REWARDING DUAL ENROLLMENT IN PERFORMANCE-BASED FUNDING FORMULAS

HOW STATES CAN CREATE INCENTIVES FOR COLLEGE TO HIGH SCHOOL PARTNERSHIPS

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By Ben Struhl

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COMPLETION BY DESIGN

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Completion By Design is a five-year Bill & Melinda Gates Foundation initiative that works with community colleges to significantly increase completion and graduation rates for low-income students under 26. The Gates Foundation has awarded competitive grants to three cadres of community colleges, in Florida, North Carolina, and Ohio, to help transform their students' experience from connection to college through completion of valued credentials. Completion by Design takes a systemic approach to create clear and intentional pathways that make it easier for students to complete their studies.

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INTRODUCTION

Far too few students who enter college succeed in earning a certificate or degree. The problem is especially severe at community colleges, where only about 30 percent of students complete certificates or Associate's degrees within 150 percent of the normal time (Snyder & Dillow 2012).[1]

States are developing a range of strategies to increase college completion rates. Research shows that one promising innovation is for them to "reach back" to high schools and prepare students for a successful college transition (Barnett et al. 2012). This could involve working with a local high school on a specific transition program or offering dual enrollment courses to high school students. However, state policies typically provide colleges few or no supports or incentives to help that happen. The lack of incentives has limited the use of reach back strategies.

One type of incentive system that has been gaining attention in education recently is the use of performance-based funding to reward colleges for improving graduation rates, including achieving milestones toward that goal. This contrasts with the way most higher education is currently funded, based solely on enrollment.

Most performance-based funding strategies target improved outcomes for students already enrolled in college, and do not create incentives for reaching back to work with high school students to prepare them for college without the need for remediation. However, four innovative states *have* incorporated incentives for colleges to collaborate with high schools on college readiness. Looking at the experiences of these four states—Indiana, Louisiana, Tennessee, and Texas—and their performance-based funding, this brief asks:

- What policies should states consider if they wish to encourage colleges to connect to high schools and create incentives for reaching back?
- If states are considering the use of performance-based funding, how can they reward colleges for engaging with high schools in ways that could advance the college-completion agenda?
- In particular, how are states incorporating dual enrollment, an evidenced-based reach-back strategy, in the new performance-based funding systems?

While more evidence is needed to understand the effectiveness of performance-based funding for promoting college completion, it is a popular policy that gives insight into how states can use incentive structures to promote alignment between colleges and high schools.[2] As policymakers seek to improve college-completion rates, the outcomes from several models of how states might include dual enrollment in emerging performance-based funding systems suggest that multiple approaches to incentives could be effective in increasing degree attainment in colleges. And whether or not performance-based funding continues to grow as a college-success strategy, giving colleges a reason to reach back to high school students and make sure that more students (especially low-income students) are prepared for college is an approach that could deliver strong positive outcomes and help students complete college.

HOW THIS POLICY STRATEGY CAN HELP STATES ADVANCE THE COMPLETION AGENDA

College completion strategies have to be comprehensive and scalable—and incentives for their broad use are essential. This is one of the tenets of an ambitious initiative involving nine community colleges in three states, called Completion By Design. Completion By Design, funded by the Bill & Melinda Gates Foundation, is committed to testing strategies that can significantly increase completion and graduation rates for low-income students under the age of 26. The effort builds upon a framework for institutional redesign and state policy support that highlights changes across four key "loss/momentum" points in a student's college experience: Connection; Entry; Progress; and Completion.

This policy brief holds direct relevance for Completion By Design states and institutions seeking to increase student connections to college and reduce the need for remediation among new community college students. It should be of interest to any state or college that is seeking to promote evidence-based strategies to increase college readiness and completion, particularly among students from low-income and first-generation families.

The states that are using performance based funding formulas to incent the expansion of reach back strategies across their community colleges are pioneers and innovators. This brief specifies each state's goals, the relevant performance metrics, and early outcomes where they can be documented. It concludes with policy considerations that any state considering this approach will need to address.

STRATEGIES THAT CONNECT COLLEGES TO HIGH SCHOOLS

Increasingly, state policymakers are turning to dual enrollment as a strategy to promote college readiness and completion. Dual enrollment allows students to enroll in high school and college simultaneously, usually receiving credit toward both a high school diploma and a postsecondary credential. Research suggests that it is an effective way for students to accelerate their educational attainment, save money on college tuition, and build momentum toward completing a college degree (Struhl & Vargas 2012). This strategy has especially strong promise for preparing low-income students and exposing them to the college environment (Struhl & Vargas 2012; Berger et al. 2013; An 2013).

Early college high schools use dual enrollment to enable largely low-income, underserved student populations to graduate from high school with one to two years of transferrable college credit or an Associate's degree. In addition, these schools provide considerable supports that enable students to succeed in the college environment.[3]

A number of recent studies have found strong results for schools and programs that use dual enrollment or early college high schools to strengthen college enrollment and reach back in preparing high schoolers for college:

- The American Institutes for Research experimentally determined that early college high schools increase college degree attainment for enrolled students admitted by lottery compared with students who were not (Berger et al. 2013).
- In a longitudinal study of over 16,000 Texas high school students, JFF found that those who participated in dual enrollment were significantly more likely to enroll in college, remain in college, and earn a credential (Struhl & Vargas 2012).
- A 2013 study for the federal government's Institute of Education Sciences found that dual enrollment participation increases the likelihood of college-degree attainment, controlling for other variables that could affect degree attainment (An 2013).

However, even as states have increased their interest in dual enrollment, state higher education financing has sometimes limited its growth and that of early college high schools:

- The funding for many dual enrollment courses is calculated based on the high school's average daily attendance (ADA) or the college's full-time enrollment equivalency (FTE). Some states allow both high schools and colleges to claim this funding for dually enrolled students, a "hold harmless" financing model that funds both partners. Other states prevent that practice, considering it "double dipping." Lack of hold-harmless funding has discouraged dual enrollment.
- Students cannot use federal financial aid for college courses if the students are enrolled in high school. Some states have created their own scholarship or other financial-aid programs and allow students to access those funds early to pay for dual enrollment, but this is far from the norm.
- In the current economic environment, states are cutting back funding for many programs. This has reduced or eliminated line-item-funded dual enrollment programs in some states and limited their expansion even in states that have policies that are generally favorable to such programs.

How to increase incentives for dual enrollment, a prime college reach-back strategy—through performance-based funding or otherwise—is a critical issue for improving college completion. One strategy that states are turning to is to link their desire to promote dual enrollment with new performance-based funding strategies.

WHAT IS PERFORMANCE-BASED FUNDING?

In the traditional funding model for public higher education, states support colleges based on the number of students enrolled, and colleges augment that with revenue from other sources, mainly tuition. In performance-based funding, the state awards a portion of its funds to institutions based on outcomes delivered or annual improvement goals met or exceeded.

There are a number of different ways states can implement performance-based funding and a number of choices they can make:

- Such funding can range from around 5 to 100 percent of total higher education spending.
- Some states take performance-based funding from normal higher education spending. Other states give it out only when the state budget allots extra funds for it.
- States often give colleges extra funding for meeting goals or achieving specific outcomes for low-income or at-risk student populations.
- States sometimes allow institutions to set their own targets for success, with state approval. In other cases, states set the targets.
- States can design performance funding metrics to vary with each college's institutional mission. In most cases, states treat community colleges and Bachelor's-granting institutions differently.

Over the years, some states have seen increases in educational attainment after they adopted performance-based funding systems—others have not and have abandoned such systems (Harnisch 2011). Recently, apparent successes in a few states have rekindled interest in performance-based funding. As of February 2013, 12 states were using it in their higher education funding formulas. Four others were transitioning to performance-based funding, and 19 were engaged in formal discussions about adopting it.[4]

PERFORMANCE-BASED FUNDING AND DUAL ENROLLMENT

There is strong evidence that dual enrollment and early college can improve college success. If the theory behind performance-based funding is correct—that institutions will improve outcomes in areas where they are rewarded for improvement—then the inclusion of dual enrollment and early college has great potential for improving outcomes. Incentives could help advance high school-to-college connections even in a time of funding constraints. Currently, three states—Indiana, Louisiana, and Tennessee—provide performance-based funding for dual enrollment. In addition, Texas is creating a performance-based funding system that will also award funding for dual enrollment (TACC, CCATT, & THECB 2011).

Because each of these states has a different performance-based funding formula, each also takes a different approach to encouraging dual enrollment. Indiana, Louisiana, and Tennessee also have generally positive dual enrollment policies, so outcomes may relate only partially to performance-based funding policies. For example, each state either provides scholarships for dual enrollees, has a hold-harmless state reimbursement policy, or does both.[5]

INDIANA

Indiana allocates 5 percent of the state higher education budget using performance-based funding, with plans to increase that to 6 percent in FY2014 and 7 percent in FY2015.

Indiana's performance funding system allocates additional funds to colleges that collaborate with early college high schools, above and beyond the funding granted for dual enrollment. Of the total performance-based funding pool, Indiana currently rewards 5.5 percent based on the number of students who complete dual enrollment credit hours and 0.8 percent for successful completion of "early college" credit hours. Performance-based funding expenditures related to dual enrollment exceeded $1.5 million in FY2012, and some Indiana colleges have received substantial funding under the program:

- Ivy Tech Community College received almost $1 million in FY2012 for students completing dual enrollment courses (1.6 percent of the entire state performance funding set-aside).
- Vincennes University gained about $200,000 in performance-based funding for providing dual enrollment courses to high school students and about $500,000 for partnering with high schools in early college programs.[6]

Indiana has made several recent revisions to its performance-based funding system regarding dual enrollment. It has decided it will support dual enrollment apart from performance-based funding, moving its funding to other sources. Also, given that many dual enrollment courses cost less to offer when they take place on high school campuses and are taught by high school teachers, Indiana reduced the performance-based bonus for dual enrollment.

LOUISIANA

The Louisiana "performance agreement system" (enacted in 2010 as the GRAD Act—Granting Resources and Autonomy for Diplomas Act) offers a combination of incentives to meet targets. Performance-based funding covers 25 percent of institutional operating budgets. In addition, the state allows colleges meeting their performance goals to increase their tuition by up to 10 percent.

In the Louisiana system, institutions receive points for meeting targets in four areas: student success; articulation and transfer; workforce and economic development; and institutional efficiency and accountability. The objectives contain 56 measures on which colleges report; some are targeted goals with annual benchmarks and some are descriptive goals that do not require benchmarks.

Among the performance goals the state heavily emphasized, most involve graduation and transfer rates. Aside from these metrics, Louisiana also has goals for increased partnerships with the K-12 system. Colleges must track three statistics related to dual enrollment: the number of high school students enrolled; the number of credit hours high school students enroll in; and the number of credit hours high school students complete.

Colleges do not set goals on these measures, nor do they receive rewards for increases on them. Instead, they receive points simply for reporting each of the three statistics. Louisiana has no plans to change dual enrollment incentives.

Since Louisiana instituted the performance-based reporting requirements for dual enrollment, the number of students taking dual enrollment courses, credit-hour enrollments, and credit-hour completions have risen sharply in seven of nine of the schools in the University of Louisiana system. Overall, dual enrollment credit-hour completion in the system has increased 46 percent (*see Table 1*).

TABLE 1.
UNIVERSITY OF LOUISIANA SYSTEM DUAL ENROLLMENT CREDIT-HOUR COMPLETION UNDER THE GRAD ACT

	BASELINE (2008-09)	YEAR ONE (2009-10)	YEAR TWO (2010-11)	CHANGE, BASELINE TO YEAR TWO
McNeese State University	2,698	3,500	5,666	110%
University of New Orleans	278	678	571	105%
Louisiana Tech University	4,855	5,959	9,654	99%
University of Louisiana at Lafayette	651	677	1,162	78%
University of Louisiana at Monroe	5,183	5,165	7,919	53%
Southeastern State University	5,246	5,139	6,050	15%
Northwestern State University	4913	4,807	5,589	14%
Grambling State University	475	440	360	-24%
Nicholls State University	1,865	1,820	1,282	-31%
TOTAL	**26,164**	**28,185**	**38,253**	**46%**

Source: Louisiana Board of Regents website: http://regents.la.gov

More research is needed to determine the extent to which Louisiana's reporting requirements caused the growth in dual enrollment. Another explanation could be that colleges understand that the early enrollment of high school students in college courses can help the colleges improve retention, student-readiness, and student-completion rates—all of which are directly rewarded through the new funding system. The state's scholarship and other tuition-assistance programs for dual enrollees are likely also a significant factor in making dual enrollment more prevalent.

TENNESSEE

Tennessee has completely replaced enrollment-based funding with an outcomes-based model. The Tennessee system has different formulas for community colleges and four-year colleges, reflecting their different missions.[7]

Tennessee awards funding to community colleges based on the number of high school students taking, rather than completing, degree-credit courses. The specific amount of funding each college receives depends on the weight it gives to dual enrollment as part of its institutional mission. Some institutions give twice as much weight to their dual enrollment programs than do others.

Tennessee's funding model gives extra weight to outcomes for groups of students that are historically underserved in higher education. The state awards an additional premium of 40 percent for outcomes related to underserved students (e.g., low-income or older adult students). In other words, if a college awarded 100 Bachelor's degrees to low-income students, it would receive funding as if it had awarded 140 degrees. However, no weighting by income status applies to dual enrollment.

Since the Tennessee Community College System has implemented performance-based funding, dual enrollment headcounts have increased significantly: 21 percent overall. Enrollments have increased at almost every college in the system, except for two that have had stagnant rates (*see Table 2*).

Once again, these increases may have happened without the incentives, but large increases in enrollment are evident.

TABLE 2.
TENNESSEE COMMUNITY COLLEGE SYSTEM DUAL ENROLLMENTS UNDER PERFORMANCE-BASED FUNDING

	DUAL ENROLLMENT 2009-10	2010-11	2011-12	CHANGE, 2009-10 TO 2011-12
Roane State Community College	1,023	1,372	1,655	62%
Walters State Community College	924	1,011	1,261	36%
Dyersburg State Community College	599	765	803	34%
Pellissippi State Community College	1,164	1,245	1,525	31%
Motlow State Community College	686	787	854	24%
Northeast State Community College	487	566	585	20%
Volunteer State Community College	1,351	1,519	1,566	16%
Chattanooga State Community College	1,003	1,095	1,155	15%
Cleveland State Community College	582	626	627	8%
Nashville State Community College	926	1,092	997	8%
Columbia State Community College	735	674	791	8%
Jackson State Community College	837	971	815	-3%
Southwest Tennessee Community College	421	367	409	-3%
TOTAL	**10,738**	**12,090**	**13,043**	**21%**

Source: Tennessee Higher Education Commission website: http://www.state.tn.us/thec

TEXAS

Texas is developing an outcomes-based funding model for its colleges, following legislation adopted in 2013. The new system would award 10 percent of funding for higher education on the basis of outcomes metrics, with the other 90 percent still based on enrollment. These changes would start in 2016; some legislators have proposed increasing the funding share to 25 percent, either immediately or over time.

Like Tennessee, Texas has set aside special funding for students who are underrepresented in higher education. For example, the funding formula gives extra weight to Bachelor's degrees completed by students who meet the federal guideline of "at risk."

In the community college system, schools earn points as students reach certain milestones, such as completing developmental education, completing entry-level English and math courses, attaining certain credit-accumulation levels, and earning degrees or transferring to a four-year college. These are known "momentum points" (TACC, CCATT, & THECB 2011).[8]

Source: Texas Two-year Colleges: Briefing for State Policymakers

Texas community colleges can also earn points and funding from serving dual enrollment students. Texas has designed performance-based funding around steps on a pipeline that helps at-risk students progress through important education milestones. Students can enter the system at any level of competency, and the college receives funding for getting them to the next level (e.g., completion of remediation, graduation) and regardless of whether the student is in high school or college.

Texas has not implemented the system yet, so it remains to be seen whether or how much it will change the behavior of Texas community colleges—or lead to increases in dual enrollment and college completion.

POLICY CONSIDERATIONS AND RECOMMENDATIONS

The experience of the states using performance-based funding as an incentive for college success shows that there are many ways in which policymakers can include dual enrollment. We conclude with several considerations for policymakers.

POLICY CAN FUND COLLEGES FOR PROVIDING DUAL ENROLLMENT, OR THEY CAN REQUIRE COLLEGES TO TRACK AND REPORT IT.

Indiana, Tennessee, and Texas give performance-based funds to colleges for providing dual enrollment. Louisiana funds them merely for tracking dual enrollment. Despite these differences, Louisiana's dual enrollment system has grown rapidly—with larger increases than in Tennessee.

Perhaps Louisiana colleges understand that expanding dual enrollment could be a viable strategy to increase other performance-funded outcomes, or perhaps the increases reflect conditions unrelated to performance funding. Regardless, the evidence suggests that states may not need to provide performance-based funding directly for dual enrollment if they align other policies to encourage college-high school connections (e.g., the scholarships and other tuition assistance that Louisiana provides to dual enrollees).

That said, it seems reasonable for states to reward colleges for expanding dual enrollment opportunities. If the idea behind performance-based funding systems is to reward what states want done, then—given the evidence base—dual enrollment is worthy of receiving the same incentives as other intermediate outcomes associated with a successful path to college completion.

STATES CAN PROVIDE DUAL ENROLLMENT FUNDING FOR COURSES TAKEN AT ANY TYPE OF COLLEGE OR ONLY THOSE TAKEN AT COMMUNITY COLLEGES.

All four performance-based funding systems discussed here take care to ensure consistency with a college's organizational mission. Thus, each system funds Bachelor's-granting schools differently from how it funds community colleges. Louisiana and Indiana both include four-year institutions in their dual enrollment performance goals. In Texas and Tennessee, the systems for four-year schools are separate from those for community colleges and do not include the tracking or funding of dual enrollment.

Although dual enrollment may fit better into the mission of the community college, many four-year colleges across the country are engaged in in-depth, successful partnerships with high schools to provide dual enrollment. Such colleges in Louisiana and Indiana derive performance-based funding from dual enrollment, and both states are expanding their programs. While being sensitive to differences in mission, states need not consider dual enrollment as something that should be located only in the community college system.

STATES CAN PROVIDE COLLEGES WITH EXTRA FUNDING FOR SERVING LOW-INCOME STUDENTS, OVERALL OR IN DUAL ENROLLMENT.

Indiana, Tennessee, and Texas have all designed programs that give extra funding for serving low-income or at-risk students. Policymakers in these states do not want to give colleges incentives to serve only better-prepared students, and they are also aware that serving less-prepared students costs the colleges more. However, the states do not make this distinction in the context of funding for dual enrollment.

Given that the Indiana, Tennessee, and Texas systems have highlighted the importance of improving outcomes for challenging student populations, and given the evidence that dual enrollment is an effective strategy when working with these populations, states should consider devoting extra funds to serving low-income or at-risk dual enrollment students. States could allocate additional funding to provide additional supports and college-connection services for underserved student populations and to improve college outcomes for these students.

STATES CAN PROVIDE ADDITIONAL FUNDING FOR EARLY COLLEGE HIGH SCHOOLS AND OTHER SCHOOLS AND PROGRAMS USING EARLY COLLEGE DESIGNS.

Not only is dual enrollment central to all early college high schools, but also most of them work primarily with underserved populations and provide students with additional supports that improve their chances to succeed in college. Giving postsecondary institutions an incentive to partner with these schools by providing additional performance-based funding would help make that happen—perhaps offsetting, for example, the cost to a college of additional enrollments. Thus, Indiana allocates funding for colleges that collaborate with early college high schools in addition to funding them for dually enrolled students.

FUNDING CAN DISTINGUISH BETWEEN DUAL ENROLLMENT COURSES OFFERED AT THE HIGH SCHOOL VERSUS COURSES OFFERED ON A COLLEGE CAMPUS.

Sometimes students take dual enrollment courses on their high school campuses, with the class taught by high school faculty members certified as adjuncts to a local college. These courses can be less expensive to offer to students than courses on the college campus taught by college faculty, because it merely shifts the teaching load of the already-employed high school faculty who are used as instructors. During one of its revisions to the state's dual enrollment funding formula, Indiana policymakers noticed that most dual enrollment courses were being delivered at high schools. Therefore, they reduced the rate of reimbursement for all dual enrollment courses.

Making a distinction between different types of program delivery seems fair, but such rules may not account for all costs associated with dual enrollment, such as the costs for aligning college and high school curricula or for providing professional development for teachers. In addition, funding all dual enrollment at a lower rate may discourage other ways of offering courses, including on the college campus.

Funding strategies that create disincentives to offering dual enrollment courses on college campuses may be counterproductive. Offering courses on the high school campus is an effective strategy that many districts can leverage successfully. However, offering courses on the college campus gives students "the power of place" and a more authentic college experience, and a few studies conclude that offering dual enrollment on the college campus is more effective than offering it on the high school campus (Karp 2012; Speroni 2011a). Therefore, efforts to cut overall costs should not discourage the practice of dual enrollment located on college campuses.

STATES CAN CHOOSE TO PROVIDE PERFORMANCE-BASED FUNDING FOR ALL DUAL ENROLLMENT COURSES OR BE SELECTIVE ABOUT WHICH ONES TO ENCOURAGE.

Texas bases its proposed system for performance-based funding on "momentum points": The state will reward colleges when students reach certain milestones on the path to degree completion. Colleges can earn points based on remedial course completions, introductory English or math course completions, certain credit milestones reached, and degrees earned. All of these metrics include progress by dual enrollment students.

Such policies may encourage dual enrollment course-taking in subjects that show more of an association with college success. Thus, states may want to focus intensively on a few high-leverage measures, such as courses in math and English (Speroni 2011b). However, research suggests that other courses are associated with college success as well—and that many courses can offer a good introduction to college when delivered as part of a curricular pathway to more advanced course-taking (Struhl & Vargas 2012; Hughes et al. 2005). Thus, there is a good argument for maintaining some flexibility in dual enrollment course-taking opportunities and monitoring the effects on college completion outcomes.

ENDNOTES

[1] Snyder & Dillow (2012) is the most recent complete version of the *Digest of Education Statistics*. More recent data are available at http://nces.ed.gov/programs/digest/d12/tables/dt12_377.asp. The share of students completing certificates or Associate's degrees within 150 percent of the normal time rose between 2011 and 2012 from slightly under to slightly over 30 percent.

[2] For more information on the use of performance-based funding to improve college completion, see Altstadt, Fingerhut, & Kazis (2012).

[3] For more information on schools and programs using Early College Designs, see: http://www.jff.org/earlycollege

[4] "Performance Funding in HIgher Education," an online map of state activity as of February 2013, is available at: http://www.ncsl.org/issues-research/educ/performance-funding.aspx

[5] Jobs for the Future has an interactive Web tool to provide education leaders with guidance as they make decisions about the policies needed to expand and sustain accelerated learning opportunities for students who are not already college bound. Policymakers can use the tool to assess the extent to which their states' policies align with model elements needed to support these programs. See a preview of JFF's interactive Web tool at: http://application.jff.org/dualenrollment. See also Ward & Vargas (2012) for background on this tool and the use of dual enrollment policy to improve college and career readiness.

[6] For more information, see the Indiana Commission for Higher Education website: http://www.in.gov/che/2772.htm

[7] For more information, see the Tennessee Higher Education Commission website: http://www.tn.gov/thec

[8] Texas based the design on a similar system in Washington State (Altstadt, Fingerhut, & Kazis 2012).

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