



How Do We Measure Student Success in Dual Enrollment Programs?



Panelists:

Maureen Ewing, The College Board

John Fink, Community College Research Center

Trey Miller, American Institutes for Research

Jason Taylor, The University of Utah

Moderator:

David Troutman, The University of Texas System

Measuring Success in High School Acceleration Programs: The AP Perspective

Maureen Ewing

October 2018

CollegeBoard

AP[®]

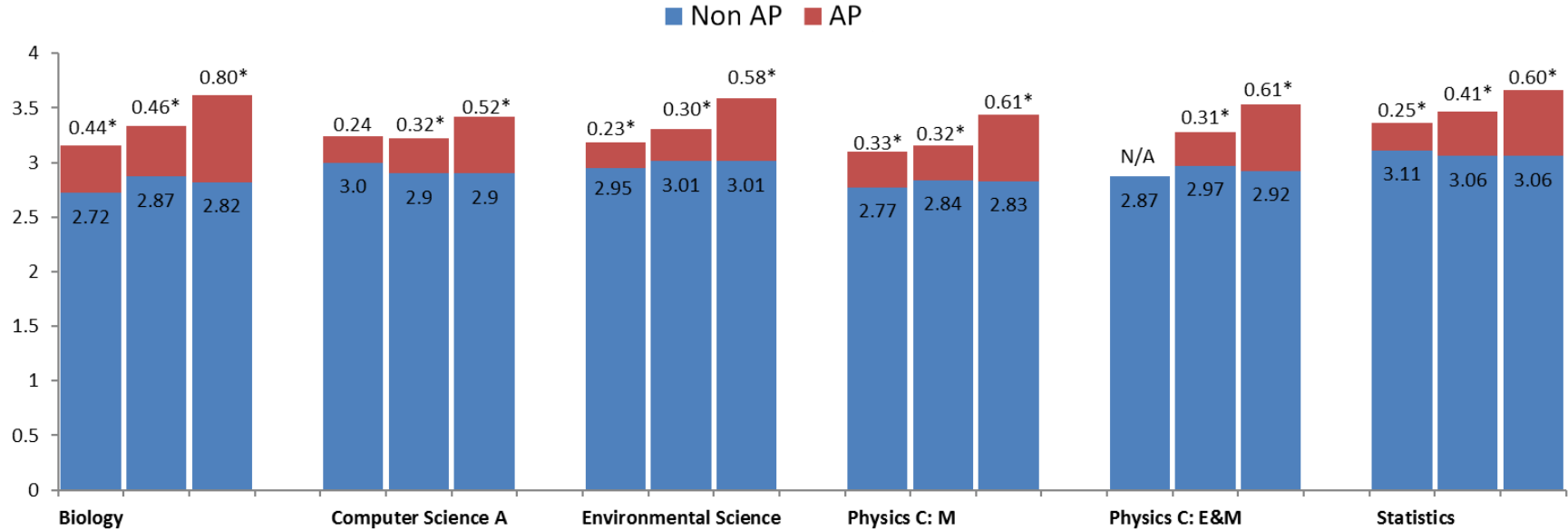


How do AP Exam takers who place out of introductory courses perform in the next course taken compared to non-AP students who took the corresponding introductory course(s) at their institution?

Are AP Exam scores valid for course placement decisions?



Sample Results: Sciences and Statistics



	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5
AP N	755	1,860	454	42	207	222	220	404	190	62	282	500	-	128	268	698	1,156	686
Non-AP N	735	666	204	483	1,101	1,093	1,489	1,853	2,006	3,805	6,393	7,762	1,633	3,264	4,443	1,859	3,255	3,204

Admitted Class Evaluation Service™ (ACES)



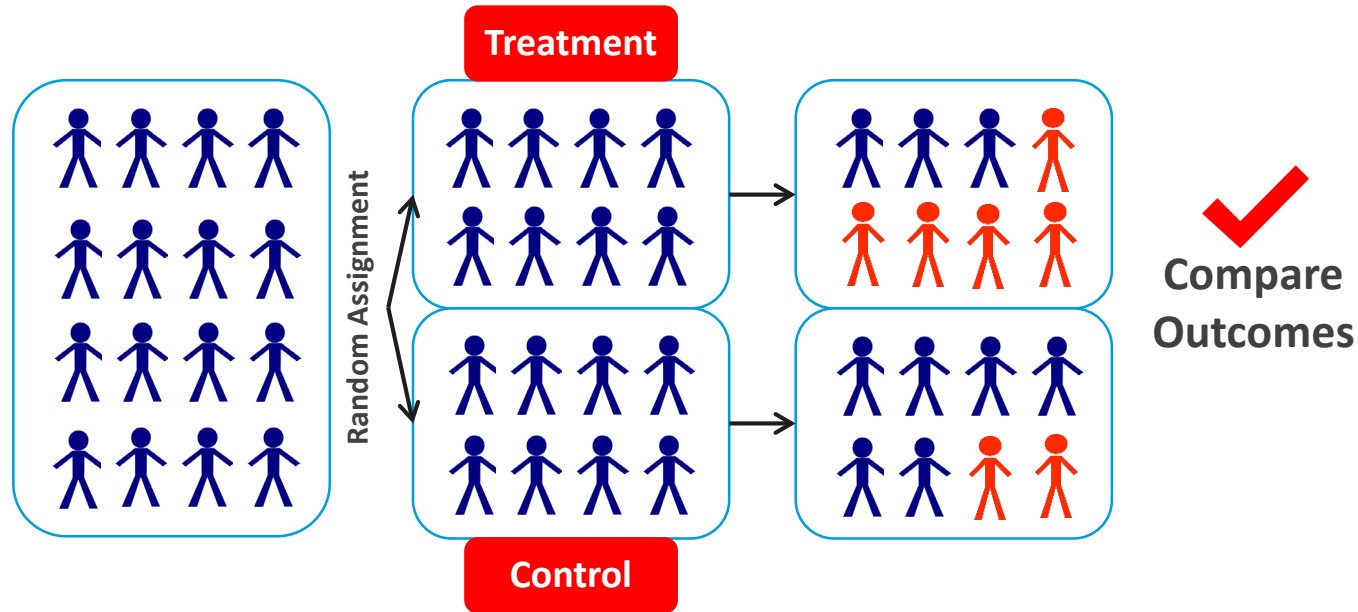
- Free online service that can be used to evaluate credit and placement policies
- Institutions upload the necessary data and the system produces a placement validity report

Program Evaluation Perspective

- AP participation and performance and other measures of success
 - College enrollment
 - Persistence
 - Degree completion (two-year and four-year)
 - Choice of major and persistence
 - Cost savings
 - “Richer” college experience
- Importance of any given measure likely varies by stakeholders
- Defining AP Participation
 - Course only?
 - Exam only?
 - Performing well on Exam?
- Importance of control variables in correlational designs/quasi-experimental designs

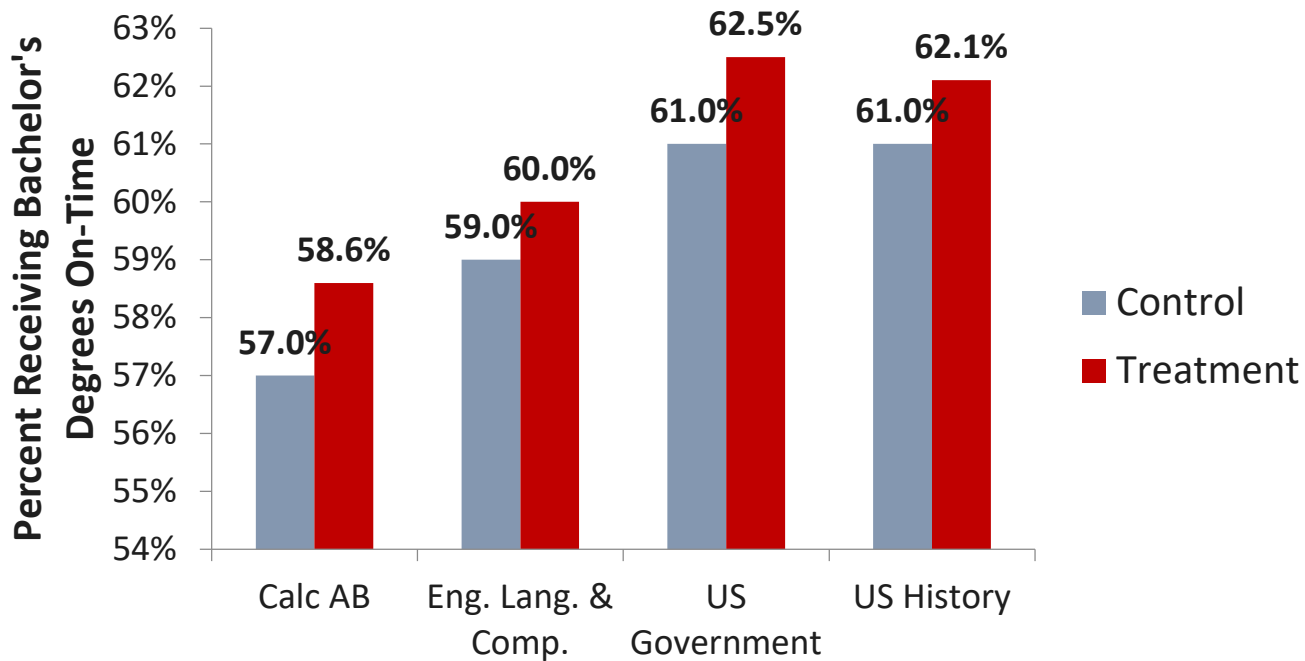
Getting at Causal Evidence: Effects of Colleges' AP Credit-Granting Policies on Student Outcomes

- ▶ Randomized Control Trial (RCT) *would have been* the “Gold Standard”



AP Causal Research

The effect of earning more and more credit-granting AP scores is partially cumulative.

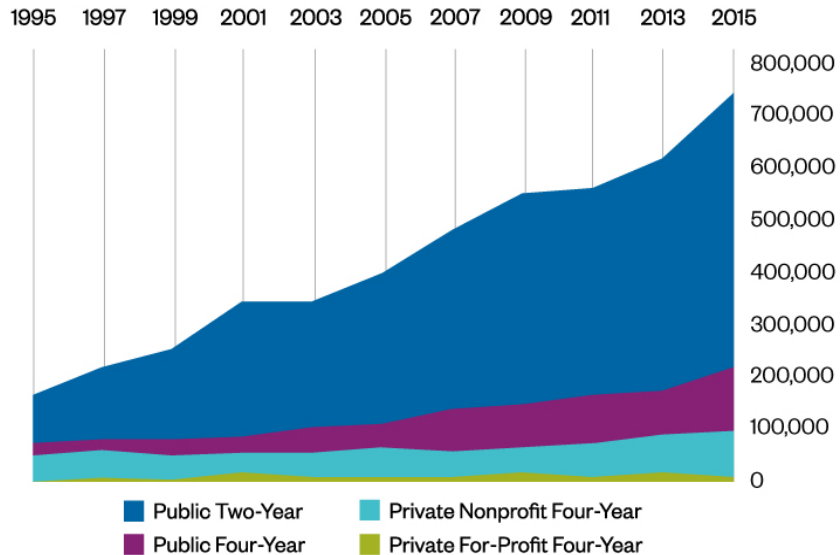


Measuring Community College Effectiveness in Serving Dual Enrollment Students

John Fink
Senior Research Associate, CCRC
Vertex Conference
October, 2018

Growth of Dual Enrollment 1995-2015

IPEDS Fall Enrollments



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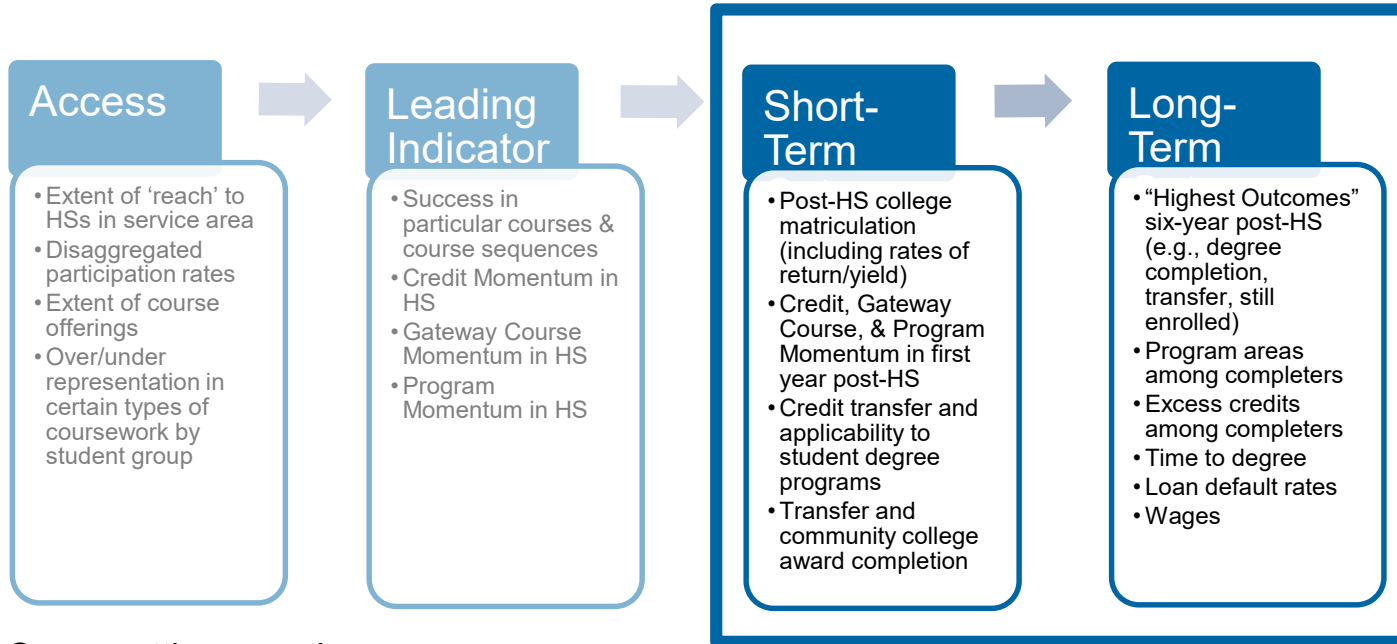
Fall Undergraduate Enrollments Among Students Aged 17 or Younger

Expansion of Dual Enrollment Concentrated at Community Colleges

Key Questions from Community College Leaders on Improving Dual Enrollment using Guided Pathways Framework

- What courses are our DE students taking & how are they selecting them?
- Are our DE students gaining momentum in a program of study in HS?
- Where do our DE students go to college after HS, how many return to our college, and what's happening with DE students who don't go to college?
- How many end up earning college credentials, from which institutions, and in what majors?
- What are the course-taking patterns and outcomes among DE students who continued at our college after HS?
- Are DE students passing college-level math and critical program courses either in HS or in their first year in college (after HS)?
- Are DE credits being applied to students' degree programs?
- How do results vary by HS and program of study?
- How do results vary for students by race, income, gender, & geography?

Tracking College Effectiveness in Serving Dual Enrollment Students



Cross-cutting questions:

- How do results differ by student characteristics (race/ethnicity, income, gender, etc.)
- How do results vary by our college's main high school partners?

What Happens to Students Who Take Community College “Dual Enrollment” Courses in High School?



September 2017

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RESEARCH CENTER

John Fink

Community College Research Center
Teachers College, Columbia University

Davis Jenkins

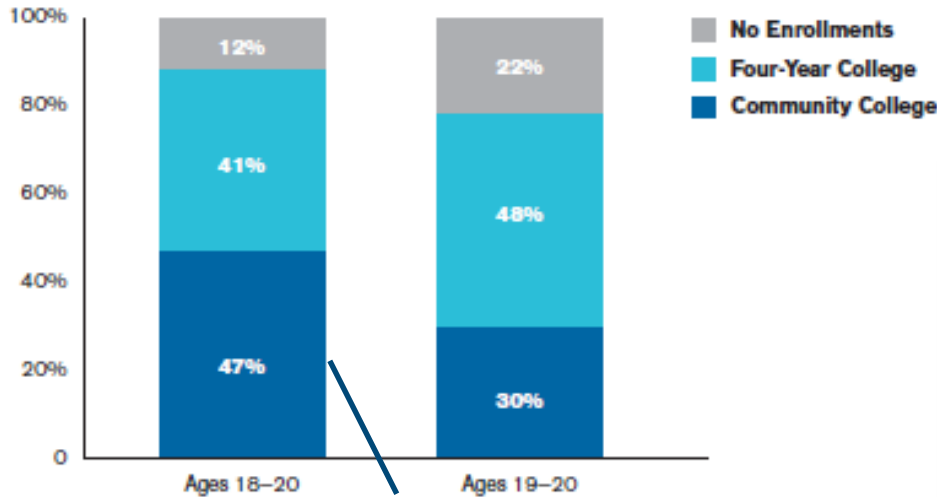
Community College Research Center
Teachers College, Columbia University

Takeshi Yanagura

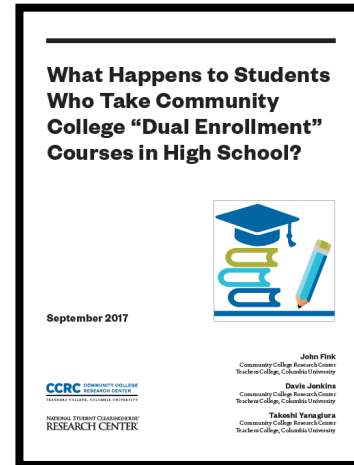
Community College Research Center
Teachers College, Columbia University

Where do dual enrollment students enroll in college after high school?

Figure 4. First College Matriculation Among Former Dual Enrollment Students



84% returned to the same community college



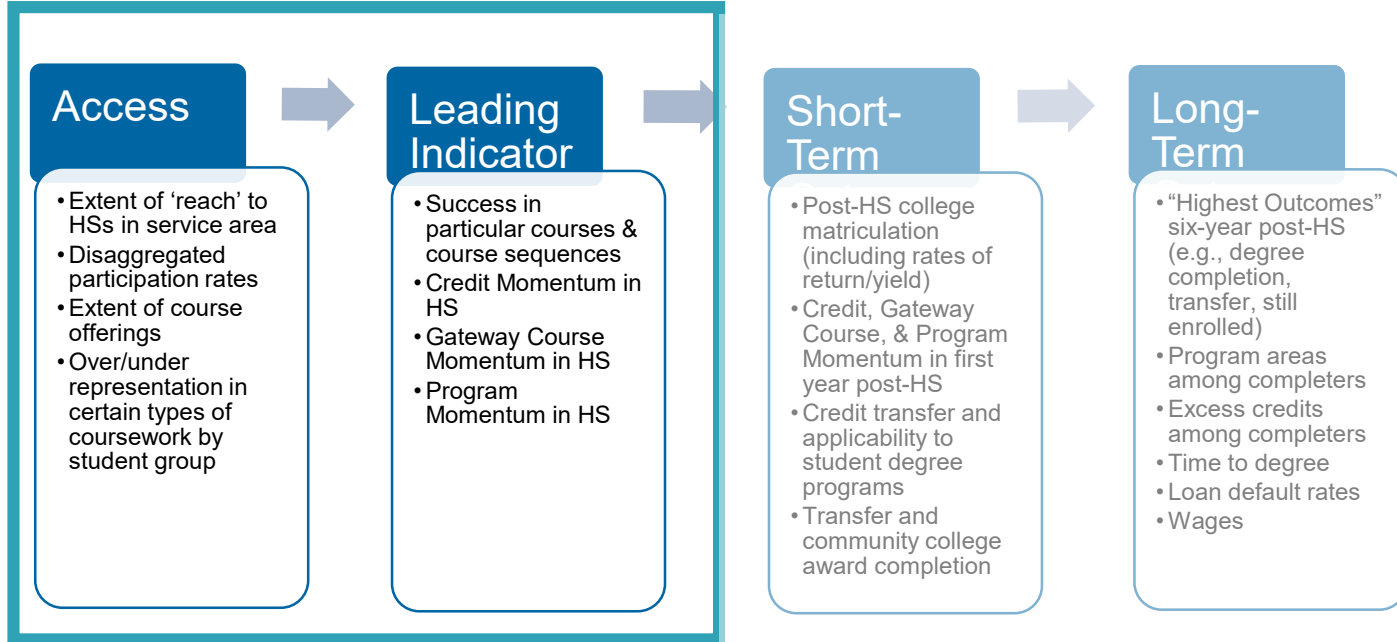
What are dual enrollment students' college outcomes?

Students who first matriculated at a community college after high school

Figure 6. Highest Outcomes by Income Among Students Who Participated In Dual Enrollment at Age 17 and First Matriculated at a Community College at Ages 18–20



Tracking College Effectiveness in Serving Dual Enrollment Students



Cross-cutting questions:

- How do results differ by student characteristics (race/ethnicity, income, gender, etc.)
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Leading Indicators of College Performance in Serving Dual Enrollment Students

What types of course-taking are associated with longer-term outcomes?

Early Momentum Matters

CCRC RESEARCH BRIEF

Number 65 | February 2017

Early Momentum Metrics: Why They Matter for College Improvement

By Davis Jenkins and Thomas Bailey

Postsecondary reform has several important goals, including improving degree completion, increasing students' chances of reaching well-informed goals, and closing equity gaps in student achievement. Thus, long-term measures—such as overall increases and improved equity in completion rates and employment outcomes—will eventually signal the success or failure of the current reform movement. But in seeking to reform college practice to improve student success over the long run, there are two broad reasons why stakeholders should initially focus on near-term measures.

First, graduation and employment will occur years in the future. If we rely on longer term metrics, we will have to wait several years after reforms are implemented to begin to get an indication of whether they are working. If we can find measures of near-term progress that predict long-term success, then we can gauge the effectiveness of the reforms much earlier. While near-term progress does not guarantee longer term success, it is unlikely that long-term success will occur if near-term outcomes are stagnant.

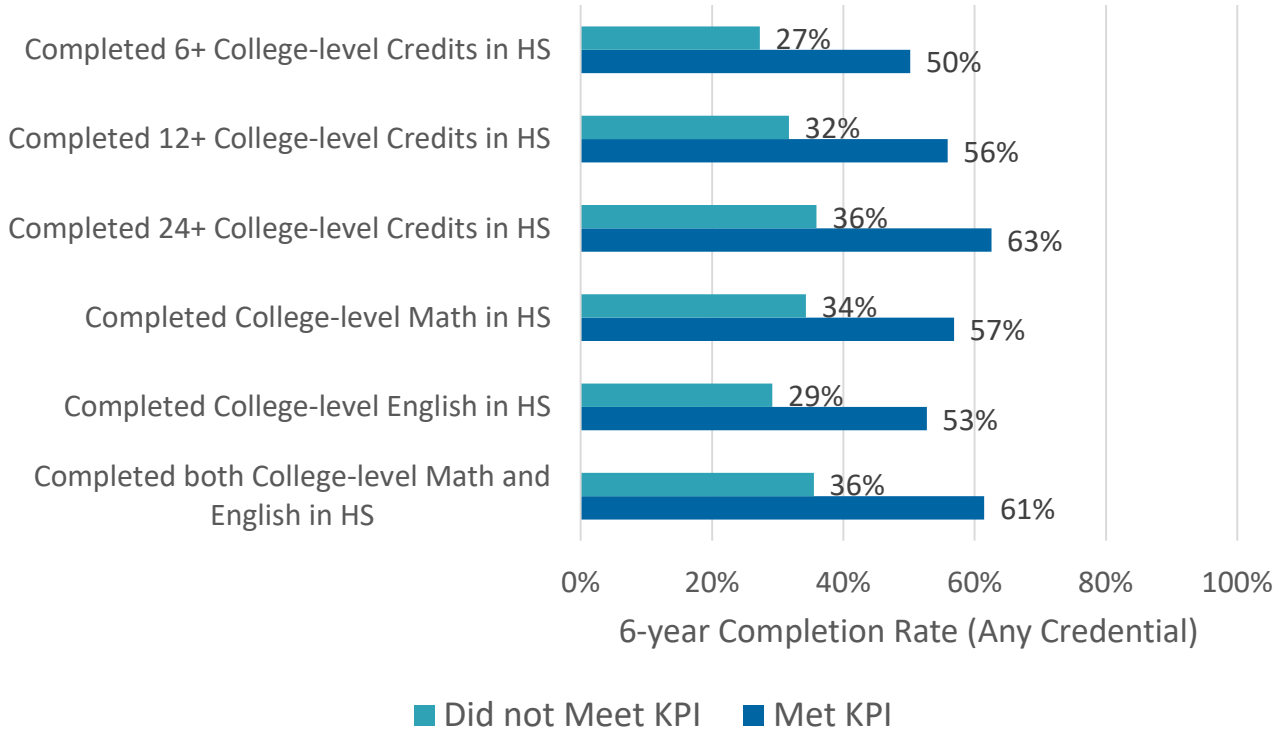
Second, focusing on near-term outcomes is not only valuable for the purpose of evaluation; it can also motivate and help guide continuous improvement and adjustment of reforms. If students begin their college careers off-track, then they will spend their first year not making progress toward their goals. In addition to wasting students' time and money, lack of progress in the first year can lead to excess credits and difficulties in transfer, and lowered chances of program completion. An examination of first-year metrics can motivate colleges to introduce practices that create the initial conditions necessary for subsequent success.

In this brief, we propose three measures of "early momentum" for both of the reasons described above: Research is beginning to show that these near-term metrics predict long-term success, and the metrics focus attention on initial conditions at colleges that are particularly important for solidifying the foundation for student success. While these measures are valuable individually, as a group they give a better picture of the impact of reforms on students, and thus are more valuable if used together. These measures include:

An examination of first-year metrics can motivate colleges to introduce practices that create the initial conditions necessary for subsequent success.

Is “Dual Enrollment Momentum” related to Credential Completion?

Former DE students who first attended an Ohio CC after HS: 6-year Completion Rates (any credential) by KPI Attainment in HS



DUAL CREDIT EDUCATION PROGRAMS IN TEXAS

MAKING
RESEARCH
RELEVANT

Authors:

Trey Miller | Holly Kosiewicz | Courtney Tanenbaum | Drew Atchison | David Knight |
Beth Ratway | Scott Delhommer | Jesse Levin

VERTEX CONFERENCE | OCTOBER 2018

Two-year study was conducted in partnership with the Texas Higher Education Coordinating Board

- Study was made possible by the Texas Higher Education Foundation with generous financial support from these organizations

HOUSTON
ENDOWMENT



EDUCATE TEXAS
a public-private initiative of Communities Foundation of Texas



GREATER TEXAS FOUNDATION



The Meadows
Foundation

- Study materials available at <http://www.thecb.state.tx.us/dualcreditstudy>
 - Draft report released for public comment at July 26th THECB Board Meeting
 - Final report to be delivered to THECB at October 25th Board Meeting

Large mixed methods study answered six primary research questions

- ***Causal Impact Study:*** To what extent does dual-credit education increase college enrollment, college attainment, and efficient degree completion?
- ***Racial Disparities Study:*** Which factors contribute to racial and ethnic disparities in dual-credit participation?
- ***HB 505 Study:*** What were the patterns in participation and courses grades in dual credit education, and the delivery of dual credit education programs before and after House Bill 505?

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Phase II answered on six primary research questions

- ***Advising Study:*** How do high school counselors and college advisors select students for dual-credit education, advise them into enrolling in dual-credit courses, and coordinate advising services?
- ***Academic Rigor Study:*** How are dual-credit students taught and assessed compared to college-credit-only students?
- ***Cost Study:*** What are the annual costs of delivering dual-credit education, and how are they distributed among stakeholders? Also,²⁴ how do these costs compare to the benefits of dual-credit education?

Key Findings

What have we learned?

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Main Finding: Dual Credit Benefits Texas and its Students

- The benefits of dual credit far exceed the cost
 - The individual and societal benefits generated by participating in dual credit education are five times the cost of delivering this type of program.
- Dual credit increases college access and completion, and decreases time-to-degree
 - Dual credit education increased college enrollment by 2.4 percentage points, and college completion by 1.1 percentage points.
- Dual credit and college-credit only courses appear to be equally rigorous
 - From a systematic review of course syllabi, class assignments, graded²⁶ student work, and survey responses submitted by dual credit and college-credit only instructors, we found that course content, student assignments, and grading standards to be similar.

Our Study Also Identified Several Areas for Improvement

- The benefits of dual credit delivered in traditional high schools are lower for disadvantaged student groups
 - Less academic preparation and less access to supports at home
 - » Supports embedded in Early College High Schools are likely important for these students
- The quality of advising varies considerably, and is inadequate to ensure dual credit students transfer credits directly to their major
 - High school guidance counselors, who provide the bulk of advising, often lack resources and training to adequately guide dual credit students in their course-taking decisions.
- Costs may deter some students from participating in dual credit
 - Advisors and guidance counselors reported that the costs of enrolling in dual credit courses are an obstacle to participation
 - In Texas, providing dual credit students financial relief increases the share of costs covered by the college or the school district

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THE UNIVERSITY OF UTAH

A Tour of DE Research...

How Do We Measure Student Success in Dual Enrollment Programs?

October 6, 2018

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Assistant Professor, Educational Leadership and Policy

University of Utah

@jltaylo

- 1. Equity**
- 2. Outcomes**
- 3. Students**
- 4. Community Colleges**
- 5. Policy**

Study 1: Taylor, J. L. (2015). Accelerating pathways to college: The (in)equitable effects of community college dual credit. *Community College Review*, 43(4), 355-379.

Finding: DC/DE policy results in inequitable access to and success in college for low-income students and student of color.

Implication: State policy is income- and race-neutral (so why would we expect equitable outcomes?), so make income and race goals/policies explicit.

Study 2: Borden, V., Taylor, J. L., Park, E., & Seiler, D. (2013). *The dual credit information project: State policy and quality assurance for college-level courses offered to high school students*. Chicago, IL: The Higher Learning Commission.

Finding: DE/DC state policy varies (like...by a lot), and states increasingly focus on quality.

Implication: State policy needs to consider and manage the tension between DE/DC access, equity, and quality.

Study 3: Taylor, J. L. & Lichtenberger, E. J. (2013). *Who has access to dual credit in Illinois? Examining high school characteristics and dual credit participation rates* (IERC 2013-4). Edwardsville, IL: Illinois Education Research Council, Southern Illinois University Edwardsville.

Finding: Systematic inequities in access to DE/DC participation based on high school characteristics.

Implication: Create incentives to expand DE/DC, and target state fiscal and human resources toward enhancing capacity in low-resource high schools to expand DE/DC.

Study 4: Taylor, J. L., Fisher, D., & Bragg, D. D. (2014). *Dual credit funding models in Illinois community colleges*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.

Finding: Local DE/DC finance models can vary greatly, likely impacting student access.

Implication: Create policy to equalize funding and to reduce affordability barriers and expand access.

Study 5: An, B. P., & Taylor J. L. (2015). Are Dual Enrollment Students College Ready? Evidence from the Wabash National Study of Liberal Arts Education. *Education Policy Analysis Archives*.

Finding: DE/DC students improves college readiness, except knowledge transition & skills.

Implication: Use DE/DC to help improve college readiness, but embed support services.

Study 6: Taylor, J. L., & Pretlow, J. (Eds.). (2015). Dual enrollment polices, pathways, and perspectives. *New Directions for Community Colleges*. San Francisco, CA: Jossey-Bass.

Multiple policies, pathways, and perspectives...

Check out all 10 chapters in Edited Volume...there's a lot in there.

Study 7: Taylor, J.L. & An, B.P. (2017). *Improving IPEDS data collection on high school students enrolled in college courses*. U.S. Department of Education. Washington, DC: National Postsecondary Education Cooperative.

Finding: Federal IPEDS measurement and collection of DE/DC leaves much to be desired (inconsistent and inadequate measurement).

Implication: Change IPEDS data collection to improve enrollment and outcome measurement.

Study 8: Taylor, J. L., & Yan, R. (2018). Exploring participation in and outcomes of Advanced Placement and concurrent enrollment programs in Arkansas. *Education Policy Analysis Archives*.

Finding: DE/DC and AP both help students transition, and no difference in college enrollment and retention based on standards-based accreditation.

Implication: We need more research and assessment of standards-based DE/DC.

Study 9: An., B., & Taylor, J. L. (forthcoming--2019). A review of empirical studies on dual enrollment: Assessing educational outcomes. In Paulsen, M. B. & Perna, L. (Eds.), *Higher Education: Handbook of Theory and Research*.

Finding: Strong evidence on relationship between DE/DC and educational outcomes, DE/DC benefits all students, but mixed evidence on differential impacts.

Implication: Need more research on DE/DC policy and practices.

Question 1:

What should be included in a framework for measuring success in college acceleration programs?



Question 2:

How can a success framework be used and by whom? Specifically, what components of such a framework would be most appropriate for policymakers (e.g., accountability) vs. practitioners (e.g., internal, improvement-focused work)?





Question 3:

How can we ensure that such a framework for measuring success advances the equity agenda? How can these measures align with the goal of expanding college opportunity to underserved school populations (African American, Latinx, Native American students)?



THE UNIVERSITY of TEXAS SYSTEM

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Session Discussion



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