

# Increasing Equity in Dual Enrollment

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League Innovations, February 25<sup>th</sup> 2019

# About CCRC

CCRC has been a leader in the field of community college research and reform for over 20 years. Our work provides a foundation for innovations in policy and practice that help give every community college student the best chance of success.

Our areas of research include:

- College readiness and dual enrollment programs, and the transition from high school to college
- Developmental education and adult basic skills
- Non-academic support services, financial aid, and student engagement
- Online education and instructional technology
- Student persistence and completion, and transfer to four-year colleges
- Guided pathways, institutional reform, and performance funding
- Workforce education and training and the economic returns to higher education



# What We Know About Dual Enrollment

- Accumulation of rigorous research on effects of HS dual enrollment
- *WWC* Report: Taking college courses in HS has numerous positive effects, including stronger HS grades, more HS completion, more college enrollment, more credit accumulation, more degree completion.
- Equitable access to and benefits from dual enrollment? Mixed findings. (An, 2013; Taylor, 2015; CUNY Study).

**What Works Clearinghouse™** U.S. DEPARTMENT OF EDUCATION  
**WWC Intervention Report** ies INSTITUTE OF EDUCATION SCIENCES  
 A summary of findings from a systematic review of the evidence  
**Transition to College** February 2017

## Dual Enrollment Programs

**Program Description<sup>1</sup>**  
*Dual enrollment programs* allow high school students to take college courses and earn college credits while still attending high school. Such programs, also referred to as dual credit or early college programs, are designed to boost college access and degree attainment, especially for students typically underrepresented in higher education. *Dual enrollment programs* support college credit accumulation and degree attainment via at least three mechanisms. First, allowing high school students to experience college-level courses helps them prepare for the social and academic requirements of college while having the additional supports available to high school students; this may reduce the need for developmental coursework. Second, students who accumulate college credits early and consistently are more likely to attain a college degree. Third, many *dual enrollment programs* offer discounted or free tuition, which reduces the overall cost of college and may increase the number of low socioeconomic status students who can attend and complete college.<sup>2</sup>

**Research<sup>3</sup>**  
 The What Works Clearinghouse (WWC) identified five studies of *dual enrollment programs* that both fall within the scope of the Transition to College topic area and meet WWC group design standards. Two studies meet WWC group design standards without reservations, and three studies meet WWC group design standards with reservations. Together, these studies included 77,249 high school students across the United States.

The WWC considers the extent of evidence for *dual enrollment programs* to be medium to large for the following student outcome domains—degree attainment (college), college access and enrollment, credit accumulation, completing high school, and general academic achievement (high school). The WWC considers the extent of evidence for *dual enrollment programs* to be small for the following student outcome domains—staying in school, college readiness, attendance (high school), and general academic achievement (college). There were no studies that meet WWC group design standards in the five other domains eligible in the Transition to College topic area, so this intervention report does not report on the effectiveness of *dual enrollment programs* for those domains. (See the Effectiveness Summary on p. 6 for more details of effectiveness by domain.)

**Effectiveness<sup>4</sup>**  
*Dual enrollment programs* were found to have positive effects on students' degree attainment (college), college access and enrollment, credit accumulation, completing high school, and general academic achievement (high school), with a medium to large extent of evidence. For the staying in high school, college readiness, and attendance (high school) domains, *dual enrollment programs* had potentially positive effects with a small extent of

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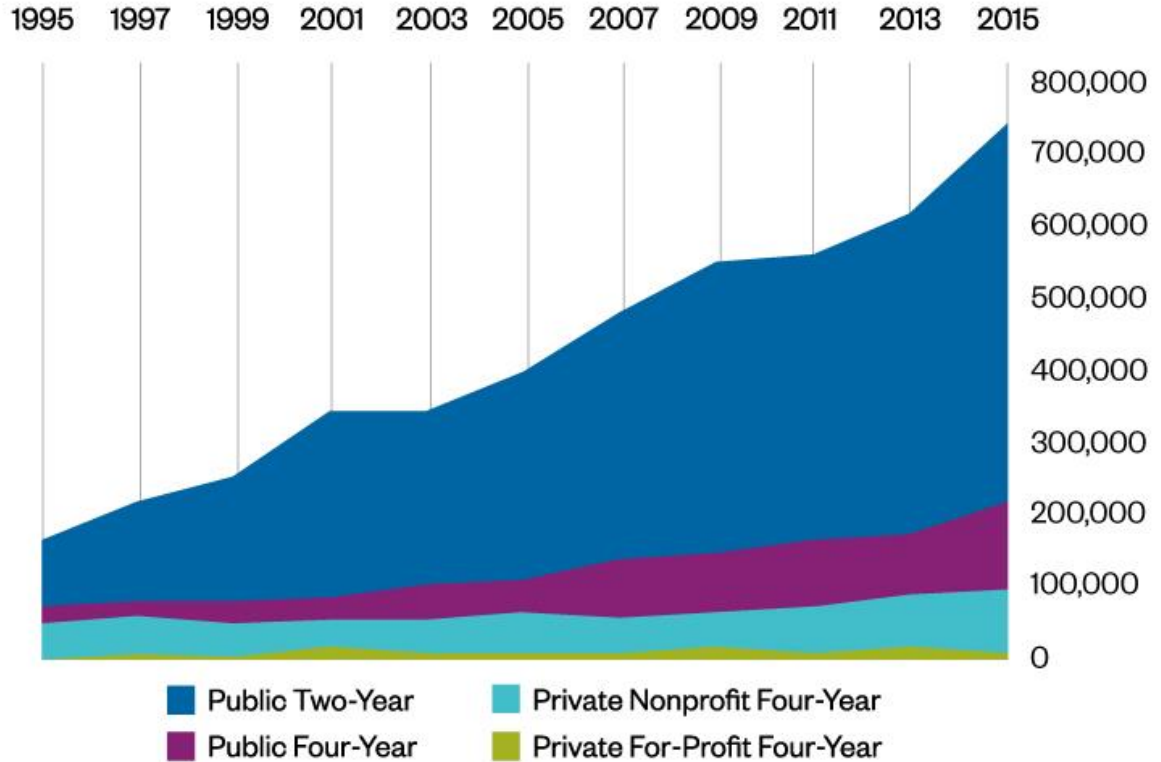
This intervention report presents findings from a systematic review of dual enrollment programs conducted using the WWC Procedures and Standards Handbook, version 3.0, and the Transition to College review protocol, version 3.2.

Dual Enrollment Programs February 2017 Page 1

# Growth of Dual Enrollment

## 1995-2015

IPEDS Fall Enrollments



**CCRC** COMMUNITY COLLEGE  
RESEARCH CENTER  
TEACHERS COLLEGE, COLUMBIA UNIVERSITY

Fall Undergraduate Enrollments Among Students Aged 17 or Younger

# Expansion of Dual Enrollment Concentrated at Community Colleges

# State Trends in High School Dual Enrollment Growth

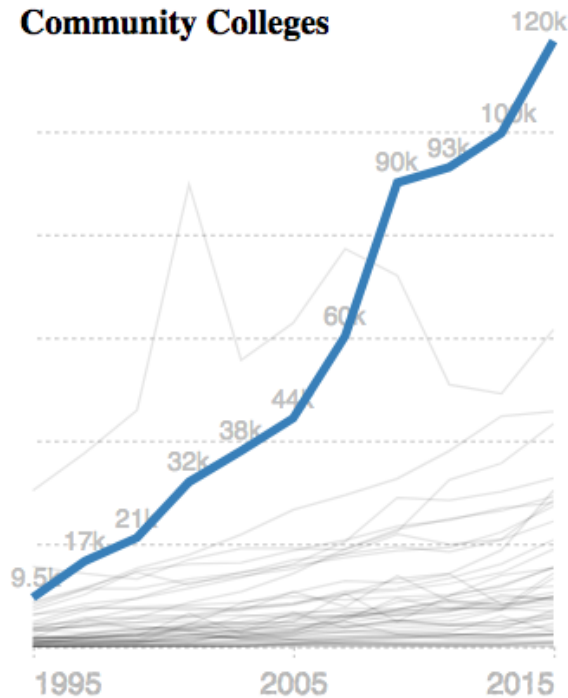
## Texas

Created August, 2017 by [John Fink](#)

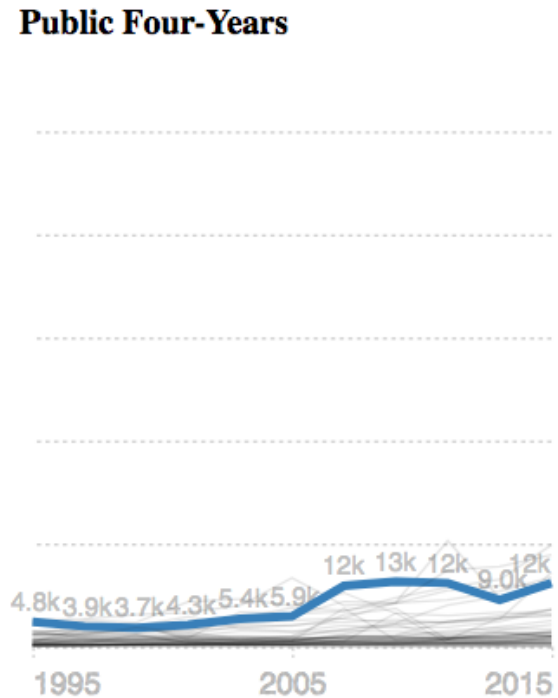
**Data:** IPEDS Fall Enrollments of Age 17 and younger students, collected biannually from 1995-2015.



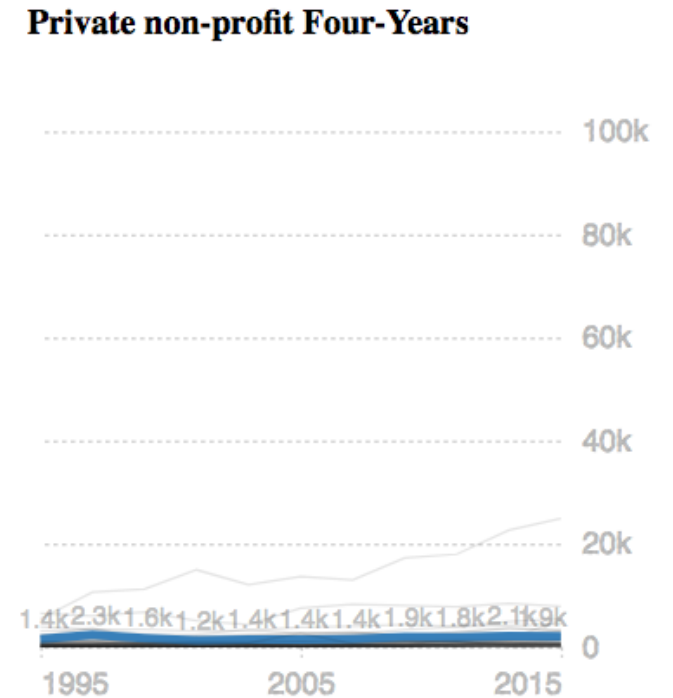
**Community Colleges**



**Public Four-Years**

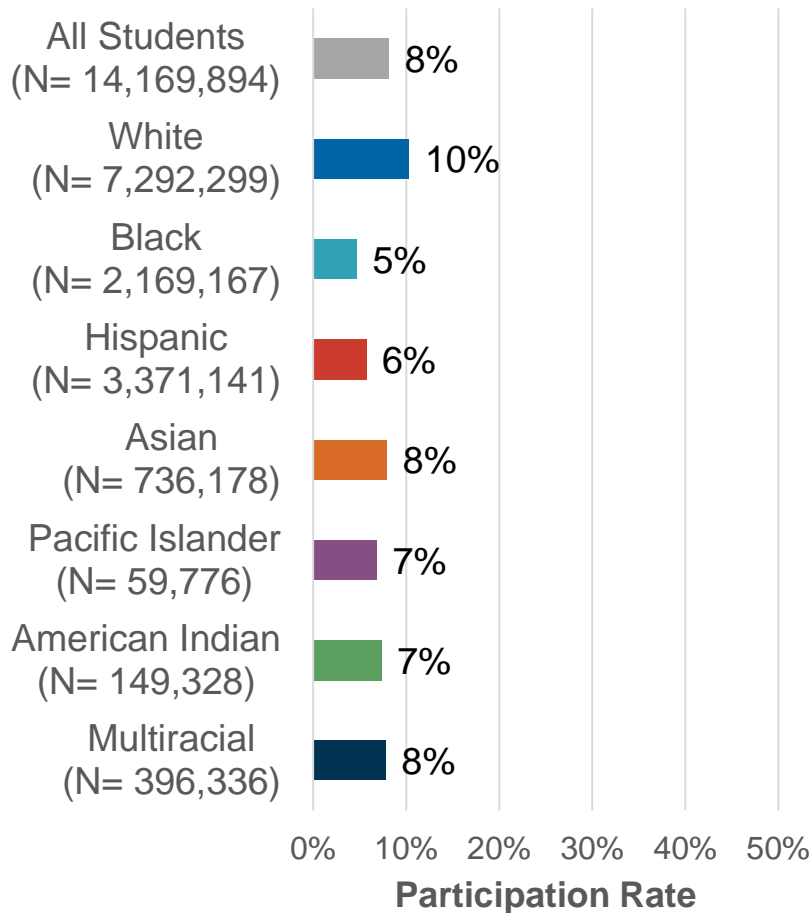


**Private non-profit Four-Years**

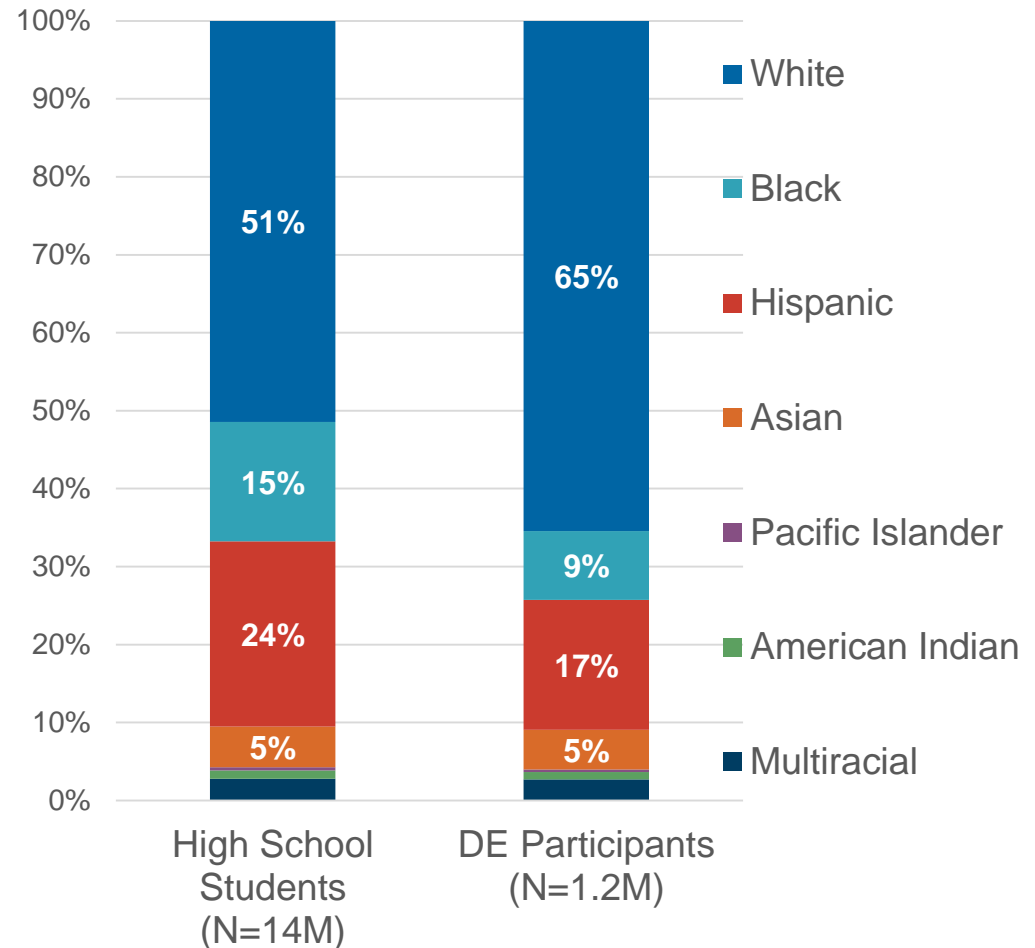


# New US Dept. of Education Data: Black and Latino HS Student Underrepresented in DE

DE Participation Rates



HS Student Racial Composition





# Tracking Community College Dual Enrollment Students

- Data from the National Student Clearinghouse: Enrollment & Degree records on 1.4 million first-time-ever-in-college (FTEIC) community college students in fall 2010.
- Dual Enrollment definition: Entering FTEIC community college students who were 17 or younger when they started in the fall of 2010.
  - Inclusive of any type of community college course-taking
  - Limitation: Age proxy results in misclassifications of some students
  - Limitation: No data on race/ethnicity, proxy for family income from Census
  - 213,780 high school dual enrollment students in fall 2010 cohort

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



September 2017

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NATIONAL STUDENT CLEARINGHOUSE  
RESEARCH CENTER

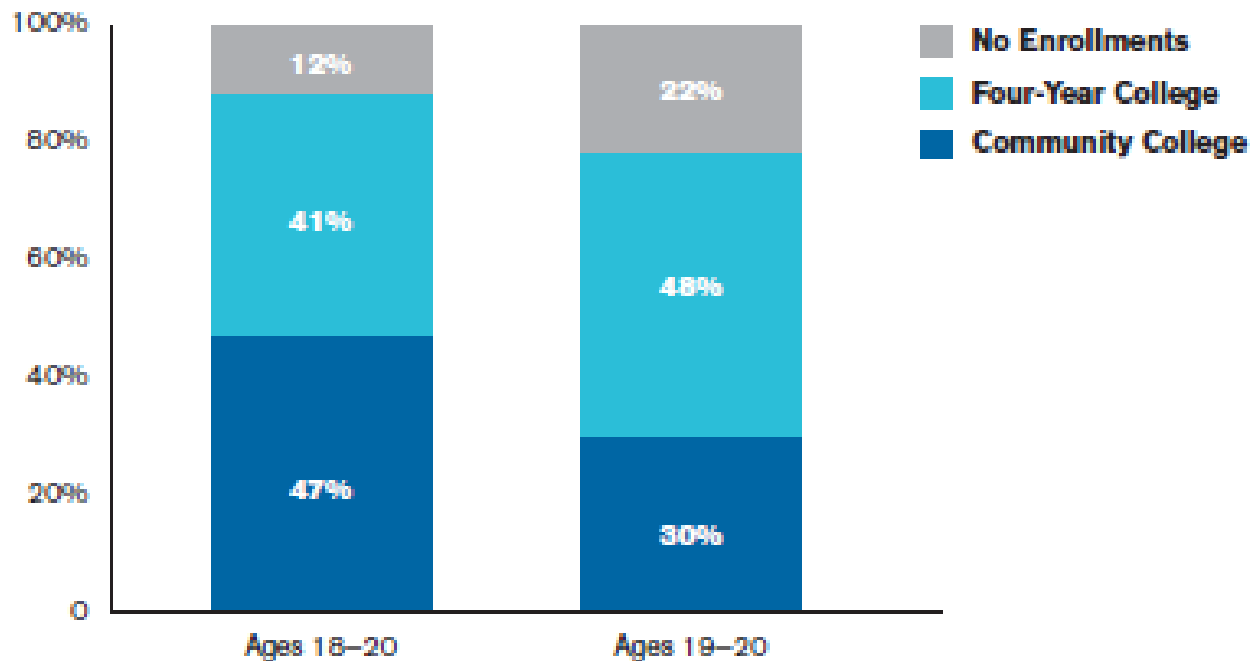
**John Fink**  
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**Takashi Yanagisawa**  
Community College Research Center  
Teachers College, Columbia University

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

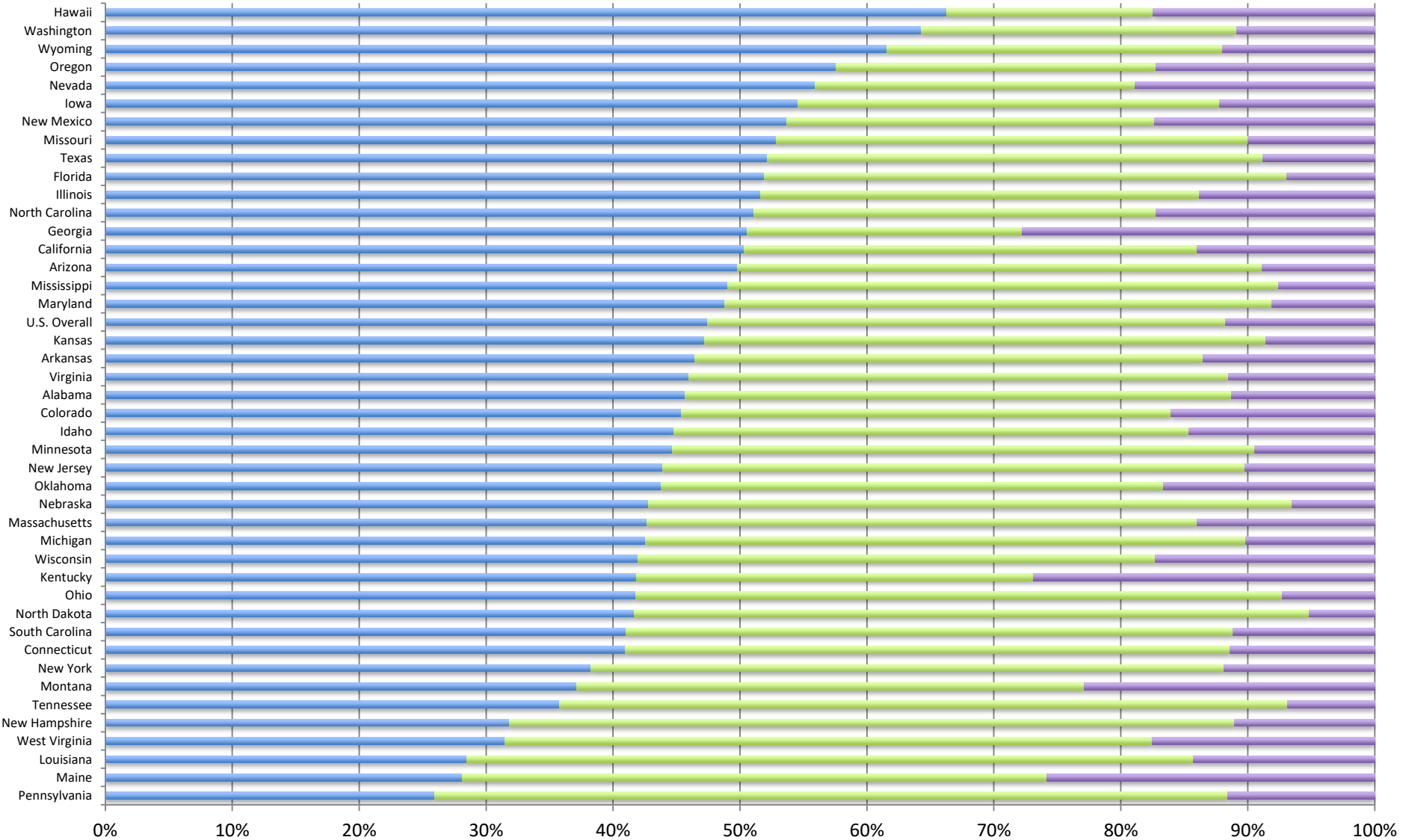
Figure 4. First College Matriculation Among Former Dual Enrollment Students





### Former Dual Enrollment Students' First College Matriculations at Ages 18-20, by State

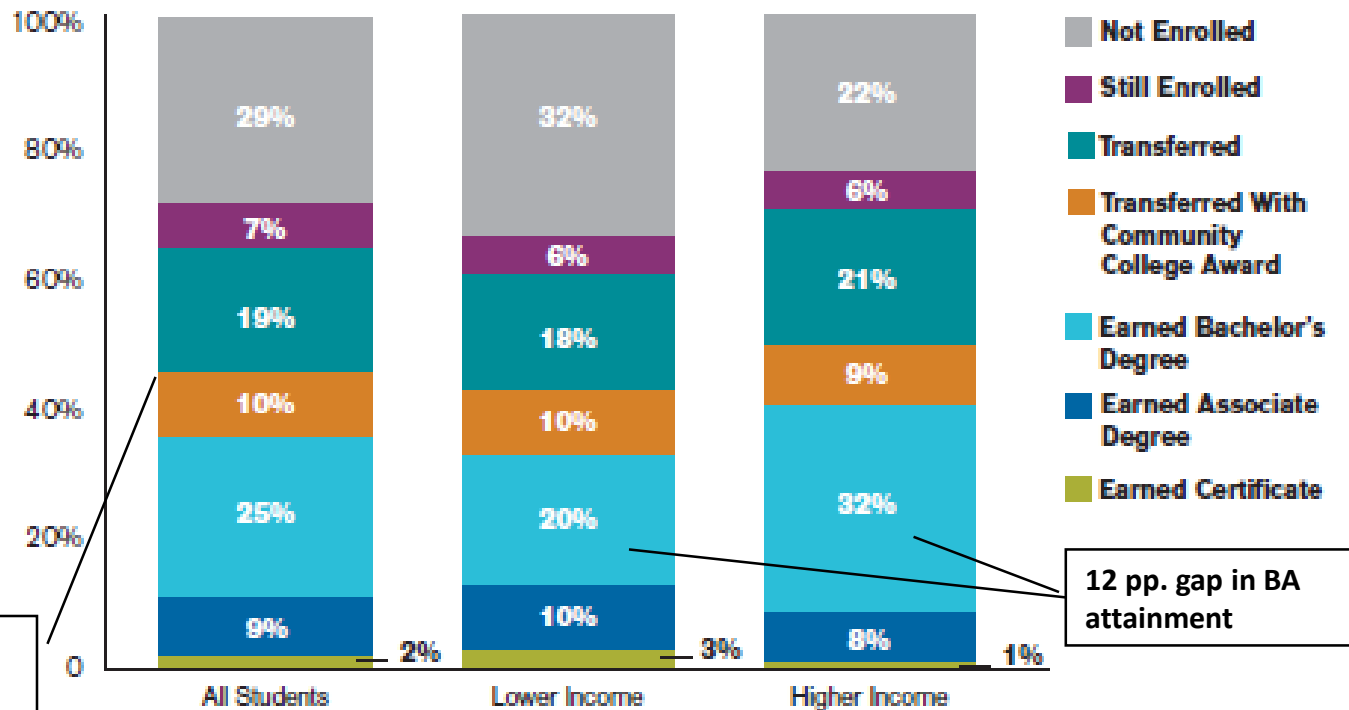
Community College    Four-Year College    No Enrollments



# What are dual enrollment students' college outcomes?

*Students who first matriculated at a community college after high school*

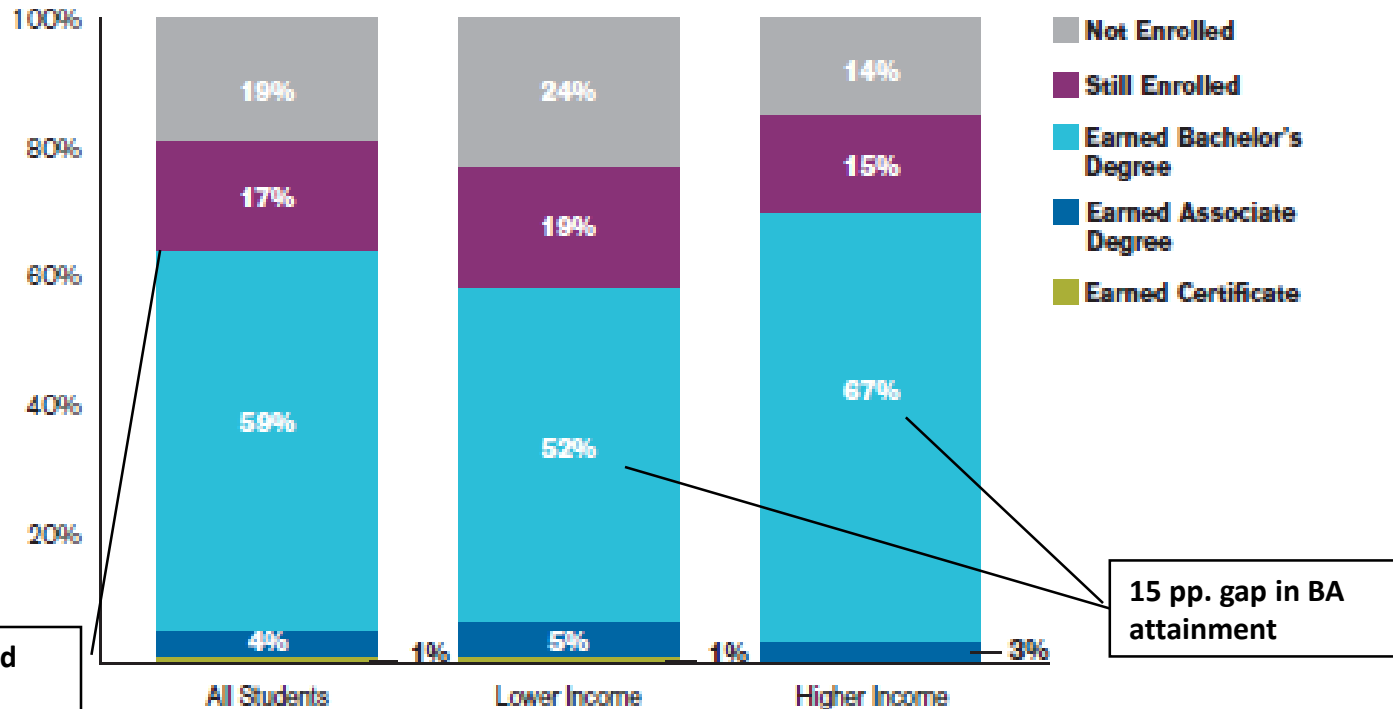
**Figure 6. Highest Outcomes by Income Among Students Who Participated in Dual Enrollment at Age 17 and First Matriculated at a Community College at Ages 18–20**



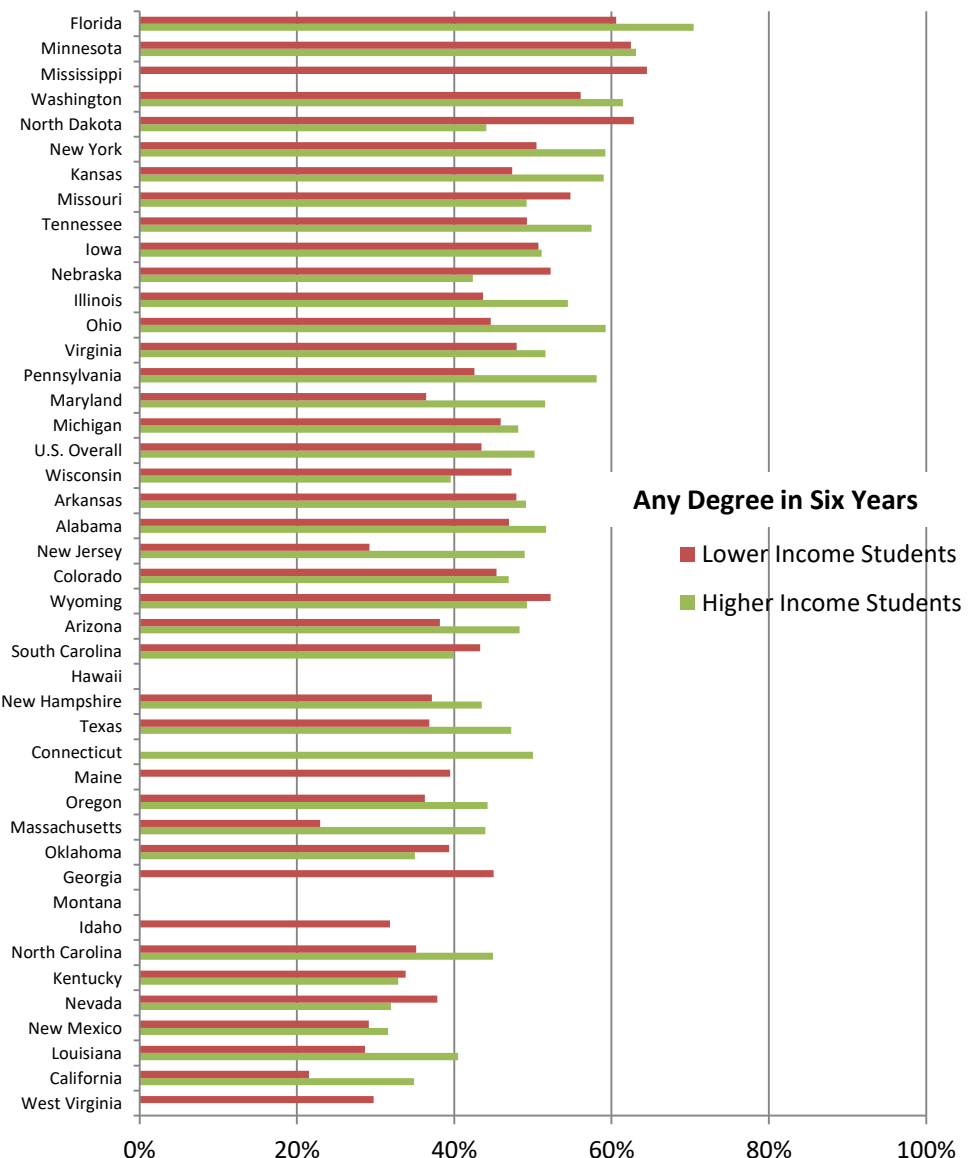
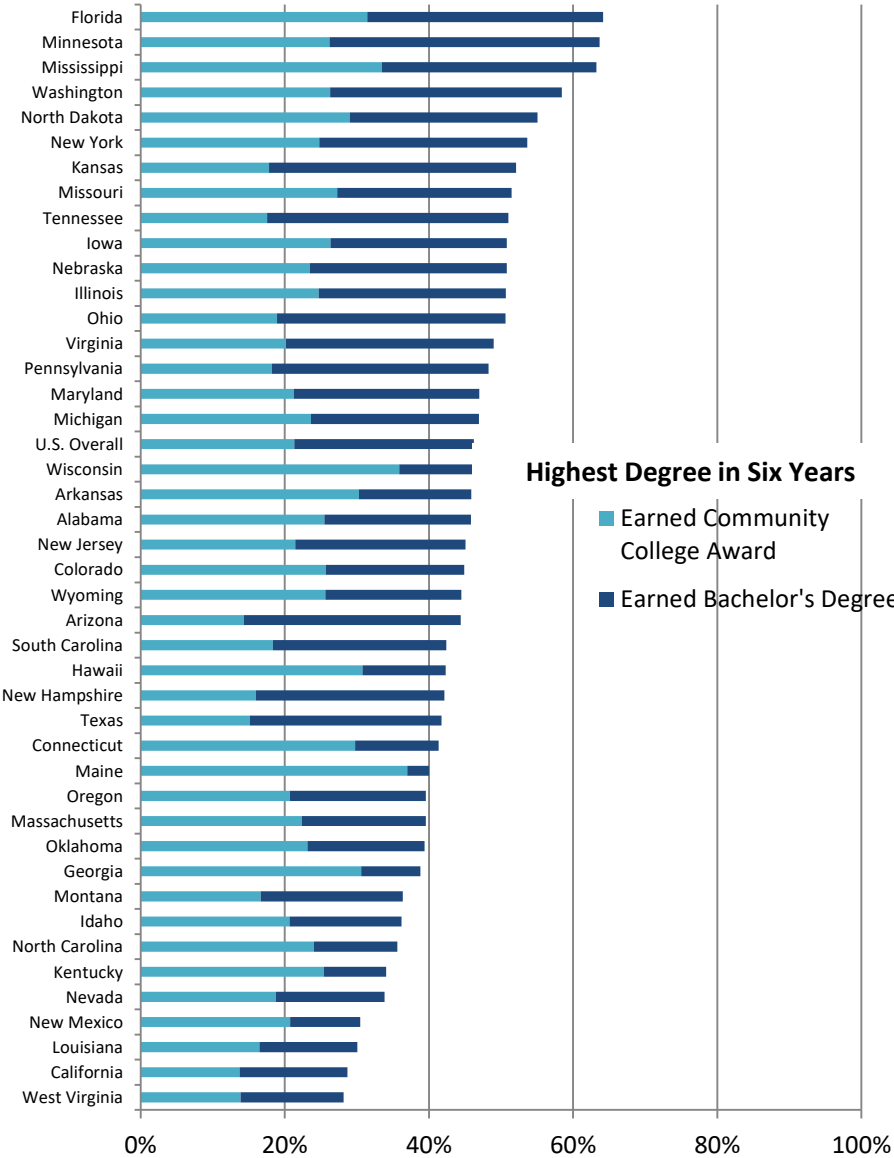
# What are dual enrollment students' college outcomes?

*Students who first matriculated at a four-year college after high school*

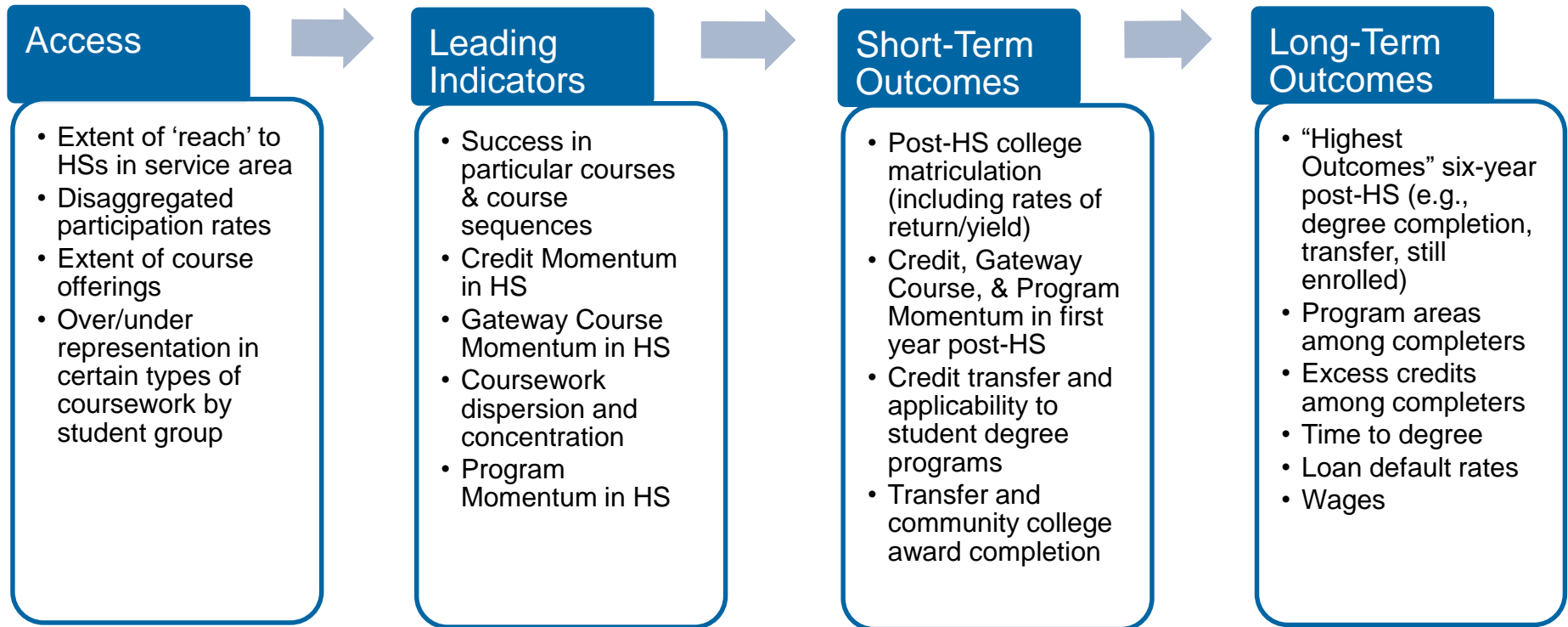
**Figure 9. Highest Outcomes by Income Among Students Who Participated In Dual Enrollment at Age 17 and First Matriculated at a Four-Year College at Ages 18-20**



## Degree Completion Rates among Former Dual Enrolled 17 year-olds who first matriculated at a **community college** at ages 18-20, by state and income



# Metrics for Tracking College Effectiveness and Equity in Serving High School Dual Enrollment Students



## Cross-cutting questions:

- How do results differ by student characteristics (race/ethnicity, income, gender, etc.)?
- How do results differ by type of DE offering (location and/or instructor type, CTE)?
- How do results vary by our college's main high school partners?

# Differentiated Dual Enrollment Programs: An Approach to Widening Access

Lessons from the STEM Early  
College Expansion Project

# A question-

How can we provide more students opportunities to participate in dual enrollment and other “collegiate experiences?”





# SECEP – A convergence

## *Early College*

- Increased access to college
- Blended high school and college curriculum
- Multi-layered student support.

## *STEM*

- Education in science, math, technology and engineering.
- Linked to emerging careers
- Promoting critical thinking, design, and hands on learning.

# Who is involved?

Bridgeport, Connecticut



# STUDENT OUTCOMES

By the end of the project, we should see....

10 percentage point increase in students taking and succeeding in college preparatory courses

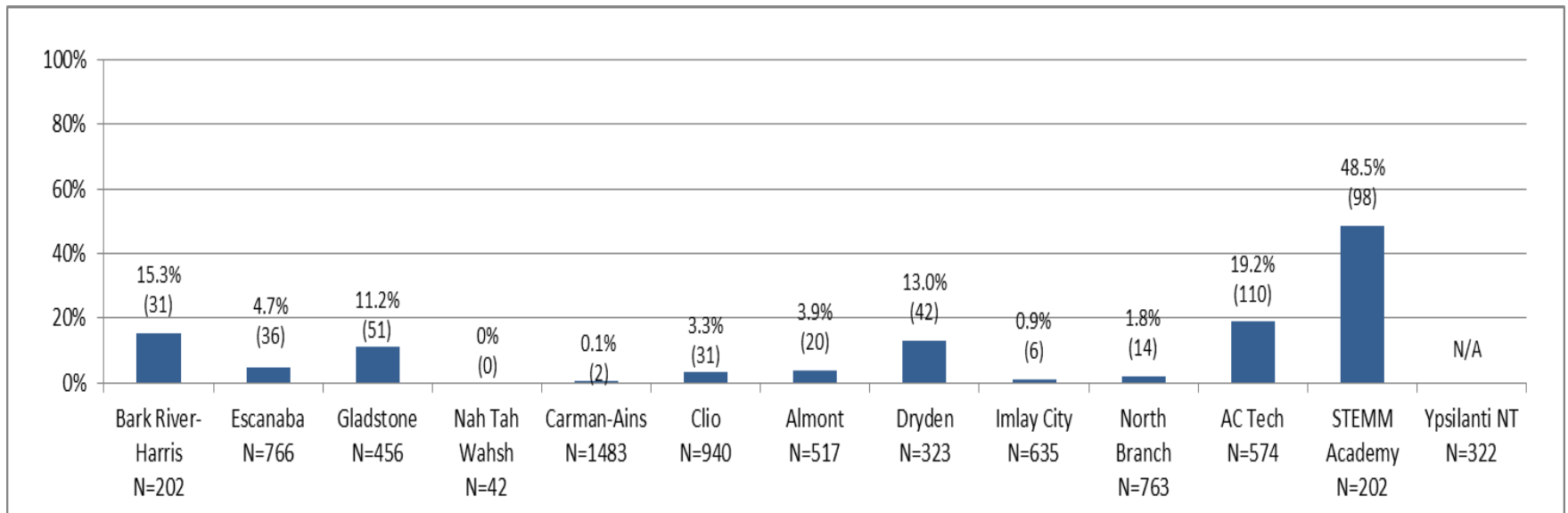
Cumulative dropout rates are 5 percentage points lower

90 % of students have received some college credit

Long Term: 10 percentage point higher rate of graduation

Long Term: Increase in students pursuing postsecondary/college credentials/degrees in STEM

# Baseline: MI schools 2013-14



# The SECEP Challenge

How do we move from serving 2-49% of students to 90%?

1. Differentiate.
2. Broaden the concept to “collegiate experiences.”

# Differentiation – a framework

- Can we provide opportunities for most or all students?
- Can we target students' needs and interests?

	Students with general education interests	Students with career focused interests
Academically advanced students		
Academically mid-range Students		
Least academically advanced students		

# What are collegiate experiences?

Collegiate experiences allow high school students to experience what it is like *to be in* college.

In many cases, they also provide opportunities to earn college credits.

## *Examples:*

- Dual/concurrent enrollment
- AP and IB
- Co-req courses
- CTE articulated credit
- Summer bridge programs
- Activities on the college campus.



# Why are collegiate experiences important?

**STUDENTS say:** The best part of my Middle Early College experience has been...

- *A good learning experience because it prepares me to know what is coming when I go into college...I also learned what college professors expect from my work and myself.*
- *Ability to experience college life.*
- *Being able to be on a college campus and take college classes and sit with professors.*
- *Being able to feel what a college setting is like.*

## Options: DUAL ENROLLMENT

- Dual enrollment is associated with higher student college degree attainment, college access and enrollment, credit accumulation, high school completion, and high school achievement (WWC, USDOE, 2017).
- The positive effects of taking college classes in high school are particularly strong for first-generation college students and students whose parents had some college but no degree (An, 2013).
- Two or more courses doubles the impact (An, 2013).

# Options: AP and IB

- Good performance on AP exams is associated with positive outcomes in college (Geiser & Santelices 2004).
- Students who enrolled in IB programs went on to earn higher GPAs in college (Geiser & Santileces 2004).

## Options: STUDENT SUCCESS COURSES

Among community college students who took student success courses, there was an increased chance of graduation of 8 percentage points (controlling for demographics and academic proficiency).

*Zeidenberg, Jenkins and Calcagno, 2007*

# Options: CTE ARTICULATED CREDIT

Research suggests that students earning articulated credit are less likely to drop out of high school and it helps them in the transition from high school to postsecondary options.

*Kim, 2008*

## Other options

- *Summer bridge programs:* Participants performed better in first college level math and writing courses than the experimental control group (NCPR, 2012).
- *CTE pathways:* Tech Prep has had a mixed record of effectiveness in terms of college outcomes (OCCRL, 2004). Programs of study show modest positive outcomes (Castellano et al, 2012).
- *Co-req courses:* Among students who placed into the highest level developmental writing course, participating in ALP was associated with higher rates of English 101 and English 102 completion (Jenkins et al, 2010).

## Even more options

- Stretch courses (e.g. CSU)
- HS/college courses with weekly labs at the college
- Pre-professional programs
- Apprenticeships

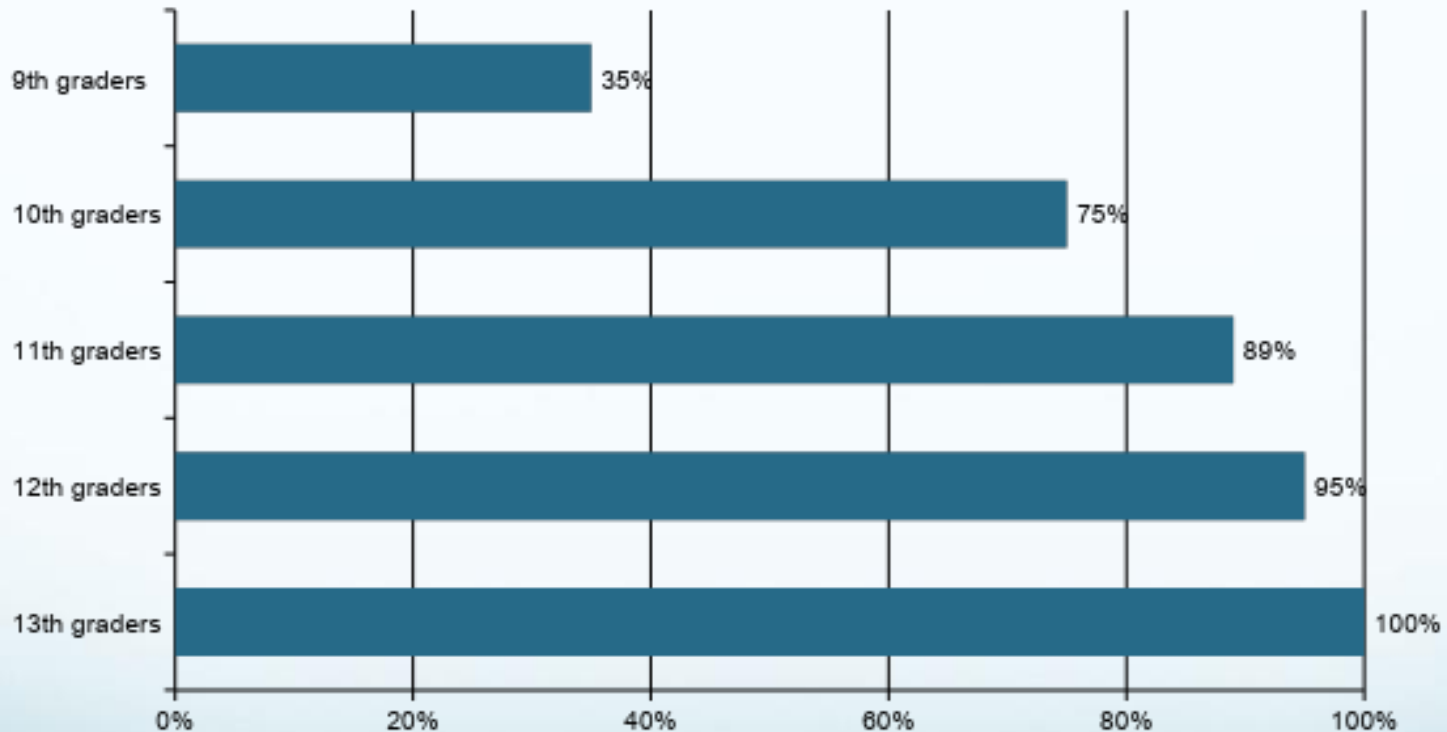


<b>Students' prior academic record</b>	<b>General education focused</b> SECEP examples	<b>Career focused</b> SECEP examples
Most advanced academically	<ul style="list-style-type: none"> <li>• Advanced Placement (AP)</li> <li>• Dual/concurrent enrollment</li> </ul>	<ul style="list-style-type: none"> <li>• DEEP in medical, law, or engineering careers</li> <li>• Project Lead the Way</li> </ul>
Mid-range	<ul style="list-style-type: none"> <li>• Middle/early college with a general education focus</li> <li>• Dual /concurrent enrollment with seminar or a co-req course</li> </ul>	<ul style="list-style-type: none"> <li>• Career pathways programs</li> </ul>
Least advanced academically	<ul style="list-style-type: none"> <li>• Student success or college-ready courses</li> <li>• Summer bridges</li> <li>• College brush up programs for placement tests<sup>4</sup></li> <li>• On campus experiences (use of science labs, clubs, library, other)</li> </ul>	<ul style="list-style-type: none"> <li>• CTE articulated credit programs</li> <li>• On-campus experiences (use of CTE labs, other)</li> </ul>

# What makes Middle College a success?

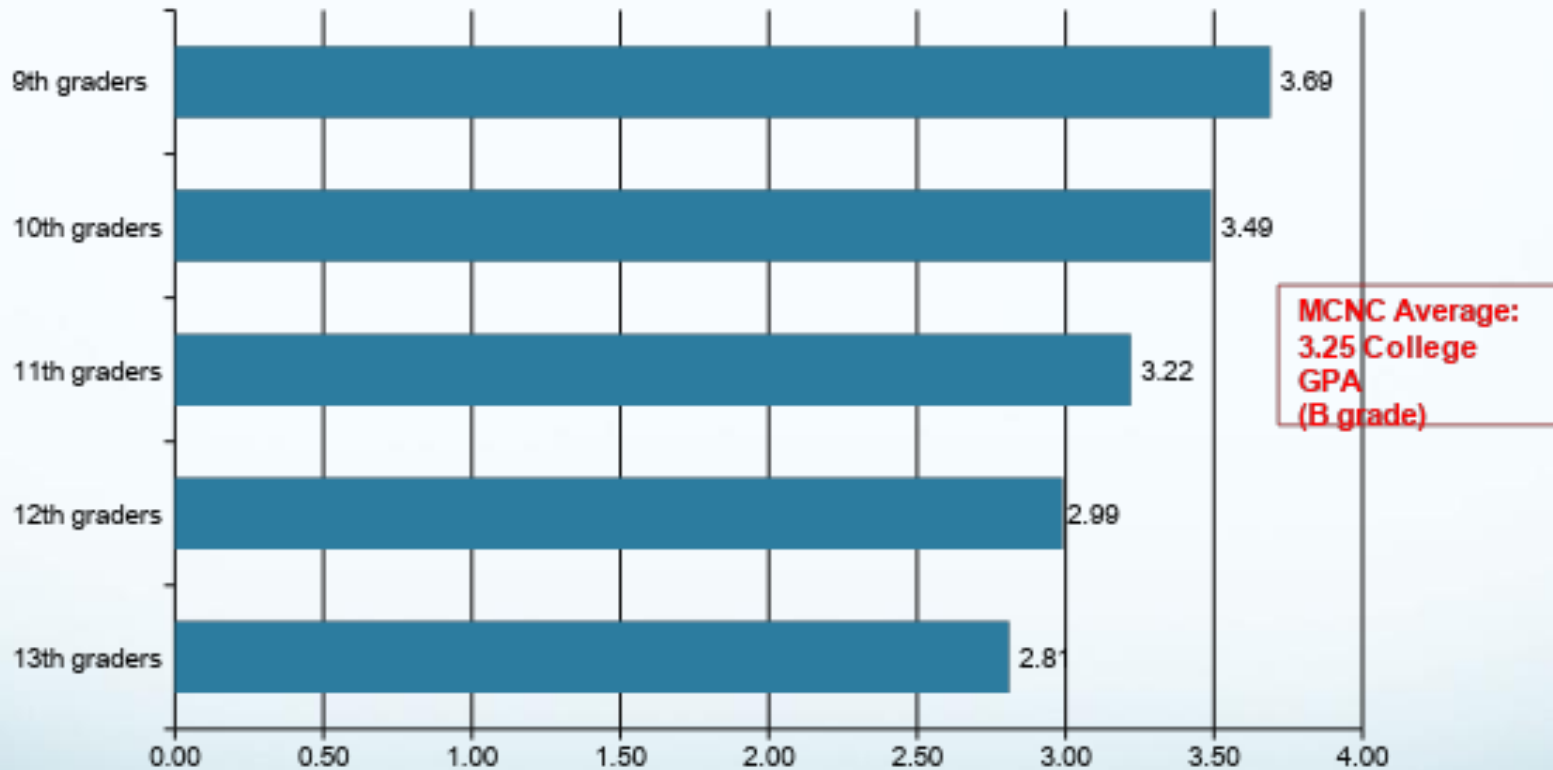


# Percentage of High School Students Taking College Courses\*

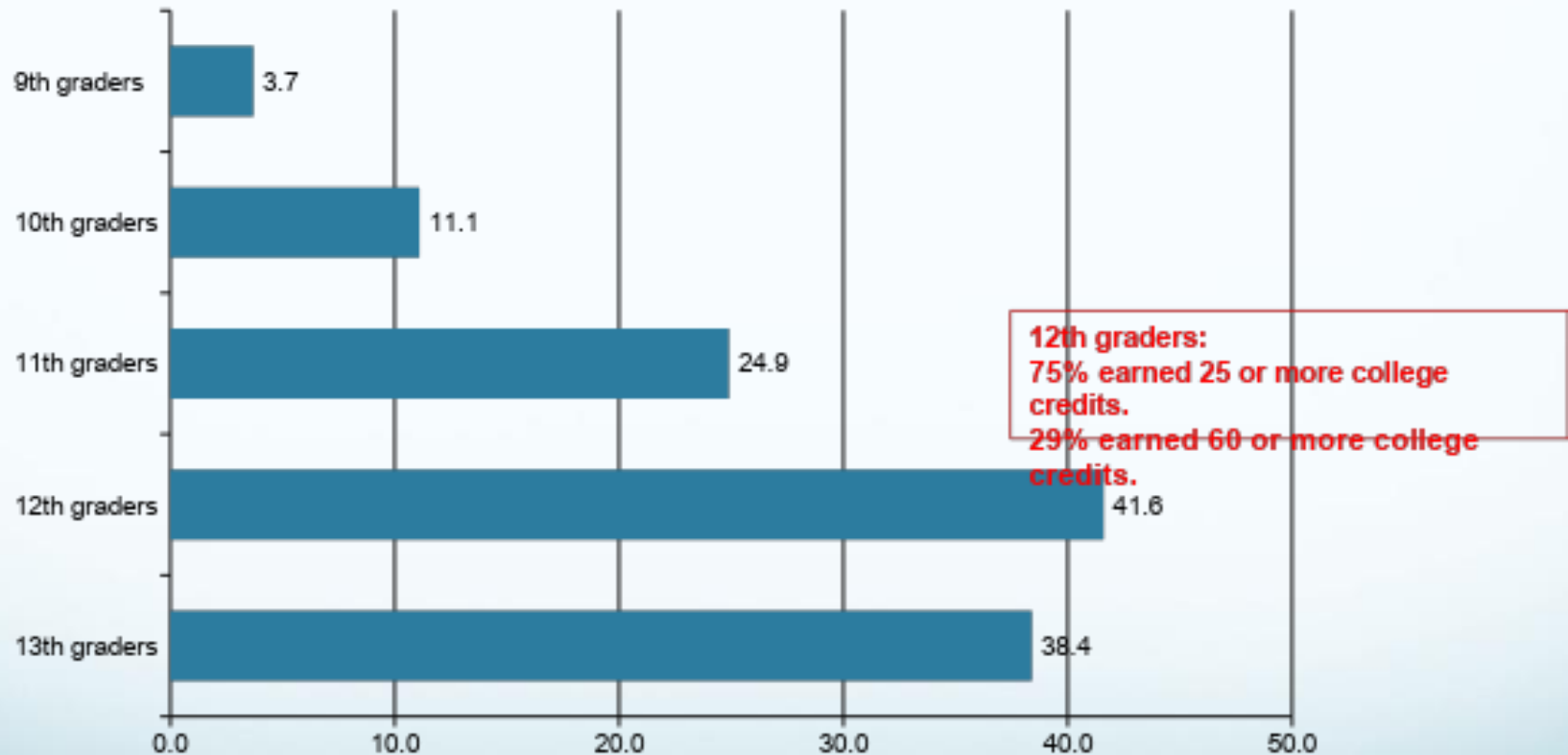


\* Based on cumulative 2016-17 students' data collected across 10 MCNC schools (3,048 college course-taking, middle college high school students).

# Average Cumulative GPA



# Average Cumulative Credit Earned



# MCNC Approaches

- Form close college partnerships
- Engage students in preparatory orientation
- Provide early opportunities to acquire content knowledge
- Set up academic and social supports to increase chance of success
- Use data to inform and improve student performance

# MCNC Stories

## Los Angeles Harbor Teachers Preparatory Academy

Enrollment 465

- **60% Latino**
- **20% African American**
- **15% Asian**
- **5% Caucasian/other**
- **70% Free and Reduced Lunch**



# Entrance Requirements

- 1st Generation College
- Underserved minorities
- Socio-economically challenged
- Good attendance/behavior
- Interview
- 2 Recommendations

# Performance

**Average credit accumulation:** 50-55 credits in 4 years

**Graduate with AA Degree:** 50-60% annually

**AP Classes:** 100%

**College Continuation:** 99% (Los Angeles provides 1st year free to all graduates attending local colleges and universities)

# OPPORTUNITIES TO ACQUIRE CONTENT KNOWLEDGE

	English 9 Summer after 9th— College English prep course for 30 students who are recommended to be college ready.	English 10	AP English Language or American Literature and/or ENG 101 (students w/ 4-5 scores on the AP English Lang exam are exempt from ENG 101).	AP English Literature or World Literature and/or ENG 102 (students w/ 4-5 scores on the AP English Lit exam are exempt from ENG 102).
	Algebra I or Geometry	Geometry or Algebra 2 or Pre-Calculus	Algebra 2 or Pre-Calculus or AP Statistics or AP Calculus or COLLEGE MATH	Pre-Calculus or AP Statistics or AP Calculus or COLLEGE MATH
	Biology	Chemistry	AP Environ Science and/ or COLLEGE SCIENCE (CHEM, PHYSICS)	AP Biology or AP Environ Science or COLLEGE SCIENCE (BIOL, CHEM, OCEANOGRAPHY)
	World History/ Geography	AP European History or other course	AP US History or US History or History 11	Economics; Government
	HEALTH 11 MUSIC 101 KIN 229 KIN 245	Spanish Speakers 2 SPANISH 21 & LAB SPANISH 22 & LAB MUSIC 411 KIN 229 KIN 245	AP Spanish SOCIO 1 GEOG 7 PSYCH 1 SPEECH 101 CHILD DEV 1	AP Computer Science ANTHR 101 POLI SCI 1 COLLEGE COURSE(S)

# Supports Offered by College

## **College Liaison/Counsellor**

**Support classes in study skills and organization (AVID)**

**Tutoring in Chemistry, Physics and Calculus**

**Cohort Classes**

**Relationship with Professors**

# Collaboration and Communication

## 1. Administrative Support

2. Meetings between Principal and AP and College Liaison
3. Meeting with Department chairs especially in Science and Math
4. Monthly Advisory Meetings with LAHC
5. Joint Projects (Teaching Project)
6. College pays for textbooks, planners and conference

# What does the college get?

- **College is credited with additional AA Degrees - many with honors**
- **Teachers of 9/10 grade cohorts accompany students to class**
- **Some students choose to continue to degree completion at Harbor CC.**

# MOTT Middle College H.S. Flint, MI

**Enrollment: 356**

- **84% African American**
- **12% Caucasian**
- **2% Hispanic**
- **2% Other**

# Entrance Requirements

- Does the student have potential to succeed in college classes with support?
- Promote enrollment for students with IEPs
- Transcript and behavior report required
- Parent and student interviews
- Students take reading and math assessments for placement



# Performance

- **Students earn an average of 33-37 college credits over 5 years**
- **20-30 % of graduates earn an A.A. degree over 5 years**

# Social, Emotional and Academic Wrap-around Services

- **Workshops and seminars for 9, 10 and 11th graders on college services**
- **Intensive counseling**
- **Intensive Advisory with long term relationships between Advisory teacher and students**
- **Stretched out courses in Math and Science**

# College Supports

- **Tutoring on campus**
- **Career placement testing**
- **Counseling for Accuplacer**
- **College Liaison/Counselor**

# High School/College Collaboration and Communication

- **3 Advisory meetings called by HS Principal where college president, deans and department chairs are invited.**
- **HS Teacher and College faculty have built relationships over time**
- **HS Counselor communicates with Financial Aid Office, bookstore, Admissions**

# Middle College at LaGuardia Community College

Enrollment: 500

70% Latino

60/40 Male/Female ratio

100% Title 1

# Entrance Requirements

- **Target Students at Level 1 and 2 Reading and Math**
- **Priority to those who attend HS Fair or Open House**
- **Strong Attendance record**
- **Accept students in 10th grade**

# Student Performance

- **Average # College credits: 24 - 40 over 5 years**
- **50% continue at College after 5th year**

# College Supports

**College administrative support**

**HS Teachers vetted to teach cohort classes(Including principal)**

**House Structure**

**Every student in college classes has seminar**

**New 10th graders are in a special seminar**

**Tutoring**

**HS Counselor also teaches Decision Making, Freshman Orientation**

**Student must drop classes via Counselor**



# HS-College Collaboration and Communication

**Attendance and Grade Data provided regularly by college and reviewed regularly by HS Staff**

**College Liaison**

**Regular meetings with College Advisory**

**Curriculum collaboration with English Department**

# Student Supports Provided by MCNC Schools, 2016-17

Advisories

97%

Cohorts of students receiving common college course-taking support together

97%

College readiness, skills, or success classes

97%

Formal tutoring

93%

Mentoring

60%

Test prep (college placement exam)

47%

Test prep (for graduation)

80%

Test prep (SAT, PSAT, ACT)

100%

# Forthcoming CCRC-Aspen Dual Enrollment Work

# Forthcoming Dual Enrollment Work

- Validation of KPIs for Dual Enrollment: What kinds of courses help students get a jump start for college?
- Access to and Effects of College Acceleration (DE, ECHS, IB, AP) for Underrepresented Students
- The Impact of Having Dual Enrolled Peers on Community College Students' Academic Outcomes
- Practices of high school – community college pairings that are highly effective in helping underrepresented students gain momentum for college through dual enrollment



# Reimagining Developmental Education

How can we do better for our students?

**SAVE THE DATE**

November 21–22, 2019

New York City, NY

Sign up for announcements at  
[postsecondaryreadiness.org](http://postsecondaryreadiness.org)

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# Thank you!

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