives and working with selected districts to develop and implement plans for adopting early college designs that reach all students, including in rural settings where transportation is a challenge.

Rhode Island is experimenting with an early college design that combines and accelerates both high school and four-year college completion. The Rhode Island legislature has charged its Office of Higher Education with developing a Bachelor’s program that will graduate students in three years. The total secondary and postsecondary completion time is shortened further because high school and college are combined. During the junior year of high school, students start on the pathway toward completing their first-year, core college courses at a public institution.

New York State, Massachusetts, and Kentucky have bold “start from scratch” initiatives in the planning stages. In New York, the *Smart Scholars* initiative, led by the State University of New York is opening 11 early colleges in fall 2010. The plans build on the success of City University of New York programs mounted in collaboration with the New York City Department of Education: College Now (see box on page 12) and the seven early college high schools with which CUNY partners. Both Kentucky and Massachusetts incorporated early college designs into their federal Race to the Top funding proposals (joining 14 other states that included early college or dual enrollment expansion in theirs). Massachusetts is publicizing the design principles within districts and their higher education systems.

Early College Designs in Practice

College Now: A Forerunner to Early College Designs

New York State has minimal dual enrollment policy. But the City University of New York, the nation's largest urban postsecondary system, and the New York City Department of Education, the nation's largest urban school district, have established a partnership that rivals those of entire states in terms of its size and that has traits that make it a precedent for early college designs. CUNY's College Now program, widely recognized as a national model for an integrated K-16 system, is the nation's most extensive dual enrollment partnership. Between the 2001-02 and 2008-09 academic years, enrollment for high school students seeking college credit through College Now increased by 39 percent from 10,475 to 14,592 students. In 2008-09, high school students completed 20,899 credit courses. In 2008-09, 63 percent of total college credit enrollments took place at the community colleges.⁹

CUNY colleges have long opened their doors to students who had yet to complete high school diplomas—sometimes to help them complete the diploma or GED. CUNY's Collaborative Programs comprise a continuum of college-preparation approaches serving students at different developmental stages and with different needs: early college high schools; university-affiliated high schools (there are 15 on or near CUNY campuses); and Gear Up, serving cohorts in single schools. College Now is another example and itself offers a range of programs: not only dual enrollment but also summer arts and theatre activities that acquaint students with college faculty, culture, and campuses.

College Now's mission is to help students meet high school graduation and college entrance requirements without remediation and to stay in college through a degree. Begun at Kingsborough Community College in 1984, College Now expanded in 1999 when the CUNY board voted to end remediation at CUNY's senior colleges. The program was designed to serve students who might not otherwise be able to attend postsecondary institutions and who receive inadequate college preparation in the city's high schools. Most CUNY students are low-income (average family income is \$28,000), most work, and their retention and graduation rates are low even at six years from college entry.¹⁰

The centerpiece of College Now is the opportunity for high school students to take free, credit-bearing college courses. College Now differs from most dual enrollment options in that courses are in a structured sequence with academic supports as needed, rather than at random. All credits are transferable within the CUNY system, but college courses do not necessarily replace high school courses.

In the 2008-09 academic year, 19,404 students participated in the program, with 27,420 "course and activity enrollments."¹¹ College Now models vary, but the largest—Kingsborough Community College with 7,897 college-credit enrollments in 2008-09—offers almost all of its courses in high schools. Other College Now programs offer courses on college campuses.

Student eligibility for credit courses is based on Regents exam scores, high school records, and other measures such as substantial personal advising. The College Now philosophy is to be stringent about admission to credit courses, the rigor of courses, and the standards of exit assessments; but the program provides multiple and widespread opportunities for students to prepare to meet these standards. Some College Now programs also help prepare students for English and mathematics Regents exams and offer noncredit, "developmental" college-preparatory courses.

Dual Enrollment Enhancement Strategies

Long-established and growing dual enrollment programs in Florida, Maine, Utah, Pennsylvania, and other states are expanding early college opportunities and participation incentives to give more students an on ramp to college. The revisions entail building in more academic supports, designating specific pathways that extend from high school through the first years of postsecondary education, and publicizing these opportunities aggressively in communities with low rates of college attendance.

For example, with longtime and extensive participation in dual enrollment, but without a network of early colleges, Florida recently announced new incentives for student participation. Half of each school's grade in the state's accountability system will be based on "the performance and participation of students in Advanced Placement (AP), International Baccalaureate (IB), Dual Enrollment, Advanced International Certificate of Education (AICE), and industry certification."

Maine has a number of dual enrollment initiatives, including the "Aspirations Program" in which the state pays for half and college campuses the other half of tuition for qualified high school students to take college courses in the University of Maine or Community College systems. The University of Maine also oversees a distance learning dual enrollment "Academ-e," and the state's 28 career-technical high schools have agreements with community colleges to

offer dual or articulated credit. Since 2002, the “Early College for ME” program has offered advising and scholarships to high school juniors and seniors for Maine community colleges, and it pays tuition, fees, and books for one to two community college courses for qualified high school seniors.

Such efforts were bolstered by public and private initiatives in the past decade. For example, in 2005 Governor John Baldacci set a statewide goal to increase the number of Maine students attending college that led to expansion of programs like “Early College for ME” which now reaches 74 high schools. Also, the Mitchell Institute, the Great Schools Partnerships, the Department of Education, and the Maine Compact for Higher Education have seeded a number of high school-college partnerships to make dual enrollment accessible to students who would not typically be college bound.

In such states, modest changes in legislation and funding send signals to students and families about the “on ramp” function of dual enrollment.

Light Touch and Local “Try It Out” Strategies

States with no legislation to enable widely available dual enrollment opportunities are inventing creative approaches to getting started with aspects of early college designs. Some states offer a quotient of free college credit to eligible high school students, and some have put a toe in the water by seeding homegrown school-college dual enrollment partnerships with modest grants assembled from multiple funding streams.

Vermont offers a free “College 101” course on all community college campuses. Students who pass the course automatically qualify to take one free college-credit course on a Vermont system campus. Initially, the state offered two free courses but had to scale back when demand was higher than had been budgeted for. In 2008, Ohio created the Seniors-to-Sophomores program, affording every high school senior who meets the academic requirements a chance to spend senior year on a college campus and earn one full year of college credits by graduation at no tuition cost.

While eager for a statewide early college initiative, Massachusetts educators have been building from the bottom up on their own, sometimes using a small and fluctuating pot of dual enrollment funds appropriated by the legislature and managed by the state Department of Higher Education. Local experiments include Amesbury High School which, in partnership with Northern Essex Community College, is targeting students “in the middle,” served neither by compensatory nor gifted programs. High school and college faculty are co-teaching three college courses for tenth graders who are headed toward Associate’s degrees and who will spend all of their education time on the community college campus as high school seniors. The Randolph School Committee approved a program beginning in fall 2011 that allows students to earn a liberal arts Associate’s degree while still in high school. While neither program exhibits all of the features of an early college design—for example, students are charged a reduced fee per credit—they are clearly putting some key pieces in place such as strong student supports.¹² Now with newly acquired Race to the Top funds, the state is planning at least six STEM early college designs. Many states have local examples that could likewise grow into a statewide early college design initiative.

Early College Designs

The U.S. Department of Education’s Interest

The U.S. Department of Education has recognized successful early college designs as potential strategies to graduate more college- and career-ready students. Its Title I School Improvement funding and Investing in Innovation Fund cite both dual enrollment and early colleges as models for states and districts to consider. Two bills introduced in Congress, the Fast Track to College Act and the Graduation Promise Act, would support early college designs and offer a cost-effective complement to the federal government’s Advanced Placement Test Fee Incentive programs.¹³

Moreover, at least 16 states cited activity to support the expansion of early college designs or dual enrollment opportunities in the first round of the U.S. Department of Education’s “Race to the Top” proposals, indicating a confluence of local, state, and federal interest in expanding college-level work in high schools.

PART II. STATE STRATEGIES FOR ENABLING EARLY COLLEGE DESIGNS

PART IIA: PUBLIC-PRIVATE PARTNERSHIPS TO MANAGE EXPANSION OF EARLY COLLEGE DESIGNS

Early college designs that result in measurable improvements in student outcomes require committed leadership and implementation expertise. A state-level entity must “own” the innovation and take primary responsibility for conceptualizing, guiding, and giving practical assistance to the schools, districts, and college partners during the startup period and beyond. This chapter provides information about state-level organizational vehicles needed for putting in place successful early college designs. Subsequent sections focus on ensuring program quality in early college designs; managing the financial resources required for planning, startup, and sustaining the designs; and setting clear goals, measuring outcomes, and reporting results to the public.

INTERMEDIARIES: OWNING AND MANAGING THE EARLY COLLEGE DESIGN INNOVATION PROCESS

States have different approaches to meeting implementation and management needs to support innovative initiatives such as early college designs.

Some states build capacity within a state education agency. For example, Georgia locates its early college high school initiative within the Georgia Board of Regents; Utah and Florida, with longstanding and expanding dual enrollment programs, manage these within their states’ departments of higher education. In its state Department of Education, Minnesota has an Office of Innovation and Center for Postsecondary Success that includes policy and programs for college readiness including dual enrollment.

However, state agencies serve many masters and must be concerned with providing routine services, managing accountability systems, and recommending policies in a wide array of areas. They are not built to have the laser-like focus required for implementing and scaling up innovations. Thus when launching ambitious, new initiatives, some states supplement the education system’s capacity by using outside providers often called “intermediaries” or “inside/outside” organizations. While state education agencies are instrumental in the support of the innovation process, these states have concluded that they can benefit from the extra capacity that partner organizations provide.

Intermediaries operate between the state departments they are assisting and the schools and school districts responsible for implementation. Formed as public-private partnerships, they can be school development organizations, charter management companies, community groups, local postsecondary institutions, or other nonprofits with school improvement agendas. The advantage of using an intermediary organization is that it is nimble, “built for purpose,” and not subject to all the rules necessary to operate in a large bureaucracy.

Intermediaries increase states’ capacity by providing flexibility in hiring staff with appropriate expertise, attracting and managing private resources, and helping to ensure state and district policies enable innovative practice. They are particularly well positioned to provide cost-effective planning and startup support, ensure the consistency of school and program design and implementation, and educate key stakeholders about the role of innovation in statewide education reform.

Whether launched from within a state department of education's office of high schools or from an intermediary managing innovation, major functions include:

- > Organizing and managing the RFP process to select sites for private and state grant funds to launch innovative designs;
- > Organizing postsecondary partnerships to support new districts and schools (e.g., access to college-level coursework, in-kind services);
- > Attracting funds from the philanthropic and business communities and leveraging those with public dollars toward a strategic vision;
- > Creating and ensuring fidelity to school and program design principles;
- > Providing a range of professional development services, including leadership training and instructional coaching to promote college-ready instruction;
- > Carrying out site visits to support implementation and troubleshooting, especially during the planning and start-up period;
- > Coordinating and convening networks of similar schools to share knowledge and resources;
- > Defining a set of student performance standards that ensure that all students will achieve a college-readiness standard by completing some college-level credit in high school;
- > Collecting data and carrying out research to extract learning from schools sites that can be transferred to other environments and make results transparent; and
- > Marshaling external support and educating policymakers about the policies needed to support new schools.

SNAPSHOTS: TWO STATEWIDE INTERMEDIARIES

North Carolina and Texas, the two states that have implemented the largest number of early college designs, have done so through public/private partnerships. Leaders in North Carolina and Texas, in conjunction with local and national private funders, created the North Carolina New Schools Project (NCNSP) and the Texas High School Project (THSP) to organize the numerous and complex processes involved in school development.

These state-level intermediary organizations have proven to be effective vehicles for spreading innovative school designs, each opening more than 100 high schools since their inception in 2003. These schools include early college high schools, emerging district-led early college designs, STEM schools, and charter schools, as well as the redesign of large, low-performing high schools. By leveraging the resources of state and local government, higher education partners, and philanthropic and business supporters, NCNSP and THSP have opened and sustained a critical mass of high schools that show promising results preparing underserved populations for postsecondary education. While they share similar functions and benefits, NCNSP and THSP are distinctive in the way each originated, their organizational structures, and their services to schools.

NCNSP: A Snapshot

- > A 501(c)3 with an independent board of directors
- > Opened 70 “Learn and Earn” early college high schools
- > Restructured large, traditional, low-performing high schools to create 43 new, autonomous small schools across 25 campuses
- > Facilitates the competitive RFP process for schools, with authority for and approval of awards resting with the State Board of Education
- > Provides regular reports about the schools to the State Board of Education and General Assembly
- > Collaborates with the state education agency, the North Carolina Department of Public Instruction
- > Includes some staff who are state agency employees on permanent assignment, managed by the project but officially employed by the state

Discussions about systemic high school reform began around 2000 when North Carolina was reeling from the loss of 250,000 manufacturing jobs. These economic conditions created an imperative for educational reform. The Governor's Office began working with the Bill & Melinda Gates Foundation on the concept of a public-private partnership that could spread economic development-themed high schools statewide. In 2003, the General Assembly passed the Innovative Education Initiatives Act, which supported innovative high schools and urged the state's Education Cabinet to pursue private funding.

That year, NCNSP was incubated as a subsidiary of the Public School Forum of North Carolina, a policy think tank. In 2005, NCNSP spun off into a 501(c)3 organization. The early college high school design, which enables students to earn one to two years of college credit or an Associate's degree while still in high school, had become central to then-Governor Mike Easley's reform agenda. NCNSP was central to realizing this vision.

Funding: NCNSP began with an \$11 million investment from the Gates Foundation, with matching funds from the General Assembly. The state provides additional support by allocating staff positions from the Department of Public Instruction to NCNSP. With major accomplishments and excellent results from the schools, NCNSP is now in a position to diversify its funds, even as Gates Foundation funding for new school development comes to an end and state funds become more limited.

Governance and Accountability: NCNSP facilitates the competitive RFP process for schools, but authority for and approval of awards rests with the State Board of Education. Additionally, NCNSP must provide regular reports about the schools to the State Board of Education and General Assembly. NCNSP has a collaborative relationship with the state education agency, the Department of Public Instruction. For example, some NCNSP staff are state agency employees on permanent assignment (i.e., managed by NCNSP but employed by the state).

Significant actions include:

- > Creating a comprehensive, integrated set of school support services at the state level, including leadership training and coaching for teachers on how to implement a college-ready instructional program;
- > Securing policy waivers that give innovative schools more autonomy such as flexibility from seat-time requirements and the ability to grant students credit both toward college and non-elective high school graduation requirements; and
- > Convening professionals from across the network at a summer institute and sending them to learn from schools across the country.

THSP: A Snapshot

- > Privately-managed resources overseen by an executive director and staff employed by the Communities Foundation of Texas, one of the nation's largest community foundations, in terms of total assets, gifts received, and grants awarded
- > Operates as an alliance among the Texas Education Agency, the Governor's Office, the Texas Legislature, the Texas Higher Education Coordinating Board, the Bill & Melinda Gates Foundation, the Michael & Susan Dell Foundation, the Communities Foundation of Texas, and other local foundations
- > Opened more than 221 new or redesigned schools, including 44 early college high schools, 51 STEM (Science, Technology, Engineering, and Math) schools (5 of which are blended ECHS-STEM models), and high-performing charter schools
- > Coordinates activities through an advisory committee of alliance members, focusing on strategy and aligned funding

The Texas High School Project (THSP) began in 2003 as a public-private alliance among the Governor's Office, Texas Education Agency (TEA), and the Gates Foundation, housed within a major local philanthropy, the Communities Foundation of Texas (CFT). Since then, the partnership has added other local foundations and corporate members. Unlike NCNSP, which is a standalone nonprofit organization, THSP operates as an umbrella alliance coordinated by a preexisting nonprofit—CFT.

Funding: THSP got off the ground when the Texas Legislature appropriated \$60 million in funding for high school completion and success initiatives and that funding was matched by \$60 million in investments from the Bill & Melinda Foundation and the Michael & Susan Dell Foundation. CFT manages the partnership's private funds, while the TEA oversees public funds. To date, THSP has secured \$222.5 million in state and federal funds and \$154.9 million in private funds.

Governance and Accountability: In its early days, THSP was a fairly informal, relationship-based alliance, but it has taken steps to formalize its structure and communications. For example, in 2007, THSP shifted its decision-making body from a steering committee to an advisory committee. CFT and TEA have taken care to distinguish the authority over and investment of public and private funding streams, even as they leverage both sources of funding toward a shared strategic vision.

Significant actions include:

- > Updating the THSP strategy to develop practical insights and proven solutions, based on the success of reform models, in four major impact areas: learning systems; teacher effectiveness; education leadership; and performance management;
- > Coordinating the development of new regional curriculum resource centers for STEM schools, many of which are early college designs;
- > Building a comprehensive data system to connect Big 8 urban districts and provide teachers with real-time information on student outcomes; and
- > Identifying "exemplar" programs that use innovative instruction to serve high-need students, and funding these programs to document and share their expertise.

PART IIB: ENSURING COLLEGE-LEVEL QUALITY IN HIGH SCHOOLS

How can we be sure that college-level courses taught in high schools match the quality of traditional college courses? This question strikes at the heart of public scrutiny when a state proposes to expand opportunities for all high school students to take college classes, especially when the students are from backgrounds underrepresented in higher education. Parents, educators, and policymakers share concerns about the integrity and authenticity of dual enrollment courses. Nobody wants to endorse a program that could be viewed as “college lite.” Nor do they want to set up young people who have weak academic preparation for college to fail in their first attempts at true college-level work.

Principles For Ensuring Quality

Standards of Quality: Ensure that course content, student assessments, and instructor qualifications meet college standards.

Eligibility Criteria: Establish eligibility policies that permit students to take college-level courses in individual subject areas for which they are prepared, based on multiple measures of readiness in those areas.

Design Integrity: Ensure that early college designs are implemented with fidelity to critical design features that are required to ensure student readiness for college-level coursework by the eleventh grade.

Quality assurance requires strong partnerships with postsecondary institutions that can assist in monitoring course content, student assessments, and instructor qualifications—and advising on improvements as needed. It also requires strict but multidimensional eligibility guidelines that allow students to take college courses in specific subjects as they prove that they can handle work in those areas. As for preparing students for college-level work, it requires basing the early college design on proven practices from early college high schools and other accelerated college-prep approaches.

Depending on the governance structure of the higher education system, states can incorporate quality control mechanisms into state law or regulations or mandate that high schools and their postsecondary partners have such mechanisms but leave the specifics to the systems or institutions within guidelines. States also may want to mandate that the entire dual enrollment program be reviewed and evaluated periodically. Utah requires this every five years (*see box on page 20*).

STANDARDS OF QUALITY

Ensure that course content, student assessments, and instructor qualifications meet college standards.

In early college designs, college-course taking can happen on a college campus, or it can take place in a high school taught by a qualified high school teacher, a visiting college professor, or an adjunct faculty member. In courses on campus, high school students take classes with “regular” college students, with all students meeting the same standards. But even courses taught in high school must meet such standards. States must guarantee the integrity of college courses taught in high school. This includes ensuring that the public does not perceive any courses completed by high school students as “college lite.”

How Utah’s Dual Enrollment Program Ensures Quality

Utah has a longstanding and large dual enrollment program. (The state uses the term, “concurrent enrollment.”) Administered by the Board of Regents, the program rules include both suggestions and requirements for maintaining quality, influenced by the National Alliance of Concurrent Enrollment Programs. A primary goal is to “assist students towards post-secondary degrees.” Courses are limited to core subjects and most are taught by high school teachers during the high school day: English, mathematics, fine arts, humanities, science, social science, and world languages, in addition to courses within the career and technical education program. Career and technical education courses include a variety of subjects such as finance, business, computer studies, and “hands-on” courses like woodworking and auto service.

Entry Requirements: To predict a successful experience, the requirements for taking college-level courses may include, among others: junior or senior standing, sophomores by exception; grade point average, ACT score, or a placement score that predicts success; supportive letters of recommendation; and approval of high school and college officials.

Faculty Preparation: Concurrent enrollment faculty must attend adjunct faculty orientation as specified by the sponsoring institution of higher education. In addition, faculty must attend in-service training during the year as specified by the institution. This training includes curriculum design, assessment criteria, course philosophy, and administration requirements.

Assessment of Educational Quality: Utah has instituted assessment tools to ensure that students receive a quality, college-level education when enrolled in dual enrollment programs. The measures include site visits by university departmental representatives and concurrent enrollment personnel at least once a year. Student surveys are also required.

Under the “Statement on Performance and Outcomes” by the Utah System of Higher Education and the State System of Public Education, concurrent enrollment staff are to “conduct a study of the impact and effectiveness of the concurrent enrollment program [every five years]. The evaluation should include college faculty, participating high school instructors, principals, and guidance counselors. The study data—excluding confidential personnel matters—will be shared with the concurrent enrollment task force.” Staff also must “conduct a follow-up study of concurrent enrollment participants who are enrolled or have been enrolled in a college to track their performance. . . . Other research will be done as necessary to ascertain the effectiveness of the program.”

For more information, see <http://www.rules.utah.gov/publicat/code/r277/r277-438.htm>. Also see “Statement on Performance and Outcomes” (Utah System of Higher Education n.d.).

Quality assurances are important for two main reasons. First, students must learn and internalize the habits of mind, behaviors, and knowledge expected of them in college. Early success with actual, authentic college-level work helps students believe they can go to college and graduate (Karp 2006). Second, a course must prepare students for the next *college* course in the sequence—for example, to enter General Biology II, once matriculated in college after taking General Biology I in high school.

States considering imposing standards to address the quality of courses taught in high school might find it useful to review the National Alliance of Concurrent Enrollment Programs accreditation standards and NACEP’s recent report, *Promoting Quality: State Strategies for Overseeing Dual Enrollment Programs*. While NACEP limits its focus to college courses taught in high schools by “trained high school teachers,” the quality-control mechanisms they review can be applied more broadly. The NACEP standards have influenced regulations in a number of states.¹⁴

College courses taught in high schools should match the comparable courses taught on the college campus.

At a minimum, a course must use the same syllabus, assignments, and end-of-course exams as the comparable course taught on campus. A stronger quality-control mechanism, which also would encourage better secondary-postsecondary alignment, would be to require that a college professor visit the high school classroom regularly to review student work and suggest improvements. Alternatively, high school teachers could send student work samples regularly to a college faculty member who would compare their quality and academic demands to those in the comparable college course.

The postsecondary institution conferring credit should set the qualifications for faculty.

Most colleges require instructors, including adjunct faculty, to hold at least a Master’s degree in the content areas they teach. Some states reinforce these expectations in law or regulations, specifying that adjunct instructors teaching dual enrollees must have the same qualifications required of full-time college faculty.

Set clear expectations and provide support for high school-college faculty collaboration and training.

A few states require or recommend an orientation for faculty teaching dual enrollment courses. For example, high school teachers can prep college faculty on pedagogies appropriate for younger students, while faculty can provide insight into course alignment, writing expectations, and the like. Some dual enrollment programs pair college and high school faculty as co-teachers for some portion of a course. This helps align expectations and content between high school and college courses in similar subjects, and symbolizes the commitment of the partners to mutual responsibility for student success.

ELIGIBILITY CRITERIA

Establish eligibility policies that permit students to take college-level courses in individual subject areas for which they are prepared, based on multiple measures of readiness.

Strict yet multidimensional eligibility policies are critical to the success of early college designs. Students must be able to accelerate toward college-level work in subjects for which they are prepared as soon as they show they are proficient. Because of public skepticism about whether low-income students can succeed, the state should underscore publicly that the goal of dual enrollment is to increase preparation for college and lower the need for remediation. Programs should not put underprepared students into remedial courses or assign students to credit-bearing courses before they are ready. Providing the public with data on student success in dual enrollment courses can build confidence about students' motivation and capacity to succeed (see *Part IVD, Setting Goals, Measuring Outcomes*).

In such a proficiency-based design, policymakers face important choices about what academic standards students must reach to become eligible for college courses—and how the state can ensure that all eligible students have the opportunity to take them. These choices entail fresh thinking about what it means to be eligible for college-level work in high school. It can not be a matter of meeting full-time college student admissions requirements, nor can it be lowering standards for doing college-level work. Rather, schools implementing early college designs must develop fair and precise ways to assess when students are fully prepared for college coursework in specific areas, and then encourage them to accelerate in those subjects.

There are multiple ways to demonstrate readiness, rather than a single, state-mandated test.

Many states require that high school students seeking to take college-level courses attain the same score on a standardized placement test (e.g., ACCUPLACER, COMPASS, an institution's own test) as any student matriculating into a college. This is a reasonable requirement: such assessments generally measure readiness for college courses in reading, writing, and math.

A placement test can also serve as an early assessment to identify students who are ready for college-level work and those who need targeted support in order to prepare. For this purpose, tests are generally given in grades 10 or 11. California State University's Early Assessment Program began with such a testing strategy and grew into a high school/postsecondary collaborative preparation initiative.

Although placement tests are useful, states and institutions would be better served by going beyond a single score, which gives limited information about readiness. Supplemental assessments could include end-of-course high school exams, portfolios of student work in the subjects students want to study in college, and teacher or principal recommendations. A student wanting to enroll in college composition might submit an essay including drafts and a final version, along with an essay showing that she has reviewed the college composition syllabus and has assessed herself as ready to meet the challenge. Schools can also consider non-cognitive dimensions of college readiness (e.g., maturity, study habits, resilience in challenging tasks, leadership qualities). Some students may be prepared academically for college-level work but not ready in other ways; this is useful to know. States also might create a composite "dual enrollment index" that assigns values to GPA, exit exam scores, and placement test scores; and requires a minimum index for dual enrollment.

High school students can enroll in a college course based on meeting the prerequisites for that course.

Students need not meet all high school graduation requirements or overall college-admission standards in order to take college courses. Cumulative GPAs, combined SAT scores, and similar measures are blunt and imprecise, especially when considered alone. Assessments should be transparent and specifically tied to the expectations of the particular college course that students seek to access. For example, a student with mediocre math scores should be able to qualify for college composition if she is proficient in English language arts.

Other steps to provide equitable access

Access to early college credits can only be expanded so far unless strategies are in place to ensure that more students become prepared for college-level work. This is why comprehensive early college designs are integral to any state strategy for expanding high school access to college work. By virtue of attending an early college school, all students are in a course of study that prepares them to take college courses by grade 11 or 12. But achieving the vision promoted here—that all high school students have the opportunity to graduate with at least 12 college credits—is a multistep, multiyear process for any state or district.

During the development process, states should:

- > Target districts that serve substantial numbers of students from groups underrepresented in higher education, with a planning for phasing in all districts over a period of years; and
- > Require that all students be informed of college-course taking opportunities as early as the ninth grade and certainly in the year before students become eligible. Critical information includes eligibility requirements, costs, and the pros and cons of generating a college transcript while still in high school.

DESIGN INTEGRITY

Ensure that early college designs are implemented with fidelity to critical design features to ensure student readiness for college-level coursework by the eleventh grade.

To ensure that students can succeed in the “stretch goal” of attaining 12 college credits, states should be prescriptive about a limited number of core features of effective early college designs, while leaving ample autonomy to districts and their schools. This section suggests that states require three essentials that are found in all strong schools: a focus on math, reading, and writing achievement; instructional strategies that are consistent across a school; and an array of student supports.

State strategies for promoting these essential practices include the RFP process, training services, and data and reporting requirements—key functions that are optimally fulfilled by public-private partnerships (see *Part IIA*) but that should be fulfilled however organized. Another strategy is for states to construct a “designation” process for early college designs. The primary focus of this chapter, however, is to explain why certain features are essential to the success of early college designs.

To further explore these basic features, early college designers can also look to proven practices. Codified practices and tool kits from exemplary schools and school networks are available from: JFF’s clinical site, the University Park Campus School Institute in Worcester, Massachusetts; the North Carolina New Schools Project; the Texas High School Project; the Middle College National Consortium; the Foundation for California Community Colleges; and the Woodrow Wilson National Fellowship Foundation.

Require or strongly suggest that all early college students prepare for and take college math and English language arts in high school.

Among the key markers of college readiness are appropriate achievement in high school math and English and passing credit-bearing college math and English composition within the first year of postsecondary education. These strong predictors of college completion are also the target of standards and curricular alignment required for college and career readiness. They are often called the “gatekeepers” because students must pass them to move on to higher-level classes. Requiring these courses will also provide a “backward map” for high school curriculum planning.

Early College Designs in Practice: Powerful Teaching and Learning

The North Carolina New Schools Project

NCNSP has five design principles, each with indicators and evidence to guide to school leaders. Here is one example:

- > All teachers adopt a common instructional framework based on best practice to ensure a coherent and consistent student learning experience.

Evidence for this indicator may include:

- > Teachers and students use a common vocabulary and set of practices and strategies school-wide (e.g., project-based learning, inquiry, differentiation).
- > School-wide learning/graduation outcomes are incorporated into all areas of curriculum and assessment and exceed state accountability testing by being based on 21st-century skills (*see www.21stcenturyskills.org*).
- > Standards-based team teaching, cross curricular projects, and/or integrated courses are expected in all subjects.
- > Students actively explore, research, and solve complex problems to develop a deep understanding of core academic concepts.
- > Literacy is emphasized across content and grade levels, helping students learn to read, write, and think in every class every day.

SOURCE: <http://newschoolsproject.org/page.php?p=3.1>

University Park Campus School

Jobs for the Future uses the University Park Campus School in Worcester, Massachusetts, as a “learning laboratory” to train school developers, leaders, and teachers to implement the proven instructional and leadership practices that have made UPCS into a national model. Teachers at the school use engaging, literacy-rich strategies in their classrooms and design lesson and unit plans that feature rich performance tasks aligned with college-readiness standards. Here are the key UPCS strategies:

- > **Write to Learn:** Writing is thinking. Most UPCS lessons are based on writing-to-learn or low-stakes writing activities that students use to develop and show understanding in all classes. The process of writing forces students to think about a topic in new and deeper ways. Low-stakes writing strategies are means through which students can develop confidence, reach understandings, and demonstrate learning prior to high-stakes tests and writing assignments. Consequently, writing activities are used in all classes to encourage critical thinking and help students clarify their own ideas. Also, written explanations enable teachers to assess students’ levels of comprehension.
- > **Emphasize Student Collaboration/Community:** Students take a collective responsibility for success. Helping peers understand material is an essential part of the student culture at UPCS. All classes emphasize group work. All students are accountable for contributing to the final product.
- > **Clear Expectations and Student Ownership of Learning:** Students are expected to be active learners and, as such, they are taught to monitor and evaluate their own academic habits and progress. Teachers make behavioral and academic expectations clear by creating detailed syllabi, making the rationale for each activity clear, and grading according to standard rubrics.
- > **The Onus of Learning Is on Students:** Ownership of learning is fostered in multiple ways: by explicitly teaching organization and time-management strategies, by making learning objectives explicit, by requiring frequent self-assessment, and by placing students in charge of meaningful decisions and responsibilities.
- > **Differentiated Instruction Engages and Challenges All Students Appropriately:** To reach UPCS’ goal of preparing all students for success in college, instruction has to be differentiated. Teachers begin where the students are, engage students through a range of learning modalities, by appealing to differing interests, and by using varied rates of instruction and varied degrees of complexity. Teachers work diligently to ensure that struggling, advanced, and in-between students think and work harder than they meant to, and achieve more than they thought they could.
- > **Balance High-Level Work with Skills Practice:** Getting students to meet college standards means balancing high-level work with skills practice on a regular basis. Students who enter UPCS are typically below grade level. The seventh- and eighth-grade courses accelerate students’ learning to prepare them for the college preparatory curriculum in grades 9 through 12. The “catch up” curriculum is not typical skill-and-drill remediation, however; it provides students with a balance of skills practice and rich lessons that engage their thinking in the disciplines.

continues on page 24

- > **Learning through Inquiry:** Courses engage students in the core thought processes of each discipline. Students adopt identities as young writers, historians, scientists, and mathematicians and participate in the central activities of each field.
- > **Implement Varied Assessments:** Rigorous instruction is supported by constant and varied assessments of learning. Teachers use low-stakes and formative assessments to evaluate student learning, constantly adjusting their instruction accordingly. A variety of high-stakes assessment strategies are used to ensure that students of all learning styles have the opportunity to showcase their learning.
- > **Embed State and College Standards in the Curriculum:** Instruction to state standards is not an add-on; it is part of the regular curriculum. Teachers regularly review Massachusetts standards to ensure that the curriculum addresses all required content and skills. Math and English teachers use MCAS questions and MCAS-aligned assignments throughout their courses. They have adapted MCAS rubrics for student writing across the disciplines. Content in upper-level courses is to prepare students for AP test or freshmen level coursework at the school's partner college, Clark University.

SOURCE: <http://www.UPCSIInstitute.org>

Pay attention to instructional strategies.

An important function of state government in the expansion of early college designs is to ensure implementation and support for core instructional strategies. Whatever organizing entity a state uses to develop early college schools or districts, it should require consistent instructional strategies across all schools. The state should also monitor whether strategies are in place and report on evidence of their effectiveness.

Perhaps the most critical characteristic of good instruction is that students experience a common literacy-rich approach to teaching and learning that is reinforced in every classroom. Such consistency requires strong instructional leadership and collaboration across a school, often under the guidance of a coach and with a schedule that includes common planning time. In a consistent, literacy-rich school, students explain how they solve math problems using the same writing techniques that they would use in English language arts or history. Students write in all their classes and there is explicit practice in reading a variety of texts, including original sources, textbooks, scientific reports, and literature. (See the box on page 23 for several examples of powerful teaching and learning.)

Academic and social supports must be in place from the day students enter an early college high school.

Supports cannot be used as reactive strategies to be implemented only after students start to fail. Rather, supports must be preemptive in order to build students' confidence and skill. While state policy is unlikely to specify what types of supports must be in place, it can and should require that comprehensive supports be available to every student, and it can suggest the kinds of supports that appear to be most effective.

Early colleges have implemented many kinds of embedded student supports that are integrated into classroom learning plans rather than added on once students are in trouble. Among these are: "skills for success" classes, advisories, writing- and reading-intensive seminars, and extended learning time.

Skills for Success Classes: Often called "College 101," these courses help students develop academic behaviors and contextual skills such as: note-taking strategies, research design, study skills for different disciplines, and managing a large volume of reading. The courses also may address broader college topics such as financial aid, course major requirements, accessing various students services, and financial literacy. Many successful schools use formalized research-based and widely tested support programs such as AVID (Advancement via Individual Determination: <http://www.avid.org/>) or supplemental instruction (<http://www.umkc.edu/cad/si/>).

Advisories: Many schools institutionalize support classes into the school day. In these meetings, called "advisories," students typically are in small groups guided by an adult who knows them. These advisors consider personal issues related to learning such as how to study in a noisy household and how to deal with deadlines. Advisories also provide teachers with practices for monitoring and supporting students' academic progress and college and career readiness throughout high school. The emphasis is on relationships, coaching, and facilitation—an agenda driven by student needs and realities rather than subject matter content alone. Advisories also help students learn about college, visit campuses, understand postsecondary majors and career areas and, in the case of early college designs, explain college expectations, appropriate classroom behaviors, and how to use college services.

Early College High School Designation Process

The case of Texas illustrates how prescriptive a state initiative may need to be when developing early college designs.

Texas early college high schools have access to professional development and coaching, and are eligible for policies and programs that support the unique early college design (e.g., a lift on some dual credit restrictions, use of the Optional Flexible School Day). Other Texas schools calling themselves early college high schools wanted these benefits as well, but not all conformed to the intended early college high school design or served the target population of underrepresented students.

Starting in 2008, the Texas Education Agency, in a process jointly administered with the Texas Higher Education Coordinating Board, has asked schools wanting to use the label “early college high school” to apply for a special designation that is designed to maintain the integrity of the model. Applicants must provide evidence of the student population targeted and served, the roles and responsibilities of the district and college partners, the rigor of the program of study and curricula, the structure of supports that ensure students can complete 60 college credits, and staffing qualifications and structures for collaboration.

The TEA created two levels of recognition: *designated* and *provisionally designated*. Schools that have been in operation for at least two years and have addressed all of the required design elements are eligible for designation as an early college and receive the associated benefits. Schools that have been in operation for less than two years or are in the process of fulfilling the required design elements are eligible for provisional designation.

SOURCE: <http://ritter.tea.state.tx.us/taa/stateinit022210.html>

Extended Learning Time: Many charter schools and some traditional public schools use time flexibly and have established a longer-than-typical school day as well as the use of summer time. These models enable students to get deeper into their studies, engage in enrichment activities, and even do their homework with teacher support. Massachusetts is the only state with a funded program to expand learning time (it is being piloted in 34 traditional public schools and 43 charter schools, a number of them high schools). However, the trend is spreading from charter schools to underperforming district schools. In 2009, 655 schools across the country gave students an average of 25 percent more time than the standard six hours a day, 180 days a year, according to the National Center on Time & Learning.

PART IIC: FINANCING EARLY COLLEGE DESIGNS: A COST-EFFECTIVE, SCALABLE APPROACH

This chapter focuses on what states can do to encourage local colleges and school districts to expand and sustain early college designs. A central challenge to overcome is that finance systems for secondary and postsecondary education are organized to be separate and discrete—built with the assumption that only one sector is responsible for a student’s education at any given time. In contrast, early college designs promote joint responsibility on the part of secondary and postsecondary institutions for the preparation and success of students from grades 9 through 14—in part by the promise of free college credit and the support systems needed for students to take advantage of that promise.

Principles for Financing Early College Designs

- > **Hold Harmless:** Secondary and postsecondary institutions are compensated for each student’s education in such a way that each is “held harmless” for jointly creating pathways with the academic, social, and financial supports to ensure that all students complete key college courses by graduation.
- > **Flexible Strategies:** School districts and colleges may use ADA (Average Daily Attendance), FTE (Full-time Equivalent enrollment), and other state funding flexibly to pay for college courses delivered in a variety of ways that substitute for high school graduation requirements, freeing up resources that can be reinvested in student supports.
- > **Startup Funding:** Funding from complementary college readiness, access, and success programs (e.g., Gear Up; state financial aid programs) may be used to support startup and ongoing costs or to subsidize tuition in high-tuition states.

States need to encourage the flexible use of per-pupil enrollment funding and special purpose programs so that high schools and colleges have incentives to partner for the purpose of starting and sustaining early college designs. And dual credit policies should encourage early college partnerships to substitute, as appropriate, college courses for high school courses; this can reduce duplication and result in efficiencies that can be reinvested into student supports and used to expand early college designs to more young people.

**HOLD HARMLESS:
INCENTIVES FOR K-12 AND POSTSECONDARY**
Secondary and postsecondary institutions are compensated for each student’s education in such a way that each is “held harmless” for jointly creating pathways with the academic, social, and financial supports to ensure that all students complete key college courses by graduation.

States typically provide enrollment-based funding to school districts and colleges as a supplement to local revenue. We refer to this funding, known by a variety of names, as ADA (Average Daily Attendance) for K-12, and FTE (Full-time Equivalent enrollment) for college. To varying degrees, states allow districts and colleges to claim ADA and FTE funding for dual enrollment students. For example, some states permit both schools and colleges to claim full funding for these students, just as they would for any enrolled student. Some permit only one or the other institution to claim funding for dual enrollees. In other cases, states deduct full or partial ADA funding from K-12 systems to pay for the college tuition and fees of dual enrollees.

States that provide partial funding for dual enrollment courses typically are concerned that paying both institutions for dual enrollees is essentially paying twice for the same service. This rationale is consistent with the original purpose of many dual enrollment programs: to provide accelerated work for advanced students or enable those who have exhausted advanced course options at their high schools to take college courses. The assumption is that when advanced students can no longer benefit from the services provided by their high school, the state should redirect funding toward institutions that can meet their needs. High schools in these states have often tried to compete with colleges for such advanced students by offering Advanced Placement courses.

However, the purpose of dual enrollment in early college designs is not to supplement high school programming or accelerate already advanced students. Rather, it is a way for school and college partners to better serve underrepresented students. It integrates substantial college coursework into the high school curriculum and develops the academic, social, and financial supports they need to progress through high school and into college.

Dual enrollment financing that promotes early college designs provides incentives for high schools and colleges to share responsibility for underrepresented students, rather than to compete for advanced students. An important incentive is so-called “hold harmless” funding for schools and colleges that engage in these partnerships: districts receive ADA funding for dual enrollees, and colleges receive FTE funding for the same students. This supports the partnerships in covering the unique costs of dual enrollment in early college designs (see *box below*).

The Unique Costs of Dual Enrollment in Early College Designs

There are additional costs beyond the expenses of traditional course delivery when high schools and colleges partner to provide dual enrollment courses. These including covering the cost of:

- > Aligning secondary and postsecondary expectations for students, creating a coherent sequence of high school and college courses to meet general education or career requirements;
- > Providing academic and social supports for students to accelerate to and succeed at college-level work; and
- > Removing cost barriers for low-income students such as by providing the courses tuition free and paying for books or other fees.

Although this funding model requires a larger investment than the zero-sum alternatives, a state recovers the costs—and more—based on several benefits. If students in these pathways graduate better prepared for postsecondary education and have a head start on the crucial first year of college, states will be spared the costs of remediation and the wasted investment in students who drop out of high school or college. In other words, funding that encourages high schools and colleges to provide the joint support that gives students early momentum in college represents a down payment on students’ college success. With the help of school finance experts Augenblick, Palaich, and Associates, JFF has developed a cost-to-degree completion calculator that estimates this return on a state’s investment.¹⁵

FLEXIBLE STRATEGIES:

PROMOTING A COST-EFFICIENT MIX OF COLLEGE COURSES

School districts and colleges may use ADA, FTE, and other state funding flexibly to pay for college courses that substitute for high school graduation requirements—freeing up resources that can be reinvested in student supports.

Early college designs make efficient use of existing resources when state policies provide sufficient flexibility. Allowing college courses to be used for dual credit is one example. Another is permitting state funding to be used to pay for college courses delivered in a variety of ways.

Allow dual credit.

To the extent that states allow college courses that cover and surpass K-12 standards to be dually credited, high schools can save resources by offering fewer courses themselves. This can be especially efficient for advanced courses or specialized, elective course offerings. High schools can reinvest the savings in supports: having teachers coach students in the knowledge and skills needed for college success. Catch-up and support strategies include extended-

day instruction, summer bridge programs, and college foundation skills courses. Teachers can also support students taking college courses through college seminars or “wraparound courses” that provide students with supplemental instruction and study strategies.

To illustrate the potential efficiencies of dual crediting for selected high school course work, consider this scenario. As part of their high school course of study, 160 juniors and seniors in an early college school take college courses to fulfill laboratory science requirements for high school graduation. The school pays a \$100 per credit fee, per student to the partnering college for these courses. As illustrated by the chart, the school would pay substantially less to deliver these courses than if it paid the two full-time science teachers who would be needed (assuming an average teacher salary of \$65,000). It could use these savings to pay a full-time teacher to support students taking these lab courses and still have additional funding to dedicate toward other resources.¹⁶

Number of Students	Cost as High School-Credit-Only Course	Cost as Dual-Credit College Course	Potential Savings
Grades 11 and 12 Lab Science, 160 students	2 FTE teachers = \$130,000	Fees for 4-credit class (\$100 per credit x 4 credits x 160 students) = \$64,000 1 FTE high school teacher to offer support in science = \$65,000	
Totals	\$130,000	\$129,000	\$1,000

Enable high school teachers to qualify as college faculty.

An efficient way to deliver college courses is for high schools to use their own teachers (those who hold the qualifications to be designated as adjunct faculty by the partnering college). This uses existing high school resources and eliminates the need for transportation. The partnering college can use FTE funding to support orientation and professional development for these teachers.

There are generally no policy barriers to funding this type of course delivery.¹⁷ However, mechanisms must be in place to ensure the quality of these courses and avoid perceptions that they are watered-down versions of college-level work (see *Part IIB for strategies to ensure quality*).

Provide college faculty with per-course stipends.

Another efficient form for delivering college courses is to have a full-time college faculty member teach a course composed exclusively of high school students, with the class offered on either a high school or college campus. In these arrangements, the school and/or college typically pay instructors based on a per-course stipend, which can be less expensive per student than paying a rate based on tuition or fees.

For example, South Texas College partners with the Hidalgo Independent School District in an early college high school. The college offers a stipend of \$1,900 per course to full-time college faculty to teach additional dual credit courses for early college students (Santos & Goldberger 2009). For a 30-student class, the cost per student is roughly \$63. This is far less than the \$252 tuition for a three-credit course that the college charges at “in-district” resident tuition rates.

Remove impediments to flexibility.

To promote dual crediting and the range of course arrangements necessary to replicate and sustain early college designs, states may need to remove policy barriers and engage key stakeholders.

For example, some states inadvertently restrict the use of ADA funding in paying for college courses. Attempting to ensure that instructors of high school students have appropriate certification, California requires that courses be taught under the direct supervision of a certified teacher from the district. This prevents schools from using ADA funding to pay for college instructors.

In addition, when college instructors teach courses for dual credit, high school teachers and their collective bargaining units may become concerned about protecting jobs. To counteract this, teachers and unions must be engaged early so they understand the goals and benefits of early college designs and how their roles can change to improve students’ high school and college success. The state may need to clarify whether policies allow college teachers to teach college courses that count toward high school graduation requirements and remove any barriers.

Early College Designs in Practice

How College-Ready, Dual Enrollment Financing Promotes Early College Designs in Texas

Texas provides several funding streams to support the development of dual enrollment course offerings, including early college high schools. Both high schools and their partner colleges receive per-pupil funding for each dually enrolled student, while high schools receive an additional \$275 per pupil to help students reach college-readiness standards. Early college high schools can integrate significant college coursework into their curricula without financial penalty to the institutions or their students.

Both El Paso Community College and South Texas College are taking advantage of the favorable Texas policy landscape to sustain and expand their early college high school clusters, with each pursuing a different approach.

El Paso Community College, which partners with four early college high schools and has two more in development, uses qualified high school faculty to deliver college courses at the high school in order to make the program financially sustainable and feasible on a broad scale. EPCC grants adjunct status to these instructors, but their local school districts pay them as part of their regular salaries. The college also offers online classes in which high school teachers facilitate computer-based instruction that a college faculty member leads remotely, from the college campus.

South Texas College has a similar cluster of early college high schools, but its four partner schools use a blended design to deliver dual enrollment courses, with extensive use of college faculty in addition to high school instructors. STC charges school districts a small fee for every course its faculty deliver; these fees supplement state per-pupil payments to the colleges. In addition, the college keeps faculty costs low by using instructors who already are teaching a full load and gives them stipends for taking on extra courses. STC also aligns dual enrollment college courses with high school AP courses, using both high school and college faculty to teach them. This also allows the college to use state high school textbook funding.

SOURCE: Santos & Goldberger (2009)

The college experience is essential for high school students, regardless of where their college-level courses are taught.

Early college schools must be able to enroll students in some quotient of courses on the college campus. When college courses are offered on the high school campus, students may learn college-level academic content and skills, but they do not receive exposure to the college environment that can help them anticipate what to expect in college and develop an innate sense of themselves as college students.

Unless it is a course designated for groups of high school students, courses on college campuses can be more expensive because colleges may view reserved spaces in regular courses as lost tuition revenue and seek to recoup it. Also, there are added costs of transporting students to the college campus if the high school is not located on the college campus. For this type of college course, states should provide school districts and colleges with the flexibility to negotiate a tuition rate that meets local needs.

STARTUP FUNDING

Funding from complementary college readiness, access, and success programs (e.g., Gear Up; state financial aid programs) may be used to support startup and ongoing costs or to subsidize tuition in high-tuition states.

Creating early college designs requires planning and startup costs (see *box on page 30*). In some cases, states have created partnerships with philanthropy and business to leverage public and private funds for investing in initiation of these pathways. In any case, some public investment is necessary if a state seeks to reach substantial numbers of students with these strategies.

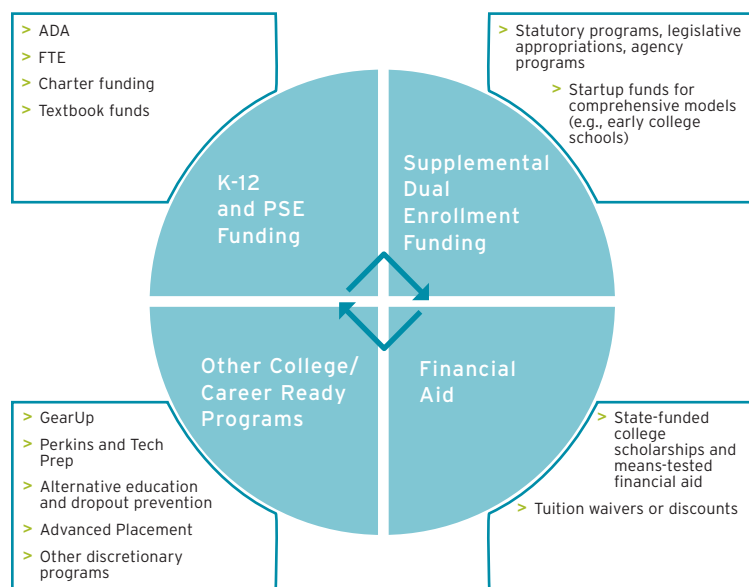
In addition, state FTE funding may represent a small proportion of revenue for some colleges (e.g., four-year colleges; high-tuition state systems). Even if they receive FTE funding for dual enrollees, they may face more challenges in offering college courses to high school students in early college designs. Supplemental funds may be required in states that want to involve these colleges as partners in early college designs.

Examples of Planning and Startup Costs for Early College Designs

- > Hiring a principal and staff if the early college design is a whole-school design (e.g., early college high schools)
- > Designing the curriculum and sequence of courses in collaboration with high school teachers and faculty from the partner college
- > Educating students, parents, and the community about early college designs, and recruiting them to participate if the pathway is a standalone school
- > Establishing a course-articulation process for defining and approving courses for both high school and college credit
- > Creating middle school outreach and preparation programs to ensure that students and their families are aware early of the opportunity to take college courses in an early college design
- > Supporting a staff liaison between the high school and college
- > Coordinating secondary and postsecondary support services, academic calendars, and transportation
- > Developing data collection plans, including the use of data for student and instructional improvement and program evaluation

States use three funding streams as supplements to ADA and FTE funding to support the costs of dual enrollment programs: supplemental dual enrollment funds; state financial aid for college; and funds for other college- and career-readiness programs. These can be adapted as needed to supplement support for early college designs. Figure 1 illustrates these categories, with examples of funding within each category:

Figure 1. Dual Enrollment Funding Streams



Startup and Supplemental Funding

K-12 and Postsecondary Funding

In addition to the rules regarding ADA and FTE funding for K-12 and postsecondary education, two other funding sources are worth noting.

Charter Funds: Charter school funding is a variant on the way states fund K-12 schools. If a state authorizes a charter school, the school typically can use state funds according to different—often more flexible—rules than those that apply to other public schools. Some states also make facilities funding available for new charter schools; these funds can assist in creating schools with an early college design.

Textbook Funds: State funds for the purchase of state-adopted textbooks can be used to offset the substantial cost of college textbooks used in early college designs. However, districts typically may only use state funds to purchase state-approved texts, which are not likely to include college texts. States should consider how textbook funds can be used toward the purchase of college texts in dual credit courses that fulfill high school graduation requirements.

Supplemental Dual Enrollment Funding

Statutory or Discretionary Programs: Some states authorize or otherwise budget dedicated funds for dual enrollment. These line items include grants that local districts or colleges may apply toward dual enrollment costs (e.g., tuition, books, transportation), typically based on projected or past-year enrollment. Some also include startup funds for whole-school models (e.g., early college schools) and support costs (e.g., joint curriculum development, professional development, student support services). One potential downside of supplemental funding is that a line-item appropriation may not be a sustainable source for early college designs—especially if it is used in lieu of support embedded in existing K-12 and postsecondary financing formulae.

Financial Aid Funding

College Scholarships and Financial Aid: Federal policy prohibits the use of federal financial aid by students who are still enrolled in high school, but some states fund their own college scholarship or financial aid programs through lottery proceeds or other sources. Georgia, Tennessee, and Indiana allow early access to these funds by high school students to cover the costs of taking college courses as a dual enrollee. States choosing to use such funding for dual enrollment in early college designs should be aware that using federal financial aid application forms as a means test for state aid may inadvertently designate high school students as ineligible because of federal aid rules.

Tuition Waivers/Discounts: Some states permit or require colleges to discount or waive the tuition of dual enrollment students—sometimes based on a means test.

States that make financial aid funding available for dual enrollees should be sure that it promotes access for students who otherwise would not participate and that the courses are transferable to general education sequences or career-oriented pathways leading to a credential. This kind of prioritization may be especially important during tough budget times.

Other College- and Career-Readiness Programs

States should consider sources of funding from complementary programs that can be made available for early college designs. Because these state and federal programs share college- and career-ready goals with early college designs, states can maximize these investments by permitting the use of program funds to support early college designs themselves. The main considerations are to ensure that the programs' purposes are consistent and that local leaders are permitted—not mandated—to use this funding for early college designs if program goals are aligned.

Gear Up: This federal program provides funding for K-12 and postsecondary partnerships that are designed to work with cohorts of students from middle school through high school, preparing them for college through academic support, financial aid, and awareness activities. Under the latest reauthorization of the Higher Education Act, Congress added permission for financing of activities consistent with those found in early college designs. For example, dual enrollment is permissible for state and local recipients of Gear Up funds. In addition, state grant recipients can create programs that allow students to earn transferable college credits or an Associate's degree at the same time as a secondary school diploma. They also may create community college programs that are "personalized drop-out recovery programs" that allow young people to complete a regular secondary school diploma and begin college-level work.¹⁸

Perkins and Tech Prep: Perkins and Tech Prep legislation encourage state grantees to prepare high school students for careers, in part through the creation of articulated, high school-college career and technical course sequences—including those employing dual credit courses. Generally, funds can be used for program development and faculty professional development, not for tuition.

Alternative Education and Dropout Prevention and Recovery: Many states have alternative education and dropout prevention and recovery programs targeting students who are off track from high school graduation or returning dropouts. Recognition is growing among states that dropouts and off-track students can also benefit from acceleration—not remediation—in their curriculum and instruction. Jobs for the Future found that eight states have expanded dual enrollment opportunities to include struggling students (Steinberg, Almeida, Santos, & Le 2010). In five

states, dropout prevention policy includes the expansion of Advanced Placement coursework to areas and schools that serve at-risk students. This funding can benefit early college designs for students targeted by such programs—for example, those who are over-age and behind in credits.

Advanced Placement: Some states have received or designated special funding for expanding Advanced Placement course taking. Some early college designs have combined Advanced Placement courses with dual enrollment: college faculty cover material from the college syllabus, and high school faculty deliver any other AP content. In this scenario, both AP-related and dual enrollment funding can be used to support such hybrid courses.

Early College Designs in Practice

State Examples of Complementary Funding Sources

Supplemental Dual Enrollment Funding			
Option	Examples	Advantages	Concerns
Line-item funding to districts and/or colleges for dual enrollment/concurrent enrollment	<ul style="list-style-type: none"> > Illinois (\$2.8 million in FY08.)* > Pennsylvania (\$8 million in 2009-10)** > Utah (\$8.7 million in 2008-09) 	<p>Provides incentives for K-12 and postsecondary to provide dual enrollment</p> <p>Can be designed to support costs of early college designs</p>	<p>Demand can easily outstrip funding.</p> <p>Existence of funds alone does not encourage programs that target low-income or other underrepresented youth.**</p> <p>Sustainability is uncertain as a standalone program.</p>
Line-item funding for comprehensive school/program models such as early college schools	<ul style="list-style-type: none"> > North Carolina (\$15.2 million in 2007-08) > Ohio (\$8 million total during 2006-08)*** 	<p>Provides incentives for early college approaches designed to prepare and support underprepared students so that they can take advantage of dual enrollment</p>	<p>Sustainability is uncertain as a standalone program.</p>
<p>* Illinois' P-16 dual enrollment grants to community colleges were eliminated from the governor's budget in 2009 because of budgetary constraints.</p> <p>** Pennsylvania designates 22 percent of its appropriation for dual enrollment programs that serve low-income students and has an additional set-aside for partnerships starting comprehensive early college, middle college, or Gateway to College schools targeted at underrepresented students.</p> <p>*** Unfunded since 2009.</p>			

Financial Aid Funding			
Option	Examples	Advantages	Concerns
Set aside funding from state-funded college scholarship and financial aid programs for use by dual enrollees	<ul style="list-style-type: none"> > Georgia > Indiana (not currently funded) > Tennessee 	<p>Can be a more cost-effective use of financial aid funds if dual enrollment ensures more students are college ready and have transferable credits upon graduating high school</p> <p>If courses lead to a degree or credential, state may see savings resulting from accelerated progression toward degree completion</p>	<p>If the state sets a cap on total years of funding, based on an assumption of speedier degree completion by dual enrollees, students may run out of funding if they decide to change programs/majors during college.</p> <p>More costly if offered to all students rather than based on a means test.</p>
Permit or require colleges to waive/discount tuition and fees for dual enrollees.	<ul style="list-style-type: none"> > California > Florida > North Carolina > Texas 	<p>Does not require a new program but does entail costs</p>	<p>More costly if offered to all students rather than based on a means test.</p> <p>State should account for and avoid possible disincentives to colleges.</p>

Other College- and Career Readiness Programs			
Option	Examples	Advantages	Concerns
Use funds from similar college- and career-readiness initiatives to fund dual enrollment.	<ul style="list-style-type: none"> > Unknown but a number of local programs make use of these resources 	These can maximize the potential sources of funding to support the goals of dual enrollment; use of such funds can increase the alignment of programs and drive them toward the shared goal college and career readiness.	<p>Local leaders should be permitted, not mandated, to use such funds; program investments should maximize, not inadvertently decrease, the impact of state initiatives.</p> <p>Hybrid programs should have a clear educational rationale and design that advances states' college- and career-readiness goals.</p>

PUTTING IT TOGETHER: HOW TWO STATES FUND EARLY COLLEGE DESIGNS

For the purposes of illustration, we describe how various funding sources come together within two states that have early college designs: Texas and Utah.

Texas

While no state has a perfect set of finance policies, Texas policy has a number of elements instructive for other states interested in advancing college and career readiness through early college designs.

In 2007-08, 17.2 percent of low-income students in Texas had completed a college course by the end of their senior year, including dual enrollment, AP, or IB courses.¹⁹ While states report dual enrollment data differently, if at all, the rate for Texas is among the highest by any method of measurement.

Texas also has 44 early college high schools. These are emblematic of the high school-college partnerships and practices ensuring that underrepresented students succeed in college courses by graduation. Texas also has an early college district in the city of Hidalgo, where virtually all students are Latino and low-income, and where virtually all are completing the state's Recommended High School Program or Distinguished Achievement Program. Moreover, Hidalgo's low-income students complete college courses at about twice the rate as low-income students statewide (Nodine 2010).

Texas Funding for Early College Designs	
Option	Examples
K-12 and PSE Funding	Since 2003, districts can claim ADA funding for dual enrollees. Schools that deliver college courses through high school faculty designated as adjunct faculty by the college can use ADA to pay for this college-level coursework.
Supplemental Dual Enrollment Funding	Since 2003, the Texas High School Project has helped to implement 44 early college schools through startup funding, educator training, and other services to prepare more students for college and careers. In 2008, the legislatively created Texas High School Completion and Success Initiative Council identified early college as a priority strategy for increasing college readiness and success rates across the state. To date, the state has invested a total of \$12,110,463 in this type of early college design, in addition to the private investment of \$7,710,000 through the Communities Foundation of Texas.
Financial Aid	Colleges may partially or fully waive tuition for dual enrollees. This provides flexibility but no requirement or incentive to make courses accessible to low-income or other students.
Other College- and Career-Readiness Programs	<p>In 2006, the legislature passed HB 1, a comprehensive effort to improve college readiness rates in the state. This authorized a \$275 per-student allotment that districts may use to promote dual enrollment, among other college success strategies in high schools.</p> <p>Texas has an Advanced Placement incentive program. Some schools that have merged selected AP and college courses have tapped into these funds.</p>

Utah

Utah's purpose for funding dual enrollment is to accelerate progression through the state's education systems.

Although this is not equivalent to promoting college and career readiness, some Utah funding policies nevertheless provide positive conditions for early college designs. For example, as of 2010, at least six early college high schools are partnering with two- and four-year colleges.

Dual enrollment participation has risen steadily, along with increases in the line-item appropriation for dual enrollment. However, the legislature reduced funding in FY 2009 for dual enrollment by \$500,000, responding to state budget constraints.

Utah Funding for Early College Designs	
Option	Examples
K-12 and PSE Funding	<p>In lieu of ADA and FTE funding, school districts and colleges each receive shares of a state appropriation for dual enrollment based on the hours of college coursework completed by students (<i>see also Supplemental Dual Enrollment Funding below</i>).</p> <p>A number of early college high schools are charter schools and opened with state support for new charter schools focused on producing more graduates prepared for further education and careers in math, science, and technology.</p> <p>The state appropriation for dual enrollment benefits students in both charter and non-charter schools. In 2006-07, 110 of the state's 114 regular high schools and 14 of its 24 charter schools participated in dual enrollment.</p>
Supplemental Dual Enrollment Funding	<p>In 2008-09, the state legislature appropriated \$8.7 million for dual enrollment. The distribution of state dual enrollment funds is divided between the local public high school and community college that have forged a partnership. Of the total appropriation, 40 percent is disbursed to the Board of Regents that is responsible for reimbursing colleges. The State Board of Education allocates its 60 percent to local participating high schools. Disbursements to local high schools and colleges are based on the hours of college coursework completed by students in the previous year, providing an incentive for partnerships to ensure that students are prepared for and supported in their classes.</p> <p>Courses eligible for funding must be on an approved state "master list" of courses in the areas of English, math, fine arts, humanities, science, social science, world languages, health, and career and technical education. The master list is approved by both the state Department of Education and Office of the Commissioner of Higher Education. Funds may be used to cover tuition costs (including for online college courses), student textbooks, instructional materials, and matriculation fees.</p>
Financial Aid	<p>All dual enrollment students are exempt from paying tuition and applicable fees. Colleges are allowed to charge a one-time admission application fee (typically \$30 to \$60). Charges, user fees, and deposits for textbooks are also at the discretion of local programs. Low-income students are eligible for waivers from these discretionary charges.</p>
Other College- and Career-Readiness Programs	<p>Utah policymakers have a goal of accelerating the progression of students through high school and college. Thus in addition to dual enrollment, the state funds other programs in keeping with these goals. While these programs cannot be used to fund dual enrollment or early college designs per se, they create additional incentives for students to complete college courses while in high school.</p> <p>One of these is the Centennial Scholarship, which covers one year of tuition at a Utah public college for students who complete high school by the end of the eleventh grade or earlier. The scholarship is prorated for students who finish after the end of the eleventh grade but before the end of the twelfth grade.</p> <p>The other scholarship is the New Century Scholarship program. If a high school student earns an Associate's degree by September after the senior year, he or she can receive a scholarship for additional postsecondary education: 75 percent of tuition at a state public college or, for students attending a private college, up to 60 credit hours or 75 percent of average state public tuition.</p>

PART IID: SETTING GOALS, COLLECTING DATA, MEASURING OUTCOMES

In this age of tight resources, states must continue to support innovations that produce better and more equitable educational outcomes. Yet states are under great pressure to assure stakeholders that innovations undertaken have a reasonable chance of succeeding and will produce measurable results. Nationally, early college high school is proving to be a promising strategy for raising the college readiness of young people normally at risk of not completing a postsecondary credential. States should have confidence that the data and research support devoting precious resources to adapting and expanding early college designs.

Principles for Measuring Success

- > Set a “stretch” goal for increasing participation in early college designs by a specific percentage each year, with an evaluation of progress at the end of five years.
- > Gather data on low-income student participation in dual enrollment and other early college designs.
- > Analyze data each year to answer key questions and report results publicly.

As with any expansion effort, states adapting and expanding early college designs will need to set up mechanisms at the outset to ensure accountability for results. This chapter describes the data to be collected in order to track progress, increase participation, and demonstrate that this strategy is a significant contributor to a state's reaching its postsecondary completion goal.

To judge the success of early college designs several years into implementation, states will want to answer such critical questions as:

- > Are underrepresented students participating at high percentages in schools with early college designs?
- > Are students in schools with early college designs graduating from high school at greater rates than their peers in traditional high schools?
- > Have early college districts' rates of student enrollment in college without remediation increased?
- > Are students from early college districts retained into the second year of college? Do they attain Associate's degrees? Do they transfer to institutions granting Bachelor's degrees?

SETTING GOALS

What is the stretch goal a state should set to reach a specific percentage of student participation in dual enrollment in five years? What would be a reasonable percentage of growth over time? How should school districts and colleges be encouraged and held accountable for contributing to state goals? Because dual enrollment is a relatively new strategy for increasing college going, most states have not included metrics for dual enrollment in their accountability systems. According to Achieve's *Closing the Expectations Gap* report for 2009, only nine states had a publicly reported indicator for combined AP and dual enrollment course participation; five had set a goal; two offered incentives to improve, and none included college credit in high school in their accountability systems. That is beginning to change. Florida is a frontrunner; the state

now includes student participation in dual enrollment as a factor in awarding 50 percent of a school's performance grade (see *Table 1: Comparison of Statewide AP and Dual Enrollment Participation in 2008*).

Here are some tentative steps to shape metrics for dual enrollment participation.

To model one way of thinking about how to set baselines for participation in order to set a five-year goal, JFF has examined publicly accessible data for six states with high concentrations of and/or considerable attention devoted to dual enrollees: Florida, Indiana, Kentucky, Ohio, Tennessee, and Texas. Kentucky and Texas have the broadest participation and almost equal participation in dual enrollment and AP. In both states, participation has grown at almost equal rates; and both participation and growth are a result of deliberate state policies incentivizing district participation over time. *States might ambitiously emulate these two states and set a goal of 25 percent participation at the end of five years.*

This is just one model for thinking about a benchmark for establishing goals; states will need to employ methods for setting baselines and goals that make the most sense given their data, educational goals, and unique policymaking cultures.

Table 1: Comparison of Statewide AP and Dual Enrollment Participation in 2008		
State	Proportion of Grade 11 and Grade 12 Students in Dual Enrollment Courses	Proportion of High School Students Taking an AP Exam
Florida	9.3%	33.1%
Indiana	13%	19.8%**
Kentucky	21%	19.8%**
Ohio	5%	17.6%**
Tennessee	10%	16.5%**
Texas	23%*	21%

** includes 9th-12th graders and non-AP/non-IB courses that the state designates as "advanced courses"*

*** AP figures derived from The 6th Annual AP Report to the Nation, published by The College Board*

In any case, if a state wants to raise college-readiness rates of underrepresented students by encouraging the creation of early college designs, it should establish specific baselines and goals for dual enrollment participation by these populations of students. It may also want to set goals for the number of schools adopting an early college design as a way to aim for interim targets for overall participation by these students. Otherwise, most of the growth in dual enrollment could come from populations that have traditionally benefited from dual enrollment programs (i.e., students already on a path to college readiness).

COLLECTING DATA

There is even less precedent for establishing goals and baselines for these specific populations than for dual enrollment participation overall. Therefore, in lieu of modeling how states might think about benchmarks, we focus here on what data states must collect and analyze to establish baselines and goals for increasing participation by these students.

Tags for high school students taking college courses. To do even "big picture" reporting on early college designs, states must identify or tag whether a high school student took a college course in their statewide, longitudinal K-12 data systems.²⁰ According to the Data Quality Campaign, 25 states have this capacity. States can then make dual enrollment a variable when it looks at data that must be reported for federal purposes. For example, all states collect data about enrollment, demographic, achievement, and program participation (e.g., student participation in special education or the free and reduced price lunch program), so a state could report on the participation of low-income, Black, or Hispanic students in dual enrollment.

Of the states reviewed, Florida, Tennessee, and Texas report data on race and ethnicity of dual enrollment participants, an important signal that they see dual enrolment as important to their goals for closing achievement gaps, even though gaps in participation currently exist (see *Table 2 on page 37*).

Table 2: Statewide Dual Enrollment Participation Rates by Race/Ethnicity, 2007-08

State	Black	Hispanic-American	White	Asian-American	All
Florida	3.8%	4.7%	13.1%	n/a	9.3%
Tennessee	0.5%	n/a	91%	n/a	10%
Texas*	16.3%	19.3%	27.9%	44.7%	23%

* These figures include non-AP/non-IB courses that the state designates as “advanced courses.”

Texas also collects data on income as part of its Academic Excellence Indicator System. This shows steady growth in participation in dual enrollment by low-income and underrepresented youth (see Table 3).

Table 3: Texas Dual Enrollment Participation Rates by Race/Ethnicity and Income, 2004-08

	2004	2005	2006	2007	2008
Black	13%	13.7%	14%	15%	16.3%
Hispanic	15.5%	16%	16.6%	18%	19.3%
Low-Income	13.6%	14.2%	14.7%	16%	17.2%

SOURCE: TEA Academic Excellence Indicator System; State Performance Reports, 2004-2009

These figures include non-AP/non-IB courses that the state designates as “advanced courses.”

Student-level transcript data. Twenty-three states can track student-level transcript information, including information on which college courses were completed for dual credit and grades earned. Thirty-six states can track student-level SAT, ACT, and Advanced Placement exam data. Tracking these data with student participation in dual enrollment allows a state to answer significant questions about students’ academic pathways and test scores.

Linked data systems. To be useful in examining the impact of dual enrollment on a state’s college-readiness and completion goals, the state needs to be able to identify individual dual enrollees by a unique identifier as the student moves from high school into postsecondary education to the completion of a two- or four-year degree. Currently, 33 states have such a capability, but not all of these states tag dual enrollment.

With a tag for dual enrollment and the ability to match student unit records in high school with postsecondary, states could collect data that would be key to improving student results and supporting schools and colleges developing early college district designs:

- > Number, subject, and grade of dual enrollment courses each student brings to college;
- > Number of dual enrollment credits that a student’s higher education institution accepts as college credit (if the student enrolls in a different college than the one providing the credit); and
- > Course grade in next course in sequence beyond the college course taken in high school (e.g., college-level Biology I to Biology II). Such data allow comparisons of high school students with “regular” college students.

MEASURING OUTCOMES

If states can match student records across the P-12 and higher education systems, they can answer key questions about the impact of early college designs across the state, school districts, and specific schools—and for specific demographic groups. They can also provide high schools and districts with feedback reports about the progress of students in postsecondary education.

Four metrics, all of which link strongly to student postsecondary success, are becoming the standard progress measures that state postsecondary systems and individual institutions collect:

- > College entry the following fall of high school graduation;
- > Placement into credit-bearing, first-year courses without remediation;
- > Completion of gateway math and English composition courses within the first year of postsecondary; and
- > Accumulation of at least 12 college credits during the first year.

Dual enrollees—especially early college students—should have a strong showing against these metrics. States might collect data about dual enrollees' progress over several years, then establish numerical goals for improvement on each factor. (For a full set of metrics, see the National Governor's Association's *Compete to Complete Common College Completion Metrics*, as well as the Data Quality Campaign's Element 9, the ability to match student-level P-12 and higher education data).

Early College Designs in Practice

Dual Enrollment Within Florida's Accountability System

In 2009, the Florida Board of Education approved enhancements to the state's high school grading formula. The changes, mandated by the legislature, split the focus of the high school grading formula to account for both Florida Comprehensive Assessment Test performance and new measures such as participation and performance on advanced coursework, graduation rates, and students' college and career readiness.

Half of a high school's grade is now based on the performance of its students on the Florida Comprehensive Assessment Test, with the remaining half based on such measures as:

- > The school's graduation rate;
- > The performance and participation of students in Advanced Placement, International Baccalaureate, dual enrollment, Advanced International Certificates of Education, and industry certification;
- > Students' college readiness as measured by the SAT, ACT, or the College Placement Test;
- > The high school graduation rate of at-risk students; and
- > Changes in these data components from year to year.

ENDNOTES

¹ The Common Core State Standards Initiative is a state-led effort coordinated by the National Governors Association Center for Best Practices and the Council of Chief State School Officers. The standards, developed in collaboration with teachers, school administrators, and experts, provide a clear and consistent framework to prepare students for college and the workforce. The standards are informed by models from states and other nations and provide teachers and parents with a common understanding of what students are expected to learn. Consistent standards will provide appropriate benchmarks for all students, regardless of where they live. For more information, see: <http://www.corestandards.org>.

² This estimate is based on JFF's extrapolation of current population figures based on analysis of the National Longitudinal Education Study by Optimal Solutions Group for JFF.

³ Kids Count, a project of the Annie E. Casey Foundation, estimates that among Latinos, a child under 18 is two to three times more likely to live in poverty than a white child. For more information, see: <http://www.aecf.org/MajorInitiatives/KIDSCOUNT.aspx>.

⁴ OECD is the Organisation of Economic Co-operation and Development, which now includes 33 countries.

⁵ See www.earlycolleges.org/publications.html. Thirteen intermediary organizations and JFF collaboratively developed these principles as part of the *Early College High School Initiative*.

⁶ Figures are from the annual national survey of schools in the *Early College High School Initiative*.

⁷ JFF recently documented the successful practices of one such design in the Pharr-San Juan-Alamo Independent School District in Texas. See Allen & Wolfe (2010).

⁸ See: Klopfenstein (forthcoming); Swanson (2008); Karp et al. (2007); and O'Brien &, Nelson (2004).

⁹ Source: Personal Communication with the City University of New York, College Now Central Office, July 2010.

¹⁰ For example, for the entering CUNY full-time cohort of 2003 for Associate's degree programs, fewer than half (49 percent) were retained for two years; within six years, 29 percent had earned an Associate's or Bachelor's degree. See "CUNY Data Book: System Retention and Graduation Rates," March 31, 2010. Available at http://owl.cuny.edu:7778/RTGS_0001_FT_FTFR_ASSOC_TOT_UNIV.rpt.pdf.

¹¹ Activities include noncredit prerequisites for specific college courses and content-rich workshops to aid in preparing for the state Regents exams such as an English-language-learner history course.

¹² Local donors pay the way for students who cannot afford to participate.

¹³ The House and Senate versions of these bills can be found through the Library of Congress THOMAS Web site: <http://thomas.loc.gov/>.

¹⁴ The National Alliance of Concurrent Enrollment Programs is a voluntary dual enrollment accreditation group. It imposes additional quality measures on its members through classroom visits and audits of student work by college faculty. NACEP accredits only programs taught by high school teachers in their own high schools during the school day.

¹⁵ Please contact JFF for further information or a demonstration of the calculator.

¹⁶ This scenario is adapted from JFF's documentation of an early college school in California, the California Academy of Liberal Studies (Goldberger & Haynes 2005). Community college fees in California are, in fact, much lower at \$26 per unit. The scenario is hypothetical to illustrate the potential efficiencies of early college. Using lower teacher salary assumptions and higher college fees would reduce the efficiencies of this model. However, the reader should find the assumptions here to be sensible, given average salaries and tuition rates nationally.

¹⁷ However, at least one state (California) stipulates that these courses must be advertised and made available to any regular college student.

¹⁸ Higher Education Opportunity Act. Public Law 110-315. Sec. 404D(c)9.

¹⁹ Source: TEA Academic Excellence Indicator System; State Performance Reports, 2004-2009. These figures include non-AP/non-IB courses that the state designates as "advanced courses."

²⁰ We recommend that states also distinguish these courses in data collection and reporting from other college-level courses such as Advanced Placement.

REFERENCES

- Allen, Lili & Rebecca E. Wolfe. 2010. *Back on Track to College: A Texas School District Leverages State Policy to Put Dropouts on the Path to Success*. Boston, MA: Jobs for the Future.
- Edmunds, Julie et al. 2010. *Expanding the College Pipeline: Early Results from an Experimental Study of the Impact of the Early College High School Model*. Paper presented at the American Educational Research Association Annual Meeting, Denver, CO.
- Goldberger, Susan & Leslie Haynes. 2005. *Designing and Financing an Integrated Program of College Study: Lessons from the California Academy of Liberal Studies*. Boston, MA: Jobs for the Future.
- Karp, Melinda. 2006. "Facing the Future: Identity Development Among College Now Students." Unpublished doctoral dissertation, Columbia University.
- Karp, Melinda et al. 2007. *The Postsecondary Achievement of Participants in Dual Enrollment: An Analysis of Student Outcomes in Two States*. Louisville, KY: National Research Center for Career and Technical Education.
- Klopfenstein, Kristin. 2010. "Does the Advanced Placement Program Save Taxpayers Money? The Effect of AP Participation on Time to College Graduation. Promise and Impact of the Advanced Placement Program." In Sadler, Philip M., Gerhard Sonnert, Robert H. Tai, & Kristin Klopfenstein, eds. *AP: A Critical Examination of the Advanced Placement Program*. Cambridge, MA: Harvard Education Press.
- Nodine, Thad. 2010. *College Success for All: How the Hidalgo Independent School District Is Adopting Early College as a District-wide Strategy*. Boston, MA: Jobs for the Future.
- O'Brien, Daniel M., Teresa D. Nelson. 2004. "Strengthening College Preparation and Access Through Concurrent Enrollment in High School and Community College." Texas Working Paper. Dallas, TX: The University of Texas at Dallas.
- Santos, Janet & Susan Goldberger. 2009. *Lessons from the Lone Star State: Designing a Sustainable Financial Model to Expand Early College High School in Texas*. Boston, MA: Jobs for the Future.
- Steinberg, Adria, Cheryl Almeida, Janet Santos, & Cecilia Le. 2010. *Six Pillars of Effective Dropout Prevention and Recovery: An Assessment of State Policy and How to Improve It*. Boston, MA: Jobs for the Future.
- Swanson, Joni L. 2008. *An Analysis of the Impact of High School Dual Enrollment Course Participation on Post-Secondary Academic Success, Persistence and Degree Completion*. Iowa City, IA: Graduate College of The University of Iowa.
- Texas Education Agency. Public Education Information Management System, 2009-10.
- Utah System of Higher Education and the Utah State Office of Education. n.d. "Statement on Performance and Outcomes: Concurrent Enrollment." Retrieved September 25, 2010 from <http://www.in.gov/edroundtable/files/CEPUtahStandards.pdf>
- Waits, Tiffany, J. Carl Setzer, & Laurie Lewis. 2005. *Dual Credit and Exam-Based Courses in U.S. Public High Schools: 2002-03* (NCES 2005-009). U.S. Department of Education. Washington, DC: National Center for Education Statistics.



JOBS FOR THE FUTURE

TEL 617.728.4446 FAX 617.728.4857 info@jff.org

88 Broad Street, 8th Floor, Boston, MA 02110

2000 Pennsylvania Avenue, NW, Suite 5300, Washington, DC 20006

WWW.JFF.ORG

< union bug >