**Dual Enrollment for College Completion: Findings from Tennessee and Peer States**

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**Executive Summary**

In early 2012, a consortium of stakeholders, including the Committee for Economic Development, the Kresge Foundation, the Nashville Area Chamber of Commerce, the Tennessee Business Roundtable, the Tennessee College Access & Success Network, and the Tennessee State Board of Education, commissioned the Community College Research Center, Teachers College, Columbia University, to conduct a study of dual enrollment in Tennessee and a sample of peer states. Motivated by Tennessee's college completion agenda and a belief that helping high school students gain access to college coursework can set them on a path to postsecondary credential completion, the Chamber aimed to (1) develop an understanding of the potential benefits to dual enrollment, (2) gain information about and generate lessons from peer states' dual enrollment experiences, and (3) present possible modifications to Tennessee's current dual enrollment policies. This report presents finding from the first phase of the study, an examination of dual enrollment research and peer state policies.

In Tennessee, *dual enrollment* refers to an arrangement in which high school students enroll in college courses and earn college credit that is recorded on a regular college transcript. *Dual credit* refers to an arrangement in which high school courses are aligned or articulated with college courses at a specific postsecondary institution; students who successfully complete the high school version and enroll in the partnering college may subsequently be granted college credit. In this report, we refer to both arrangements by the more general term, *dual enrollment*.

In reviewing the research literature on dual enrollment outcomes from around the country, it became clear that a well-designed dual enrollment policy can support Tennessee's college completion agenda.

- *Dual enrollment encourages college readiness.* Students who participate in dual enrollment have a better understanding of collegiate expectations, are more likely to graduate from high school, and are more likely to enroll in college than similar students who do not participate.
- *Dual enrollment encourages college success.* Dual enrollment participants have high higher college grade point averages than their nonparticipating peers, are more likely to persist in college, and make good progress toward graduation. Importantly, these findings hold true for all types of students—including those, such as males and low-income students, who are often underrepresented in higher education.

However, the research also indicates that for a dual enrollment program to promote college completion, it must be thoughtfully designed.

- *There are many ways to structure dual enrollment programs and policies.* Research findings do not point clearly to one best system for dual enrollment. When crafting a dual enrollment program, program administrators and policymakers must be attentive to a myriad of program features and decisions. Particular attention should be given to funding mechanisms, course location, and eligibility requirements for both students and instructors.
- *Implementation quality matters.* It is not enough to call a course a college course; it is important to ensure that dual enrollment courses are authentic college experiences. They must reflect college-level coursework and instructional delivery.

To better understand the ways that other states conduct dual enrollment, we engaged in a policy review and interview study of five peer states. These states—Florida, Texas, Georgia, North Carolina, and Kentucky—were selected for their diverse approaches to education generally and to dual enrollment specifically, as well as their geographic and economic proximity to Tennessee. The following are key takeaways from these states:

- *Peer states support dual enrollment.* All of the states included in the study view dual enrollment as an important educational reform strategy and lever for improving college completion.
- *Peer states fund dual enrollment.* All of the states included in the study fund dual enrollment, such that high schools and colleges do not lose funding when students participate and such that participation is free or low-cost to students and families. Though the mechanism by which this funding occurs varies, interviews revealed that peer states consider it imperative to make the program low-cost to all institutional and individual stakeholders.
- *Peer states include a wide range of students in dual enrollment,* including those in career and technical courses of study.
- *Peer states are moving toward greater structuring of dual enrollment.* States are working to limit students' state-funded dual enrollment course choices so that course-taking moves students onto a clear pathway toward a credential.

Phase II of this study will identify specific policy proposals based on the opinions of stakeholders within the state. But those interested in dual enrollment reform should keep in mind the following as they begin to formulate ideas and recommendations over the coming months:

1. Dual enrollment can play a role in the College Completion Agenda. To do so, however, it must be well supported and well implemented at both the state and local levels.
2. Supporters of dual enrollment need to find ways to incentivize institutional and student participation through state funding. One important consideration, then, is determining how to generate political support for funding dual enrollment.
3. There is a strong rationale for structuring students' dual enrollment course-taking in order to encourage students to use the program to achieve specific, state-desired outcomes. Stakeholders should consider which outcomes are most important—for example, if there are certain career areas toward which students might be directed, or if there is a goal of increasing transfer into four-year institutions.

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Phase I, the focus of this report, focuses on what is known about dual enrollment. We examined the existing rigorous research on the relationship between dual enrollment and college outcomes. We also identified various forms in which dual enrollment is implemented. Finally, we investigated the dual enrollment policies of five peer states in order to generate possible directions for Tennessee policy reform. Phase II will be conducted during fall 2012 and will focus on Tennessee dual enrollment stakeholder perceptions of the state policy environment.

**Dual Enrollment**

There are a variety of ways for high school students to earn college credit prior to graduation. Terminology and program models differ from state to state, and even from school to school. Throughout this report, we adhere to the terminology used by stakeholders within the state of Tennessee.

*Dual enrollment* is an arrangement in which high school students enroll in college courses and earn college credit upon completion. The courses are regular college courses, taught to the same standards and using the same textbooks, with grades recorded on college transcripts. Students may also earn high school credit (though not necessarily).[1] Courses may be offered at the college or the high school and are taught by a college instructor or a high school instructor with the same credentials as any other college adjunct. Students must be high school juniors or seniors and meet college eligibility criteria.

Dual enrollment programs are funded by Tennessee Lottery funds (TCA 49-4-930). Colleges receive $300 per course per dual enrollment student. Students must supply any difference between the $300 colleges receive and total tuition costs, and they must pay for books and transportation as well. If students meet HOPE Scholarship requirements, they may register for a second dual enrollment course, also reimbursed at $300. Students may continue to enroll in to up to two dual enrollment courses per semester for the duration of their high school career, as long as they meet the HOPE Scholarship eligibility criterion of a 2.75 grade point average in their college courses. Credit hours earned via dual enrollment courses do NOT count toward students' future HOPE Scholarship eligibility.

*Early college high schools*, *middle college high schools*, and *Move on When Ready Programs* (TCA 49-06-8303) expand upon dual enrollment by enabling high school students to take most of their high school curriculum on a college campus. Whereas dual enrollment students may take a college course or two to

[1] Elsewhere in the country, the arrangement by which students earn both high school and college credit for the same college course is referred to as *dual credit.*

supplement regular high school course-taking, these other arrangements enable high school students to supplant much of their high school experience with college courses. Many students in these more intensive programs earn high school diplomas and associate degrees at the same time.

*Dual credit* programs are partnerships between high schools and colleges in which the two institutions work together to align their course offerings. Dual credit programs (also referred to as Cooperative Innovative High School Programs) in Tennessee are supported by TCA 49-15 and the newly enacted PC 967.[2] Students who take approved courses in high school may, on matriculation into the partnering college, receive college credit for a high school course or course sequence.[3] For example, a secondary–postsecondary partnership may determine that a high school welding course sequence covers the same competencies as the college's introductory welding course. Students who matriculate into the college and provide evidence that they successfully completed the high school sequence earn college credit and are exempted from the college's introductory welding course.

Dual credit courses are taught at the high school, by high school instructors. Dual credit courses' status as high school courses allows them to be funded by local education agencies through their regular budgetary process. Student eligibility is set at the institutional level, as part of the inter-institutional articulation agreement. It is important to note that dual credit courses are offered in only a small subset of career and technical education (CTE) areas. In contrast with the broader general education courses offered via dual enrollment, dual credit courses are part of prescribed curricular pathways.

High school students may also earn *college credit via examination*, such as in the Advanced Placement (AP) program, the International Baccalaureate (IB) program, and the College Level Examination Program (CLEP) programs. In these instances, students take an exam in a specific discipline. If they score high enough, and if their college accepts the exam score, they may be exempted from or earn credit for introductory college courses.

This study is concerned with dual enrollment and dual credit in the state of Tennessee (for simplicity, we will use the term "dual enrollment" to encompass both types of programs). The most recent national statistics on participation are nearly a decade old, and given national attention and state policy focus, current participation rates are undoubtedly higher. In 2002–2003, over 800,000 U.S. high school students took a college course.[4] In Tennessee, in 2010–2011, 16,404 students participated in dual enrollment via the lottery scholarship program, at a cost of $7,194,005.[5] In 2009–2010, over 6,000 students took a dual credit course.[6]

**Dual Enrollment and the College Completion Agenda**

Educational reform increasingly focuses not on access to college but on college completion. Efforts such as Complete College America, the Complete College Tennessee Act, the Common Core State Standards,

[2] Passed during the 2012 legislative session, Public Chapter 967 seeks to better coordinate dual credit and dual enrollment in the state by, among other things, consolidating oversight for the two programs under the Department of Education's Office of Career and Technical Education.

[3] Elsewhere, this arrangement is referred to as *articulated credit*, *Tech Prep*, or *credit-in-escrow.*

[4] Kleiner, B., & Lewis, L. (2005). *Dual enrollment of high school students at postsecondary institutions: 2002–2003* (NCES Report No. 2005-008). Washington, DC: U.S. Department of Education, National Center for Education Statistics.

[5] Tennessee Higher Education Commission. (2012). *2012 Tennessee Education Lottery Funded Scholarship special report: An examination of grant and loan forgiveness programs for special populations*. Nashville, TN: Author.

[6] Tennessee Career and Technical Education 2009-2010 Dual Credit/Dual Enrollment Data

and Completion by Design all aim to increase the number of young people who successfully earn a postsecondary credential. In its focus on bridging the gap between high school and college, and in its requirement that high schools and colleges work together, dual enrollment is an important programmatic strategy that furthers the nation's and Tennessee's college completion goals.

Dual enrollment programs have long been assumed to improve students' postsecondary outcomes.[7] In providing access to college coursework, dual enrollment may increase students' motivation to enter college and help them learn about what will be expected of them once they are there. Because dual enrollment programs are usually low- or no-cost to families, participants presumably save on college costs. And dual enrollment can encourage systemic reforms that broadly encourage college success by helping high school and college faculty align their understandings of college readiness and college-level work.

Until recently, these presumed benefits to dual enrollment were just those—presumptions. But a host of new, well-designed studies have found substantial support for dual enrollment as a means for improving student outcomes in high school and college. Importantly, these studies find that students who participate in dual enrollment—*as compared to similar peers who do not participate*—not only enter college in significant numbers but remain enrolled, make progress toward graduation, and graduate at greater rates as well.

College readiness. Educators and policymakers believe that, as an important step toward earning a college degree, students must be capable of meeting the demands of postsecondary education. This entails not only being able to complete college-level work but also understanding that college courses require new study skills and habits in order to be successful. Research shows that dual enrollment encourages such readiness. Dual enrollment participants learn study skills and other habits related to college success, such as how to study like a college student and how to behave appropriately in a collegiate environment.[8] This is particularly true for students who take courses located on a college campus. Dual enrollment participation also increases the likelihood of high school graduation,[9] an important precursor to college enrollment.

Notably, recent research has found that dual enrollment can benefit all types of students, not only those who are academically advanced. Students typically underrepresented in higher education, including males and those from low-income families, benefit as much as or more than their more advantaged peers.[10] Lower-achieving and racial or ethnic minority students can also benefit.[11]

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[7] Bailey, T., & Karp, M. M. (2003). *Promoting college access and success: A review of credit-based transition programs*. Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education; Hoffman, N. (2005). *Add and subtract: Dual enrollment as a state strategy to increase postsecondary success for underrepresented students*. Boston, MA: Jobs for the Future.

[8] Foster, K., & Nakkula, M. (2005). *Igniting and sustaining educational identity development: Findings from two early college high schools.* Boston, MA: Jobs for the Future; Karp, M. M. (2006). *Facing the future: Identity development among dual enrollment students* (Unpublished doctoral dissertation). Columbia University, New York, NY; Nakkula, M. (2011). *Adapting, thriving, and leading in college*. Boston, MA: Jobs for the Future.

[9] Karp, M. M., Calcagno, J. C., Hughes, K. L., Jeong, D. W., & Bailey, T. (2007). *The postsecondary achievement of participants in dual enrollment: An analysis of student outcomes in two states*. St. Paul, MN: National Research Center for Career and Technical Education; Rodriguez, O., Hughes, K. L., & Belfield, C. (2012). *Bridging college and careers: Using dual enrollment to enhance career and technical education pathways.* New York, NY: Community College Research Center, Teachers College, Columbia University.

[10] Karp et al. (2007).

[11] Rodriguez, Hughes, & Belfield (2012).

Academic momentum. Rigorous research on dual enrollment finds that participants are not only ready for college but also more successful once there. In this way, dual enrollment can be a key strategy in increasing college completion rates. While well-done studies of dual enrollment rarely track students all the way to graduation, there is ample evidence that dual enrollment students get on course—and stay on course—to graduate to a greater extent than their nonparticipating peers.

The concept of "academic momentum" is a key element in understanding the relationship between dual enrollment and college completion.[12] Research has found that students who accrue college credits early in their postsecondary careers, as well as those who reach certain milestones, are more likely to ultimately earn a credential. In other words, if students build a "nest egg" of college success early on, it propels them to future success.

Evidence shows that dual enrollment helps students build their nest egg and therefore encourages academic momentum and, potentially, college completion. Dual enrollment participants have higher college grade point averages than similar nonparticipants.[13] They are also more likely to persist to the second year of college or beyond[14] and, perhaps most importantly, accrue more college credits than similar nonparticipants.[15]

Optimizing dual enrollment outcomes. While recent research points to some very encouraging outcomes for dual enrollment programs, it also offers suggestions for maximizing the potential of the programs. Dual enrollment programs can be conducted under a variety of arrangements, for example, either at the high school or on a college campus. There is some evidence that not all formats have equal outcomes, and that implementation quality matters.[16] For example, dual enrollment programs held on college campuses may have a greater impact on student outcomes than those in which courses are held on high school campuses.[17] Other studies find that the type of dual enrollment course and the rigor with which it is taught influence whether or not participation impacts student outcomes later on.[18] Still other research indicates that students enrolled in dual credit programs (called articulated credit or Tech Prep

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[12] Adelman, C. (2006). *The toolbox revisited: Paths to degree completion from high school through college.* Washington, DC: U.S. Department of Education; Swanson, J. 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: Institute for Research and Policy Acceleration at the Belin-Blank Center for Gifted Education, University of Iowa.

[13] Eimers, M., & Mullen, R. (2003, May). *Dual credit and Advanced Placement: Do they help prepare students for success in college?* Paper presented at the Association of Institutional Research Annual Forum, Tampa, FL; Kotamraju, P., (2005, April). *The Minnesota Postsecondary Enrollment Options Program: Does participation in dual enrollment programs help high school students attain career and technical education majors and degrees in college?* Paper presented at the Council for the Study of Community Colleges 47th Annual Conference, Boston, MA; Michalowski, S. (2007). *Positive effects associated with College Now participation.* New York, NY: City University of New York, Collaborative Programs Research and Evaluation, Office of Academic Affairs; Dadgar, M., & Allen, D. (2011, March). *Thinking beyond enrollment: Postsecondary outcomes of dual enrollment in New York City.* Paper presented at the Association in Education Finance and Policy Annual Meeting, Seattle, WA.

[14] Eimers & Mullen (2003); Michalowski (2007); Swanson (2008); Dadger & Allen (2011); Rodriguez, Hughes, & Belfield (2012).

[15] Michalowski (2007); Karp et al. (2007); Rodriguez, Hughes, & Belfield (2012).

[16] Allen, D. (2010). *Dual enrollment: A comprehensive literature review and bibliography*. New York, NY: City University of New York Collaborative Programs, Office of Academic Affairs; Kim, J. (2008). *The impact of dual and articulated credit on college readiness and total credit hours in four selected community colleges* (Unpublished doctoral dissertation). University of Illinois at Urbana–Champaign; Speroni, C. (2011a). *Determinants of students' success: The role of Advanced Placement and dual enrollment programs* (NCPR Working Paper). New York, NY: National Center for Postsecondary Research; Speroni, C. (2011b). *High school dual enrollment programs: Are we fast-tracking students too fast?* (NCPR Working Paper). New York, NY: National Center for Postsecondary Research.

[17] Speroni (2011a).

[18] Kim (2008); Allen (2010); Speroni, (2011b).

elsewhere) do not see improved college progression or completion rates, in large part because they find it difficult to turn their high school course-taking into transcripted college credit.[19]

Educators, families, and policymakers also often try to compare dual enrollment and AP, as both are popular models of college credit earning in the high school. There are many differences between the two, however. Dual enrollment students take a college course, while AP students take a high school course with college-level content. Dual enrollment credit goes on a student's transcript, while AP credit must be earned via examination and accepted by an individual college. These programs also typically serve different purposes and different student populations. Though the scope of this project did not allow for an in-depth examination of the literature on AP outcomes, we did seek out studies that compared postsecondary outcomes for students enrolled in the two programs.

The literature indicates that while students who *take AP exams* are more likely to persist in college and earn a bachelor's degree than other students,[20] these outcomes are not evident for participation in AP more broadly.[21] Students need not take an AP examination when taking an AP course, and it appears that those students who participate in AP without the exam do no better in college than they would have if they had not taken the course. In other words, the positive impact of AP accrues from exam-taking, not course-taking. In contrast, the outcomes reviewed above on dual enrollment accrue to all participants, perhaps because dual enrollment leads directly to college credit, whereas AP course-taking without an exam does not help students make progress toward a college credential.

Participants in both programs have better postsecondary outcomes than similar students who do not participate in some form of college credit earning in the high school.[22] Some studies find that AP participants have higher college grade point averages[23] or greater rates of enrollment in four-year institutions[24] than do dual enrollment students. However, both programs are associated with increased rates of persistence and credential attainment.

**Features of Dual Enrollment Programs**

As noted, dual enrollment programs can vary along a range of features. Researchers have identified at least nine areas in which programmatic and policy decisions must be made when designing a dual enrollment program.[25] There is not strong research evidence supporting one program model over

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[19] Bragg, D. D. (2001). *Promising outcomes for Tech Prep participants in eight local consortia: A summary of initial results.* St. Paul, MN: National Research Center for Career and Technical Education; Hughes, K. L., Karp, M. M., Bunting, D., & Friedel, J. (2005). Dual enrollment/dual credit: Its role in career pathways. In Hull, D. (Ed.). *Career pathways: Education with a purpose* (pp. 227–255). Waco, TX: CORD Communications; Hughes, K. L., Karp, M. M., Fermin, B., & Bailey, T. (2005). *Pathways to college access and success.* Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education.

[20] Jackson, C. K. (2012). *Do college-prep programs improve long-term outcomes? (*NBER Working Paper No. 17589). Cambridge, MA: National Bureau of Economic Research.

[21] Klopfenstein, K., & Thomas, M. K. (2009). The link between advanced placement experience and early college success. *Southern Economic Journal, 75*(3), 873–891.

[22] Eimers & Mullen (2003); Speroni (2011a).

[23] Eimers & Mullen (2003).

[24] Speroni, (2011a).

[25] Karp, M. M., Bailey, T., Hughes, K. L., & Fermin, B. (2004). *State dual enrollment policies: Addressing access and quality.* Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education; Golann, J. W., & Hughes, K. L. (2008). *Dual enrollment policies and practices: Earning college credit in California.* San Francisco, CA: The James Irvine Foundation; Edwards, L., Hughes, K. L., & Weisberg, A. (2011). *Different approaches to dual enrollment: Understanding program features and their implications.* San Francisco, CA: The James Irvine Foundation.

another.[26] Two considerations should guide program choices: (1) which model will best serve a given state or institution's dual enrollment goals (i.e., access, completion, equity) and (2) how best to ensure authenticity of the college courses. *Authenticity* is a term used to describe the extent to which dual enrollment courses mimic the experience of "regular" college courses; inauthentic courses are unlikely to improve student outcomes.[27]

*Student eligibility* refers to the requirements students must meet in order to participate in a dual enrollment program. Some states set statewide eligibility requirements, while other states leave eligibility decisions up to participating institutions. Typical eligibility requirements include maintaining a specified high school grade point average or meeting the particular college's regular admissions requirements, such as attaining a certain score on a college placement or other exam. Programs typically try to balance a desire for broad student access to dual enrollment with the need to ensure that participants are able to be successful in a college course. Eligibility standards that are too high mean that dual enrollment will be limited to those students already most likely to complete college, while standards that are too low may lead to early college failure for some students.

Dual enrollment *funding* typically comes from a variety of sources, many dictated by state policy. Funding must happen on two fronts. First, high schools and colleges must be funded for the students enrolled in their courses (high school average daily attendance [ADA] and college full-time equivalent [FTE] funding). Since students take one course but are simultaneously enrolled in two institutions, decisions must be made regarding which institution receives the per-pupil funding (in many cases, both institutions do). Second, student tuition needs to be addressed. Funding decisions have large implications for participation rates. When students or institutions are asked to pay for the program out-of-pocket, they are less likely to participate.

Program designers need to be attentive to *course location and timing*. Dual enrollment courses can be offered at the high school, on a college campus, or via distance technology including online software and interactive TV. They can also be offered before, during, or after the school day. High school-based courses, particularly when offered during the school day, are the most convenient for students, particularly low-income students who may lack transportation and have after-school commitments. Ensuring authenticity for these courses is challenging, however. College-based courses, in contrast, are usually very authentic, but students may have difficulty getting to the college campus or may find attending class on a college campus to be intimidating or discouraging.

Dual enrollment *instructors* can be either regular college faculty or high school instructors certified by the college as adjuncts. In the latter arrangement, high school teachers typically need to meet the same criteria as any other college adjunct instructor. Using high school teachers is often easier logistically and may encourage students to participate because they are comfortable with a high school teacher. College instructors, in contrast, are likely to be familiar with college instruction and norms.

Program developers also need to consider *course content and sequence*. This includes whether dual enrollment courses will be general education courses, career and technical education courses, or both. This also includes whether students take dual enrollment courses as stand-alone courses or as part of a

[26] The notable exception to this is course location; Speroni, 2011a found that college-campus-based programs have greater impact on student outcomes. The logistical and access considerations of running large-scale college-based programs, however, make high school-based models appropriate and useful in many cases even if they are less effective.

[27] For more details on each of these programmatic choices, as well as their pros and cons, see Edwards, Hughes, & Weisberg (2011).

series or sequence that is part of a broader program of study. Ideally, this sequence should be the first step in a longer postsecondary sequence of courses, such as a certification program or specific major. Similarly, dual enrollment programs vary in their *intensity*, with some being small-scale elective courses and others encompassing more of students' course-taking.

Program designers also need to decide whether or not to offer dually enrolled students *support services* and, if so, which ones. Providing supports can be particularly important when participants include lower-achieving students and students from disadvantaged backgrounds. Supports can address students' academic needs (i.e., tutoring) or broader college preparation (i.e., assistance with college and financial aid applications). They can also be offered by the high school, the college, or a partnership of the two.

Dual enrollment programs, as we have noted, vary in terms of their *method of credit earning*. Most dual enrollment programs provide transcripted credit, but in some places—including Tennessee—dual enrollment models also include articulated credit. Finally, dual enrollment varies in its *oversight*, or which institution or governmental agency retains control over the program and is ultimately responsible for ensuring its quality and sustainability.

**Dual Enrollment in Peer States**

To understand Tennessee's dual enrollment and dual credit policies within a regional context, we examined the policies and practices of five peer states. The states were selected in conjunction with staff from the Nashville Chamber of Commerce and members of this project's steering committee. States were selected to be representative of the range of policy types, higher education structures, and economic development contexts of the southeastern United States. In this section, we briefly describe each state's reason for inclusion, dual enrollment policies, and dual enrollment participation rates. In the following sections, we elaborate on cross-cutting policy themes and lessons for Tennessee.

***Florida*** is a national leader in dual enrollment policy, participation, and research. The state has had dual enrollment legislation (F.S. 1007.271 and F.S. 1007.235) since the 1970s; the policies were most recently revised in 2006 as part of Florida's broader A++ initiative. More than 37,000 students participate in dual enrollment, with the majority of those enrolled in a community college.

Florida's dual enrollment policy allows students to take college courses at the high school or a college campus, before, during, or after the regular high school day. Instructors must have college-level teaching credentials, though they may be high school instructors certified as college adjuncts. Students are eligible to enroll in college-credit dual enrollment courses if they have a 3.0 grade point average and pass the state's college readiness test (PERT). Students may take dual enrollment courses in career certificate (CTE) areas if they have 2.0 grade point averages and meet other standards for college readiness set by the sponsoring college. Students may not take developmental coursework via dual enrollment.

Importantly, Florida statutes and regulations set clear quality assurance guidelines for dual enrollment. F.S. 1007.235 requires institutions to enter into inter-institutional agreements when offering dual enrollment courses and requires postsecondary institutions to take responsibility for their quality and rigor. Additionally, Florida has a statewide course numbering system, and all dual enrollment courses must adhere to the course content and other requirements of the statewide system. Finally, Florida has developed a set of standards for dual enrollment courses, approved by the state's Articulation

Coordinating Committee in 2007, that sets forth quality guidelines for eligibility, faculty, content and assessments, course environment and expectations, and accountability.

By statute, dual enrollment is cost-free to students in Florida. Tuition and fees are waived. High schools must provide books and other instructional materials to students free of charge. School districts are reimbursed their per-pupil funding for dually enrolled students via the state's Florida Education Finance Program. Likewise, colleges receive FTE funding for dually enrolled students.

***Texas*** passed legislation in 2006 requiring high schools to provide students with the opportunity to earn college credit prior to graduation. State statute (T.E.C. 28.0009) includes dual enrollment as one option for doing so. Participation in dual enrollment has risen dramatically since the implementation of this legislation—from 71,803 during the 2007–2008 school year to 94,232 in 2009–2010.[28]

In Texas, most dual enrollment participants receive high school credit as well as college credit for their college courses. Dual enrollment occurs at the high school, on the college campus, or via distance learning. State policy requires participating institutions to develop their own partnership agreements governing the structure of the dual enrollment program, leading to some variation across schools.

Texas targets its dual enrollment program at those students who are college-ready. Eligible students, therefore, are those who have demonstrated readiness on one of the state's approved exams, such as the COMPASS, ACCUPLACER, or THEA (T.E.C. 51.3062). Colleges may also require students to have certain grade point averages or other requirements for dual enrollment participation.

Dually enrolled students must take courses approved by the state and listed in either the Lower Division Academic Course Guide Manual (for general education and transfer courses) or the Workforce Education Course Manual (for CTE courses). These manuals cover many courses, so students have a wide range of dual enrollment course options. The state higher education coordinating board is considering proposals to limit dual enrollment course-taking to a narrower, more degree- or field-of-study-focused set of courses, but there has been no formal policy developed in this area.

Texas education code (T.E.C. 130.008) allows both high schools and colleges to receive per-pupil funding for dually enrolled students. Colleges are permitted but not required to waive tuition for dual enrollment students as well (T.E.C. 54.216). When colleges opt not to waive tuition, high schools may pay tuition, or families may be required to pay. Students and families are also responsible for college fees and transportation, if applicable.

***Georgia*** was selected for peer state inclusion because, like Tennessee, it has a dual system of higher education, with separate technical and community colleges.[29] Dual enrollment in the state is also permitted and regulated by multiple programs, policies, and funding streams. In 2011, dual enrollment legislation was revised as the Georgia Move on When Ready Act (H.B. 149). The Georgia Department of Education administers all dual enrollment programs under State Board Rule 160-4-2-.34.

Dual enrollment courses in Georgia are required to count for both high school and college credit. Thus, any course offered as part of a dual enrollment program must be certified by the Georgia Department of

[28] American Institutes for Research (2011). *Research study of Texas dual credit programs and courses*. Washington, DC: Author.
[29] These systems are structured slightly differently than in Tennessee, however, with the Technical College System of Georgia authorized to offer Associate of Applied Sciences and select Associate of Science degrees as well as certificates.

Education as covering the same course content as the equivalent high school course. All dual enrollment courses in Georgia must be taught by a regular college instructor. However, they can be offered on a college campus, a high school campus, or via distance education.

Georgia's primary dual enrollment programs are *Accel*, for general education courses, and *Hope*, for career and technical education courses.[30] Juniors and seniors are eligible for Accel if they meet eligibility requirements set by the postsecondary institution; freshmen and sophomores may also participate in Accel coursework if they have a 3.5 grade point average and meet college eligibility requirements. Students are eligible for Hope dual enrollment courses if they meet college readiness requirements set by the postsecondary institution. They also must maintain a 3.0 grade point average in their college courses.

Accel dual enrollment is funded via regular education allocations within the state budget (see Text Box 1 for more information). The Georgia Student Finance Commission pays students' tuition, fees, and a book allowance of up to $150 per semester. Both colleges and high schools receive per-pupil funding for dually enrolled students under the Accel program.

Hope dual enrollment programs are funded via the state's lottery funds. Due to concerns about the sustainability of this funding stream, as of 2011, Hope grants pay for 90% of students' tuition costs and do not cover fees or books. Colleges may waive the remaining tuition, but if they opt not to do so, parents and students are responsible for the difference. High schools and colleges both receive per-pupil funding for Hope dual enrollment students.

***North Carolina*** was included because it has recently passed new dual enrollment legislation (see Text Box 2 for more information on the motivation for and genesis of the new policies). The new legislation, the Career and College Promise Program (S.L. 2011-145), provides structure and cohesion for students' dual enrollment course-taking by limiting the courses in which they may enroll and went into effect in January 2012. In 2007, approximately 43,000 high school students in North Carolina enrolled in college courses.[31]

Dual enrollment in North Carolina can be offered at the high school, the college, or online. Courses can be taught by high school or college instructors.

The Career and College Promise legislation limits dual enrollment course-taking to one of three options: the Core 44 College Transfer Pathway, for academic coursework leading to a transfer degree; the Technical Career pathway, for students pursuing one of 16 career pathways; or Cooperative Innovative High Schools, for first-generation college-going students in grades 9–12 who want a more comprehensive dual enrollment experience. Students must have a 3.0 grade point average to participate in the Core 44; students in the Technical Career pathways should have a 3.0 or their principal's recommendation. Students entering the Core 44 pathways must also pass a college readiness assessment or placement test, although this requirement can be waived for students with a 3.5 grade point average. Students entering the Technical Career pathway must meet specific career pathway

[30] Georgia dual enrollment legislation also permits Move on When Ready participation, in which students leave the high school campus to take all of their courses on a college campus; early colleges; and Gateway to College. As these programs are intensive forms of dual enrollment for a narrower band of the student body, they are outside the purview of this policy scan.
[31] Briggs, K., & Wilson, V. (2010). *Joint high school partnership programs*. Raleigh, NC: North Carolina Community College System.

prerequisites. Students in both pathways must maintain grade point averages of 2.0 or higher in their college coursework to remain eligible.

All dual enrollment programs in North Carolina are funded through the state. Both high schools and colleges receive per-pupil funding for dually enrolled students. Tuition—which in North Carolina is collected by the state rather than individual institutions—is waived, such that the state loses funds. Students do have to pay for books and fees.

Finally, ***Kentucky*** is a leading-edge reformer in both K-12 and postsecondary education and has engaged in a series of reforms to facilitate students' transitions from high school to college. Motivated by S.B. 1, wide-ranging education legislation passed in 2009, the Kentucky Department of Education and the Kentucky Career and Technical College System (KCTCS) entered into a Memorandum of Understanding (MOU) in 2011 addressing dual enrollment in the state. The MOU spells out specific features of dual enrollment in the state, giving coherence to the program as well as providing a quality-assurance framework. In April 2012, the Kentucky Council on Postsecondary formalized this MOU as official policy governing dual enrollment course offered on the high school campus.[32]

Dual enrollment in Kentucky can be offered on a college campus, for college credit only, or on a high school campus, for high school and college credit. Courses may also be offered virtually. Instructors may be either regular college instructors or high school teachers who have the same credentials as college adjunct faculty. In fall 2008, approximately 18,000 students participated in dual enrollment.[33] A majority of these students took courses at community colleges.

The MOU leaves eligibility requirements up to individual colleges. Students must, however, meet relevant KCTCS placement standards, such as passing a placement test, for the course in which they want to enroll.

Funding for dual enrollment in Kentucky varies depending upon where the course takes place and who teaches it. Students who take dual enrollment on a college campus have their tuition waived by the state. Dual enrollment students who take their courses on a high school campus, taught by a high school teacher, also have their tuition waived. Both groups of students are assessed a small administrative fee. Dual enrollment students who take a course on the high school campus taught by a college instructor receive a 50% tuition waiver; students pay the difference but are not charged an administrative fee. Most institutions retain their FTE or ADA funding for dually enrolled students.

[32] Kentucky Council on Postsecondary Education. (2012). Dual credit policy. Retrieved from http://www.cpe.ky.gov/NR/rdonlyres/B7447563-5237-47A3-9C60-B9D6EE951C36/0/9_Dual_Credit_Policy.pdf
[33] Kentucky Council on Postsecondary Education. (2010) Dual enrollment. Retrieved from http://cpe.ky.gov/info/dual

**Text Box 1**

**Making Hold-Harmless Funding Happen in Georgia**

For many years, dual enrollment in Georgia was hold-harmlessly funded, such that both high schools and colleges received their per-pupil funding for dually enrolled students. In 2008, at the urging of the then-governor, new State Board of Education rules reduced high schools' funding for dually enrolled students, effective in the 2008–2009 school year.

When the new rule went into effect, dual enrollment participation in the state dropped dramatically. In the Technical College System of Georgia, for example, 7,548 students took a dual enrollment course during the fiscal year (FY) 2008. In FY 2009, after the rule took effect, 5,919 did so—*a nearly 25% reduction in participation*. Participation continued to drop in FY 2010 and FY 2011.

In 2011, at the strong urging of the Lt. Governor, key legislators, the State Board of Education, and K-12 districts across the state, the new governor signed HB 186, which restored hold-harmless funding for dual enrollment and codified it in legislation. The bill also provided a one-time line-item allocation of $2 million to repay school districts for the funds lost as a result of the earlier rule change.

How did the state find the funds? First, a broad array of constituents, led by the Lt. Governor, believed that dual enrollment was an important element of the state's completion strategy and forcefully argued that it was worth funding. Second, the state realized that the costs, overall, were not that large. The difference between double-funding and removing funds from the high schools was approximately $2 million per year, a relatively small portion of the state's overall budget.

Finally, proponents reframed the conversation. They argued that the state is paying for credits, not seat time. So when students earn high school credit, high schools should be paid; when students earn college credits, colleges should be paid. If both happen to occur at the same time, so be it—credit is credit. According to those we spoke to for this study, such reframing resonated throughout the state. Home-harmless funding is no longer at issue: "It's just the way things are done now."

**Text Box 2**

**Structuring Student Course-Taking in North Carolina**

Dual enrollment has existed for many years in North Carolina and continues to be a key element of the state's commitment to providing access to postsecondary education. However, in recent years, state legislators became concerned that, while many students were participating in dual enrollment, such participation was not translating into degree acceleration or completion. Analyses of state data indicated that dually enrolled students were earning elective credits that did not lead to degrees. Moreover, students were entering four-year colleges without having earned any college-level math or English credit—even though doing so is related to increased probability of success. As the president of the North Carolina Community College System was often quoted saying, "Dual enrollment students were eating their dessert before their vegetables."

Limiting students' options within dual enrollment, as done in North Carolina's newly effective Career and College Promise Program, is an attempt to ensure that the state's investment in dual enrollment leads to its intended outcome: college completion. Students are limited to courses that lead to a transfer degree or within specified career pathways. In this way, dually enrolled students will be set on clearly structured paths to degrees.

The policy is very new, so its impacts are not yet known. Though there has been some resistance from students and parents used to selecting their own dual enrollment courses, those we spoke with felt that this resistance will dissipate. The changes may ultimately be viewed positively because the new structure can save families money by helping students earn free credit that can count toward a two- or four-year degree.

**Lessons from Peer States**

In looking at the policies across the five peer states, a number of themes and lessons emerged. Interviews with Tennessee stakeholders in fall 2012 will provide additional information as to what types of policies will be most useful within the Tennessee state context. However, there are important lessons from the peer states which should be incorporated into any discussion of future policy changes.

*State eligibility requirements balance the need for student readiness with broad access by setting multi-tiered eligibility standards.* The states reviewed for this study all sought to ensure that students were ready to be successful in college courses even as they expanded access to those courses. To this end, most allowed a range of eligibility requirements, based upon the type of course in which students were enrolled. For example, while dually enrolled students typically must place out of developmental education for academic courses, they may be permitted to enroll in career and technical courses if they meet other readiness standards. Notably, including CTE courses and students in dual enrollment programs is a key feature of many current state policies.

*States are moving to limit state-funded dual enrollment course-taking, even as they expand overall access.* Most states in our study have moved toward limiting the courses students can take via dual enrollment, either in terms of how many they can take in total or the type courses they may take. This is a relatively new trend but one that seems to be gaining momentum. In part, this is a strategy to maintain access to dual enrollment while controlling program costs. But, as described in the North Carolina example, it is also a conscious programmatic strategy to design dual enrollment that will best contribute to states' college completion goals.

*States find ways to make dual enrollment cost-free to students.* Most states included in the peer state review offer dual enrollment at no or low cost to students and families. In some cases, students may pay a portion of the overall tuition, but they are rarely responsible for the entire cost. We heard repeatedly in interviews that charging tuition for dual enrollment creates significant barriers to participation for students from low-income families and therefore works against states' goals for the program. That said, nearly all states expect students to pay for books, fees, and/or transportation costs, which also serve as a barrier to participation for some students.

*States find ways to hold institutions harmless, financially, for their participation in dual enrollment.* Nearly all states included in this study doubly fund dual enrollment, such that both high schools and colleges receive their per-pupil funding for dually enrolled students. The Georgia example presented in Text Box 1 is clear evidence that when institutions lose money, dual enrollment participation is likely to drop. In the states examined, legislators and policymakers placed high priority on dual enrollment and college completion initiatives more broadly and found the funds to meet the fiscal demands of those initiatives even during difficult budgetary times.

*States are moving toward highly structured dual enrollment policies.* Dual enrollment, as we noted, ranges in its design, and state policies vary commensurately. Some states have highly structured policies that address multiple design elements, while others leave most of the decisions to the participating institution. The type of policy a state designs should be aligned with its broader goals for dual enrollment; one type of policy is not inherently better than the other. However, we found that, as with other aspects of higher education reform aimed at increasing college completion, states are moving toward creating more structured dual enrollment policies and providing institutions with more guidance and regulations than they have in the past. This allows them to craft dual enrollment that, presumably, leads to degree completion and acceleration while maintaining program quality and controlling costs. In

essence, as they make dual enrollment a more prominent piece of their education reform agendas, states are also exerting more control over when, how, and for whom dual enrollment programs are implemented.

**In sum**

The research presented in this report is intended to lay the stage for future examination of, and potential revisions to, Tennessee's current dual enrollment policies. The research literature makes clear that dual enrollment—under the right circumstances—can be a key lever in improving student success in college, therefore contributing to the state's College Completion Agenda. Analysis of peer state policies and interviews demonstrate that other southern states view dual enrollment as an important education reform strategy and are exerting significant resources—in terms of personnel, political capital and, importantly, funding—to ensure that a wide range of students have access to dual enrollment programs.

Phase II of this study will identify specific policy proposals based on the opinions of stakeholders within the state. But those interested in dual enrollment reform should keep in mind the following as they begin to formulate ideas and recommendations over the coming months:

1. Dual enrollment can play a role in the College Completion Agenda. To do so, however, it must be well supported and well implemented at both the state and local levels.
2. Supporters of dual enrollment need to find ways to fund the program, or institutions and students will not participate. One important consideration, then, is how to generate political support for funding dual enrollment.
3. There is a strong rationale for structuring students' dual enrollment course-taking in order to encourage students to use the program to achieve specific, state-desired outcomes. Stakeholders should consider which outcomes are most important—for example, if there are certain career areas toward which students might be directed, or if there is a goal of increasing transfer into four-year institutions.