



# **NJ PATHWAYS**

## **TO CAREER OPPORTUNITIES**

**Aligning Education to Build an Innovative Workforce**

Welcome.

We ask that you please take this time to mute yourself, thank you.

In the chat, please provide your name, title and organization.

May

# Health Services Collaborative Meeting

Theme: Dual Enrollment

# NJ Pathways to Career Opportunities

## Health Services Sector

New Jersey's Community Colleges and the New Jersey Business and Industry Association have joined together to launch an unprecedented education and training pathways initiative.



**SANDRA BLECKMAN**

Director, Health Services Strategy and Workforce Partnerships

**& STEPHANIE SAMUEL**

Program Manager, Health Services, Infrastructure & Energy Sectors and Workforce Partnerships



# TODAY'S AGENDA:

- **Expert Speaker: *The Importance of Dual Enrollment and Best Practices***
  - Davis Jenkins, Senior Research Scholar (Community College Research Center at Columbia University)
- **Pathways to Career Opportunities: *Somerset Co Health Sciences Academy at the Somerset Co Vocational Tech School***
  - Teresa Morelli, Supervisor, Academics & Supervisor, Academy for Health and Medical Sciences (Somerset County Vocational Tech School)
  - Katisha Gloster, Program Manager, High School Outreach and Academics (Raritan Valley Community College)
- **Student Spotlights: *Raritan Valley Community College***
  - Sangeetha Punnam, Student (RVCC & Somerset County Vocational Tech School)
  - Varun Punnam, Alum & Current 4-Year University Student (RVCC Alum and UPMC Current Student)

# Give Us Your Feedback



FILL OUT THIS QUICK SURVEY  
BASED ON YOUR EXPERIENCE  
OF THIS MEETING



**NJ PATHWAYS**  
TO CAREER OPPORTUNITIES  
Aligning Education to Build an Innovative Workforce

Please use our hashtag:

# #NJPathways

To share your participation in the  
NJ Pathways to Career Opportunities  
Industry Collaborative Meetings



**NJ PATHWAYS  
TO CAREER OPPORTUNITIES**  
Aligning Education to Build an Innovative Workforce



New Jersey's  
Community Colleges





**SPEAKER**

# Expert Speaker



**DAVIS JENKINS**

Senior Research Scholar (Community College  
Research Center at Columbia University)

## The Importance of Dual Enrollment



# Transforming NJ's Talent Diversion System To High-Opportunity Career Pathways (and Talent Supply Chains)

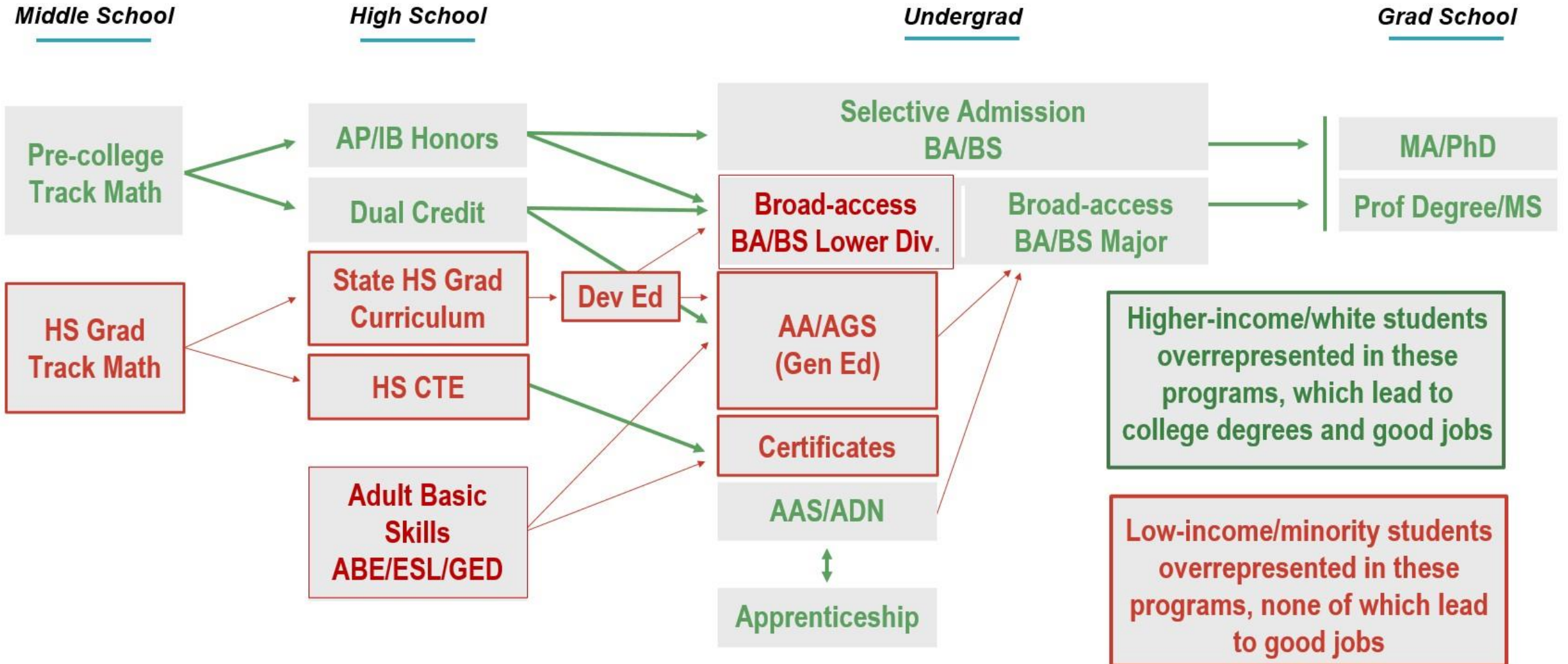
**Davis Jenkins**

Senior Research Scholar, CCRC

NJ Pathways to Career Opportunities  
May 2022



# U.S. Education systems sorts into high- vs. low-opportunity career pathways by class and race, not talent



# Dual Credit Models: Potential as Onramps to Career Pathways

DE Model	Pluses as Onramp	Minuses as Onramps
<b>ECHSs / P-TECHs</b>	<ul style="list-style-type: none"> <li>• Strong evidence of benefits (including for underserved)</li> <li>• Potential for career focus</li> </ul>	<ul style="list-style-type: none"> <li>• Small scale (1)</li> </ul>
<b>Dual / Concurrent Enrollment</b>	<ul style="list-style-type: none"> <li>• Moderate evidence of benefits</li> <li>• Large scale (2)</li> </ul>	<ul style="list-style-type: none"> <li>• “Random acts”</li> <li>• Gen ed vs. programmatic focus</li> <li>• “Programs of privilege”</li> </ul>
<b>HS CTE</b>	<ul style="list-style-type: none"> <li>• Career-focus</li> <li>• Large scale (3)</li> <li>• Diversity of students</li> </ul>	<ul style="list-style-type: none"> <li>• Poor articulation with postsecondary CTE</li> </ul>

(1) 4 P-Tech high schools in NJ (<https://www.ptech.org/p-tech-network/our-schools/new-jersey/>); small number of ECHS

(2) ~14K in NJ ccs in 2019-20 (<https://public.tableau.com/app/profile/john.fink/viz/UndergraduateEnrollmentTrendsbySector/Summary>)

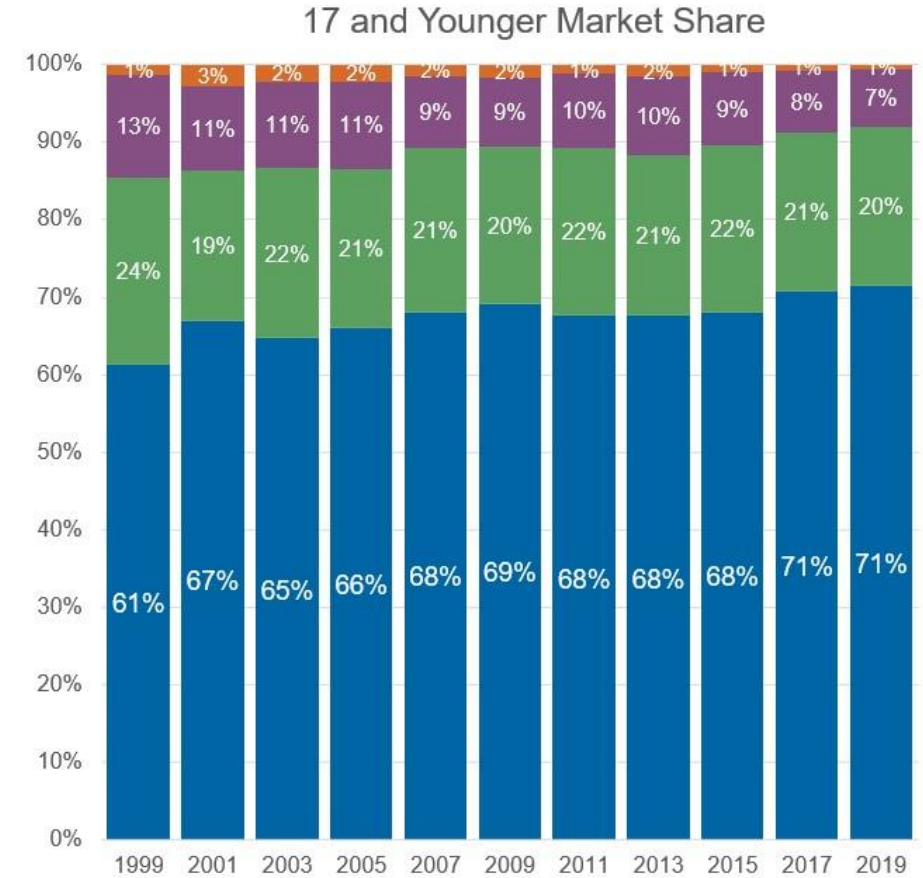
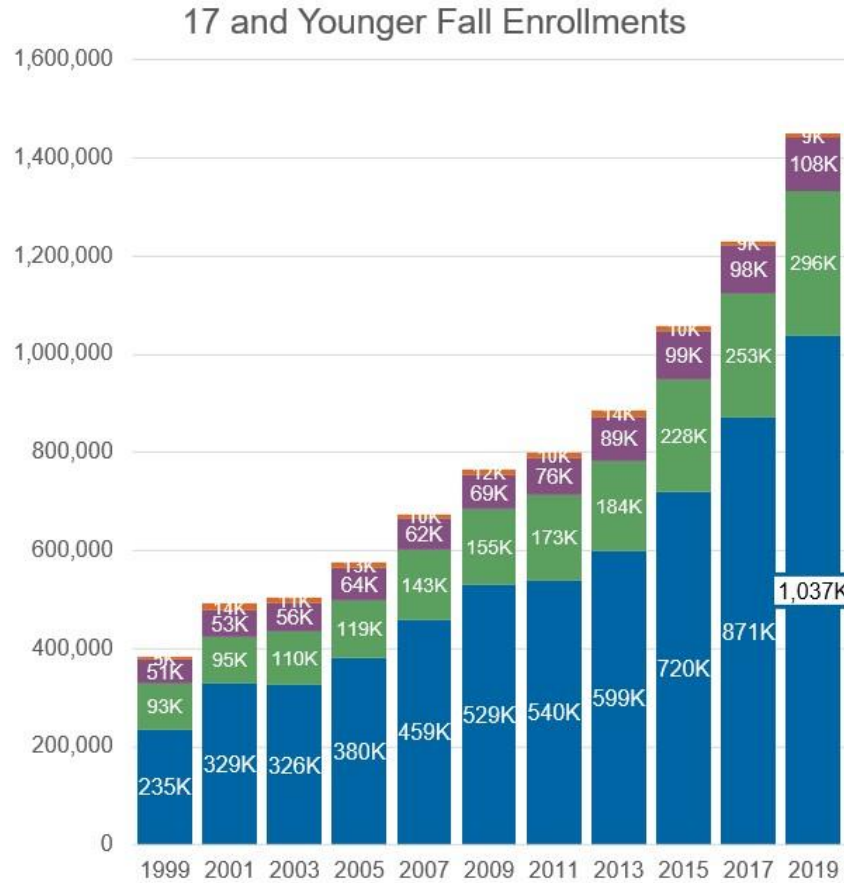
(3) 77K HS CTE students in NJ (<https://www.nj.gov/education/cte/>)

# Growth of Dual Enrollment 1999-2019

IPEDES Fall Enrollments

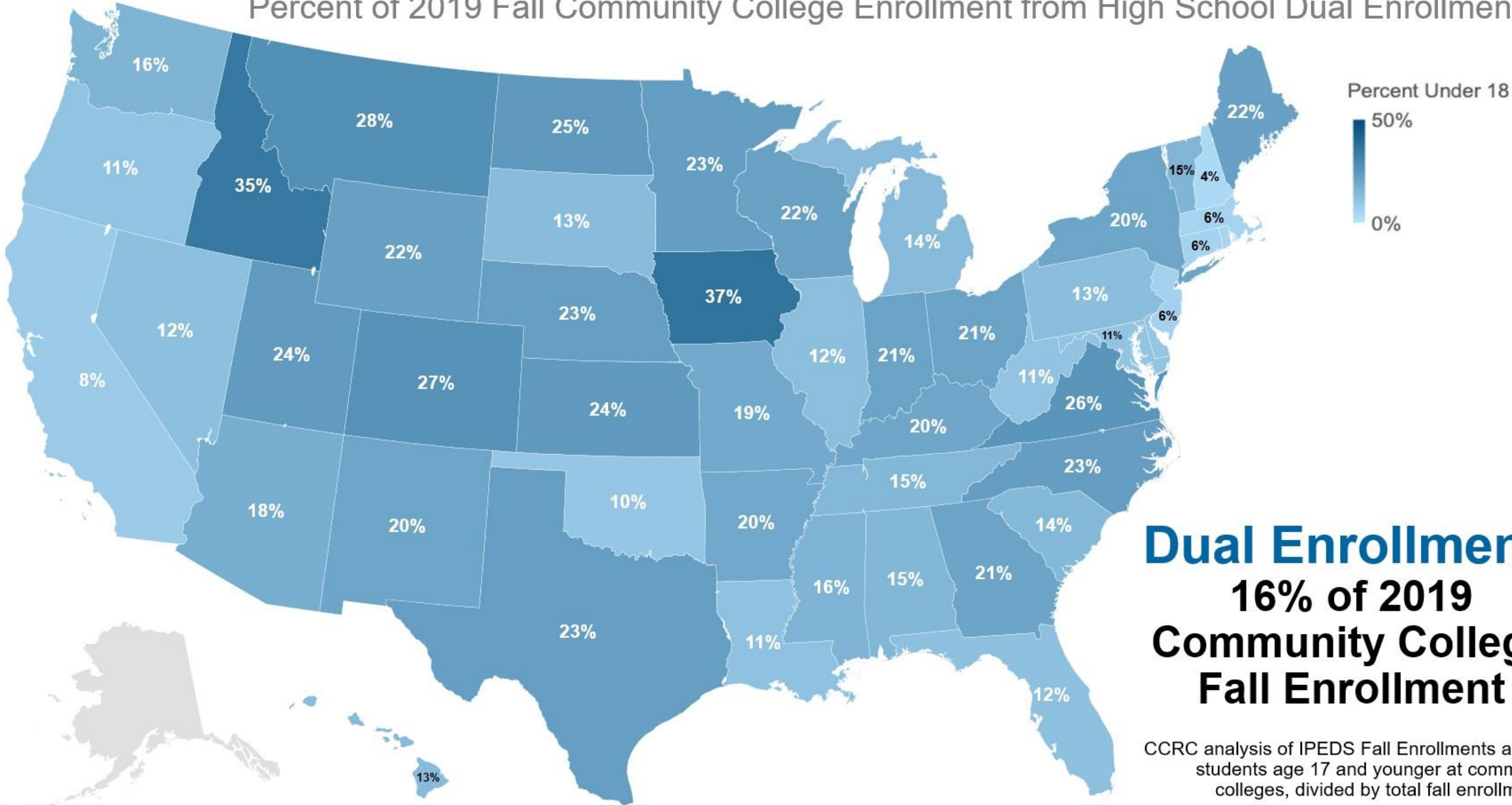
*Fall Undergraduate Enrollments among Students Aged 17 or Younger*

■ Community Colleges ■ Public four-years ■ Private nonprofit four-years ■ Private for-profits



# Expansion of Dual Enrollment Concentrated at Community Colleges

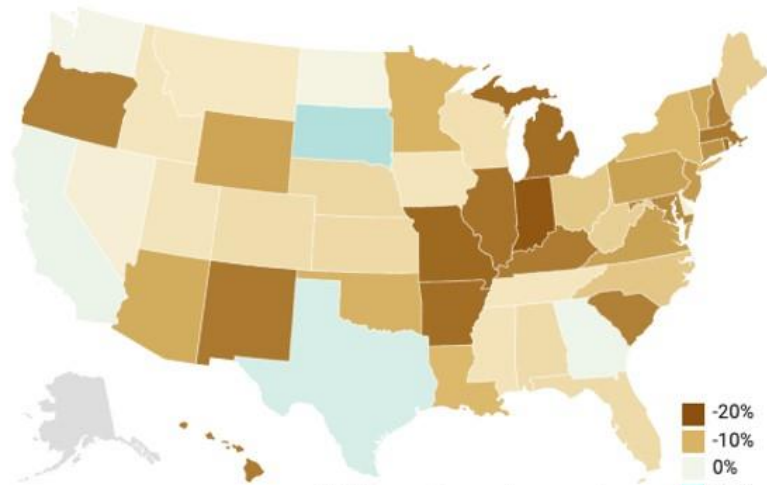
Percent of 2019 Fall Community College Enrollment from High School Dual Enrollment



**Dual Enrollment:  
16% of 2019  
Community College  
Fall Enrollment**

CCRC analysis of IPEDS Fall Enrollments among students age 17 and younger at community colleges, divided by total fall enrollments.

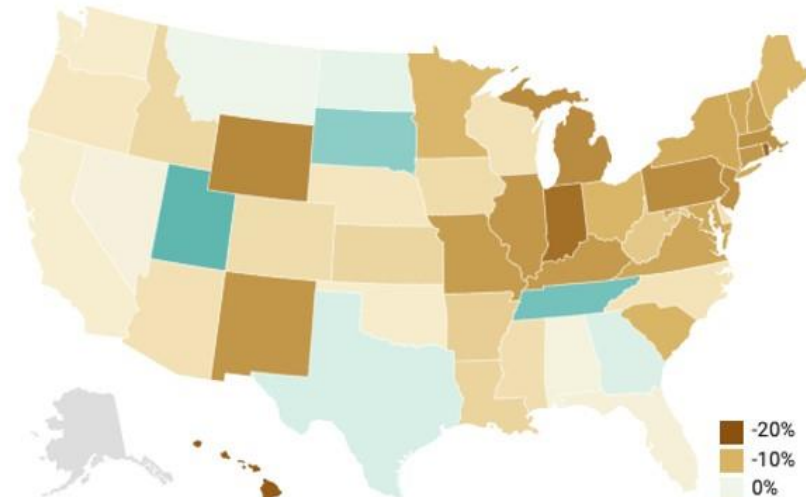
# Percent Change (2013-2019) Community College Fall Enrollments by Age



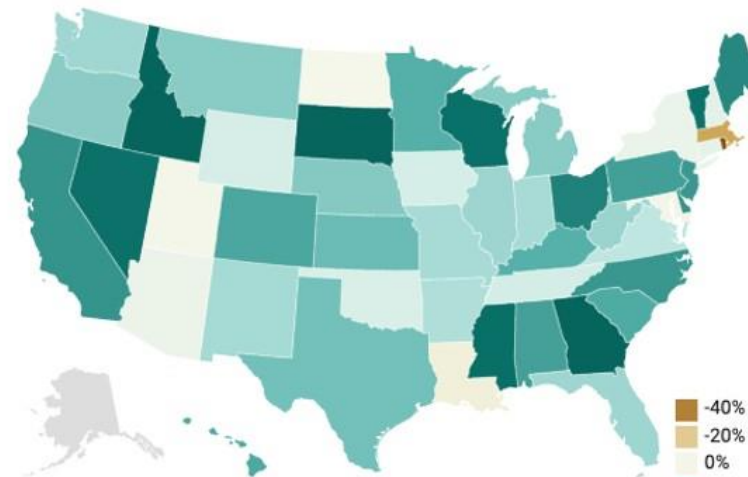
**All students**



**25 and older**



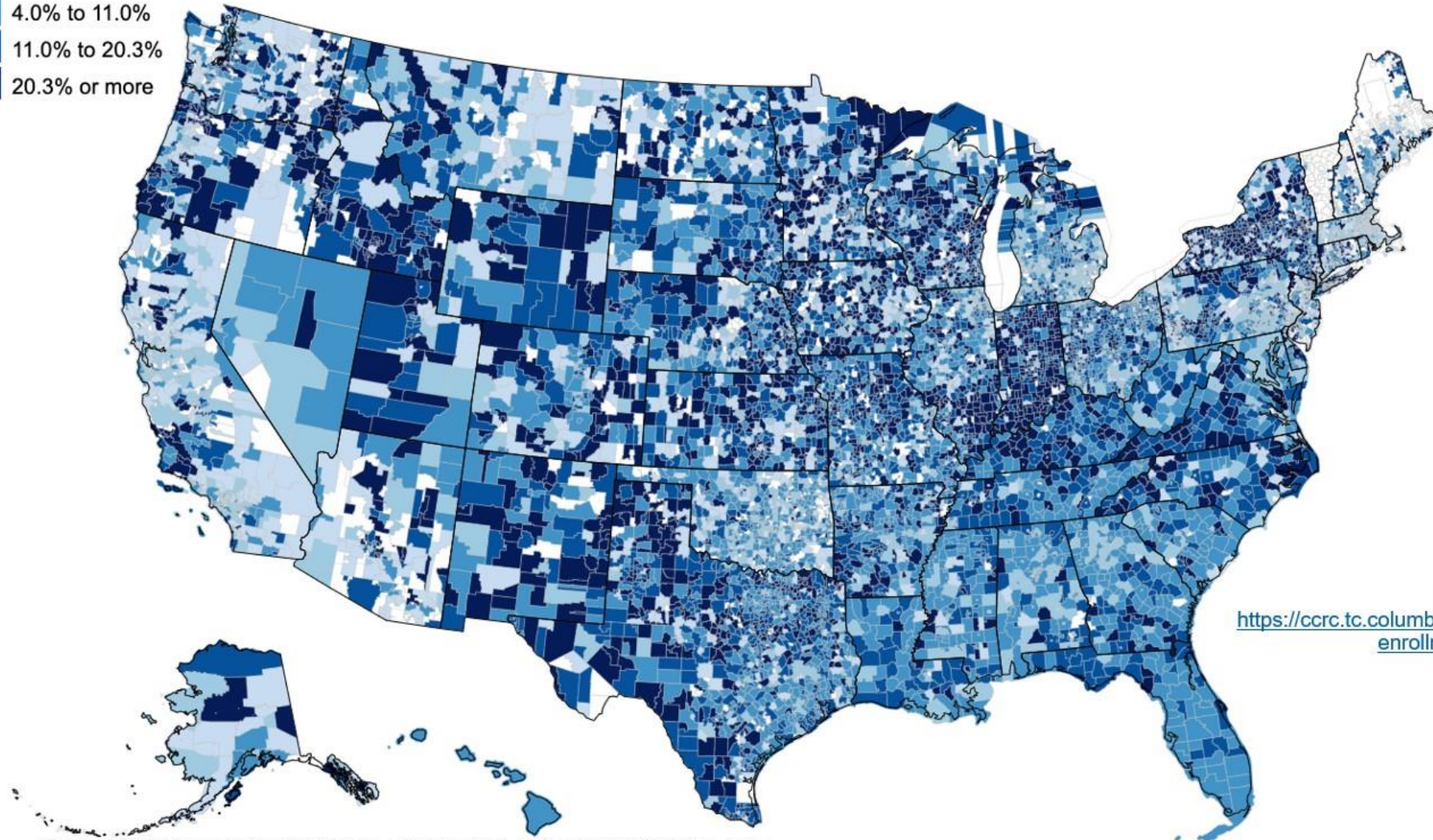
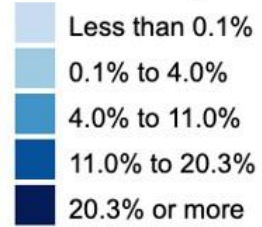
**18-24 years old**



**17 and younger**

# 2017-18 High School Student Participation in Dual Enrollment by School District

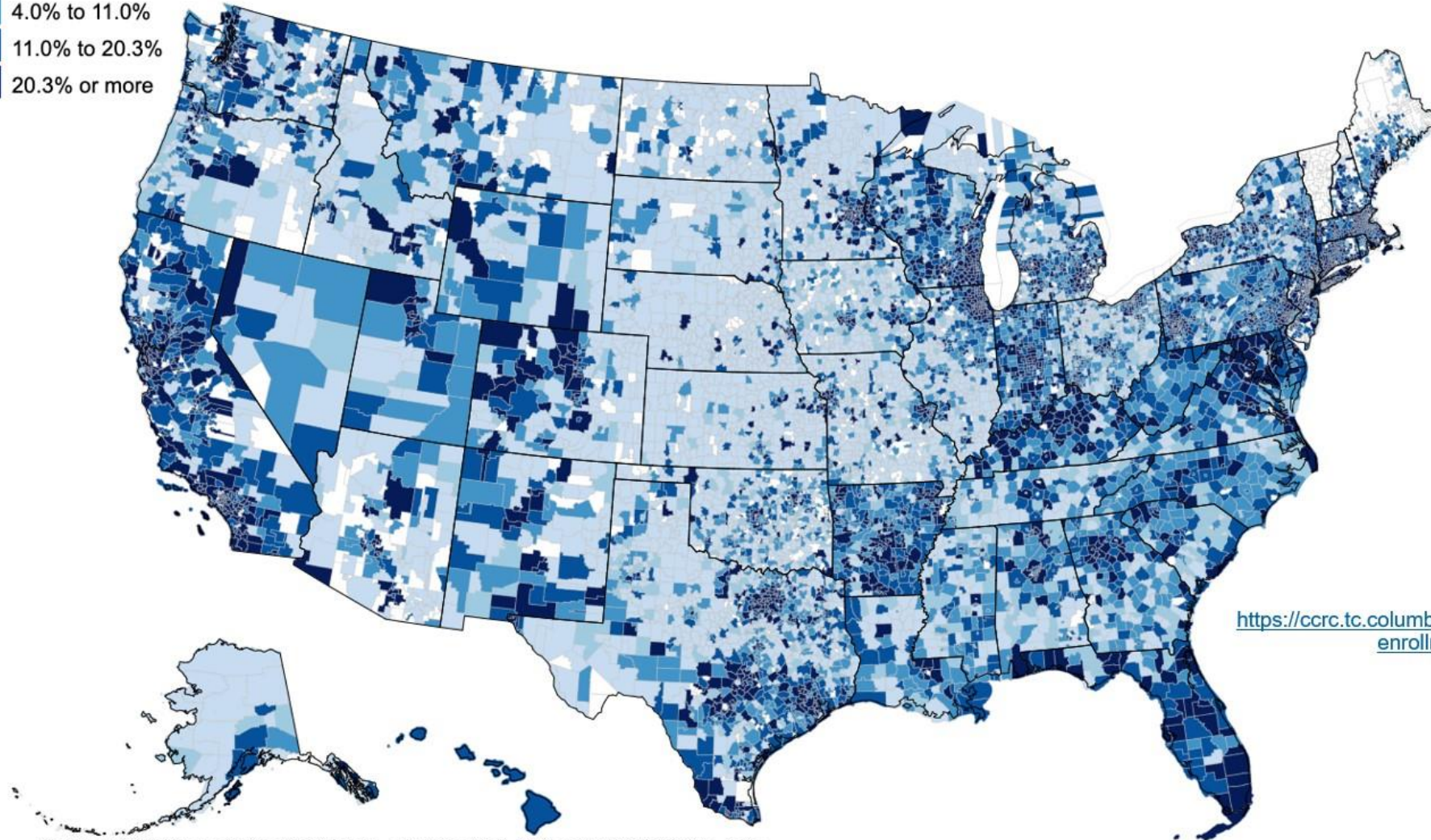
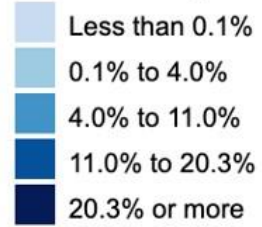
## DE-Participation Rate



View an interactive map:  
<https://ccrc.tc.columbia.edu/easyblog/ap-dual-enrollment-access-update.html>

# 2017-18 High School Student Participation in Advanced Placement by School District

## AP-Participation Rate

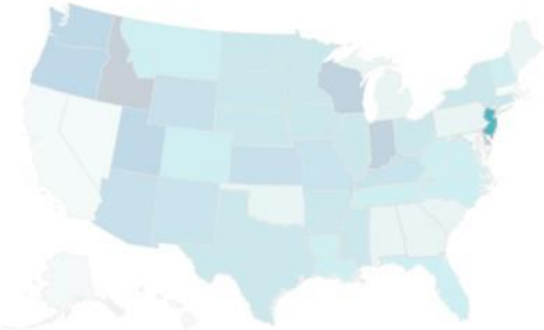


View an interactive map:  
<https://ccrc.tc.columbia.edu/easyblog/ap-dual-enrollment-access-update.html>

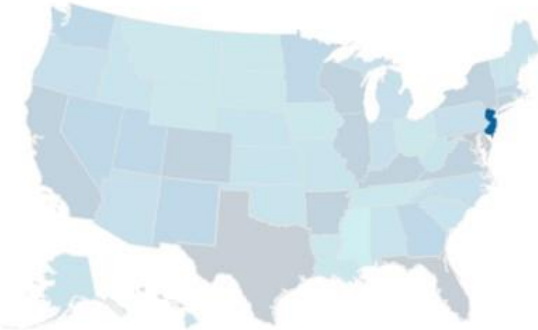
# 'Programs of Privilege'



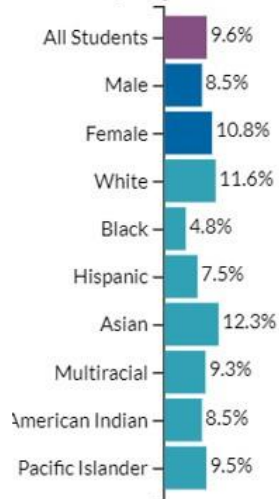
Dual Enrollment (DE)



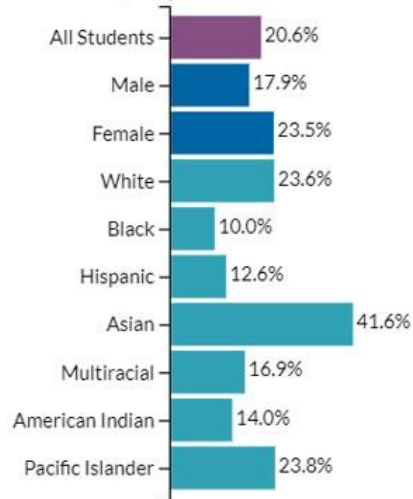
Advanced Placement (AP)



Participation in DE by Student Group  
New Jersey



Participation in AP by Student Group  
New Jersey



## A Detailed Look at AP and Dual Enrollment Participation by School and District

Lookup a District Schools in a District Districts within States

### Equity in Access to College Acceleration Civil Rights Data Collection District Search

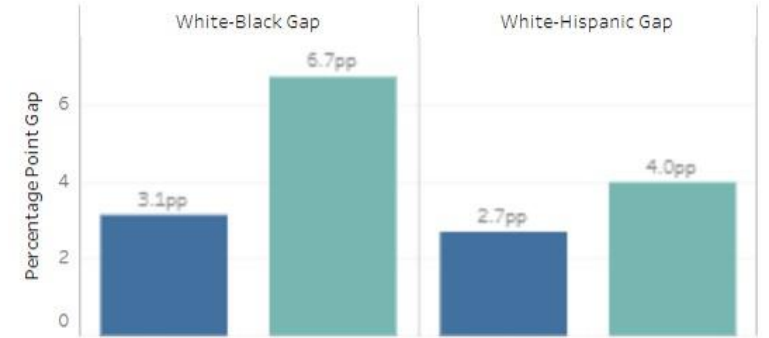
Compare District DE/AP Participation and Racial Equity Gaps to State Averages (2017-18 School Year)

### Racial Equity Gaps in Dual Enrollment Participation

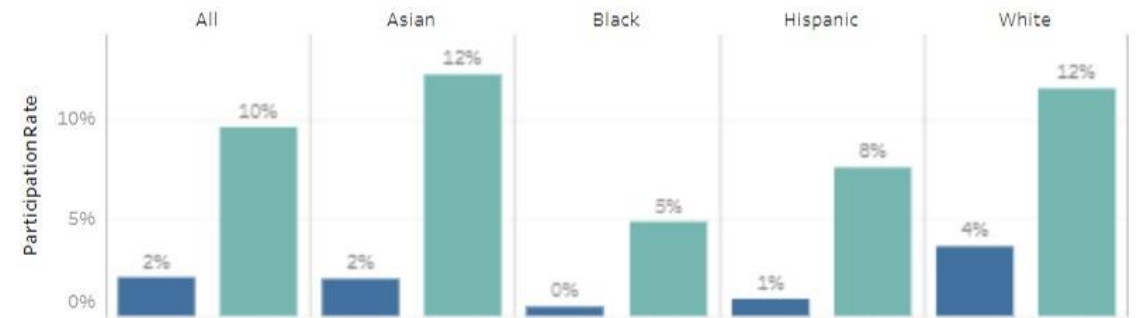
Edison Township School District, NJ

Select a District  
Edison Township School District, NJ

Show results for:  
 Advanced Placement  
 Dual Enrollment  
 District State Average



### Dual Enrollment Participation by Race/Ethnicity Edison Township School District, NJ





# From 'Random Acts' and 'Programs of Privilege' to High-Opportunity Postsecondary Career Pathways

*Access for whom?*

Grades 6-8

Dual Enrollment

Grades 9-12

1. Outreach to underserved students & schools

## DEEP Practices

Complementary set of practices implemented by college-school partnerships

2. Alignment to college degrees & careers in fields of interest

3. Early career & academic exploration, advising, & planning

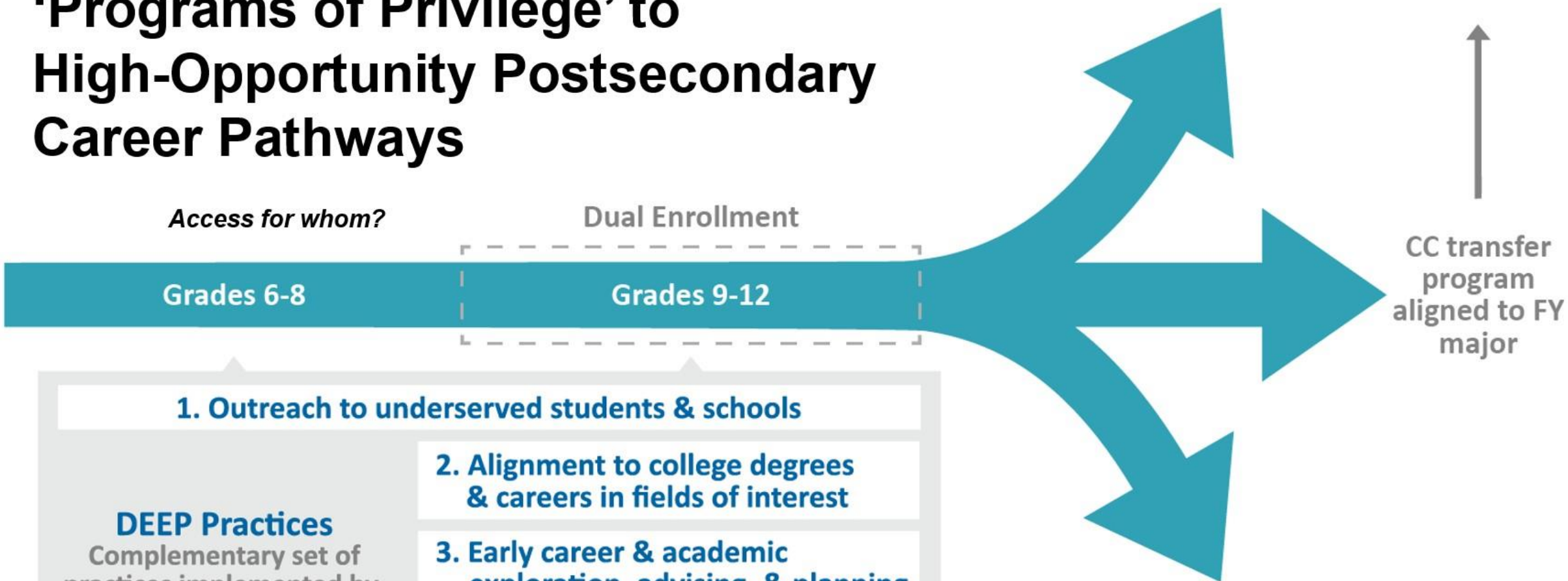
4. High-quality college instruction & academic support

*Access to what?*

Entry into baccalaureate major at four-year (FY) institution

CC transfer program aligned to FY major

Workforce program aligned to high-wage/high-demand career



# Tips for transforming dual enrollment into an onramp to postsecondary career pathways

- **Backward map** educational paths from HS to career-path jobs
  - Eliminate arbitrary barriers (math, tests); ensure active/experiential learning
  - Market to students, families, schools as roadmaps to debt-free degrees and high-opportunity careers
  - Market to employers, policy makers as “talent supply chain”
- **Giving students career information not enough; MOTIVATE** students thru opportunities for networking, exposure, experience
- Help all students **explore interests, connect with others** in fields of interest, and **develop a career-connected education plan**
- Actively **market roadmaps to** underserved students, families, schools, communities—showing debt free routes to college degrees linked to good jobs

# ADVANCED MANUFACTURING



**Awareness:**  
PICC or Concurrent courses to learn about a variety of jobs and careers in one interest area.



**Exploration:**  
PICC or Concurrent courses to explore careers of interest and develop post high school plans.



**Early Admission:**  
PICC or Concurrent courses that lead to a Career Pathway Certificate or degree.



**General Education:**  
Courses that all college students must complete to fulfill core degree requirements for graduation.

✓ Courses marked with a check mark satisfy a program degree requirement. Connect with your high school counselor and NICC Success Coach to learn what course options are available to you.

	COURSE NUMBER	COURSE NAME	WELDING Peosta	COMPUTER NUMERICAL CONTROL (CNC) Peosta	INDUSTRIAL MAINTENANCE TECHNICIAN Peosta	ENGINEERING TECHNOLOGY Peosta
Lightbulb	MFG241	Machine Operations I		✓		
	WEL330	Welding Fundamentals				✓
Magnifying glass	WBL110	Employability Skills				
	WEL119	Maintenance Welding			✓	✓
	WEI434	Flame/Plasma Cutting Fundamentals	✓			
Graduation cap	WEL110	Welding Blueprint Reading	✓			✓
	WEL433	Basic Gas Metal Arc Welding (GMAW)	✓			
	MFG127	Manufacturing Print Reading Module II		✓		✓
	MFG344	Introduction to CNC Lathe Programming		✓		
	MFG345	Introduction to CNC Mill Programming		✓		
	MFG161	Introduction to Precision Measurement and Inspection Fundamentals		✓		✓
	MFG293	Introduction to Basic CNC Mill Operations		✓		✓
	MFG295	Introduction to Basic CNC Lathe Operation		✓		✓
Open book	BCA212	Introduction to Computers Business Applications		✓	✓	✓
	COM723	Workplace Communication	✓	✓	✓	✓
	ENG105	Composition I		✓	✓	
	MAT744	Technical Math		✓		✓
	MAT772	Applied Math	✓	✓		
	MAT773	Applied Math II	✓	✓	✓	
	PSY112	Psychology of Human Relations		✓	✓	✓
	SDV179	The College Experience	✓	✓	✓	✓

[www.nicc.edu/advancedmanufacturing](http://www.nicc.edu/advancedmanufacturing)

## POWER THE FUTURE.

ADVANCED MANUFACTURING. ENGINEERING.

The future of advanced manufacturing and engineering is exploding. Machines are smarter, the demand for product is on the rise and the need for professionals like you to design, program, operate and maintain technology is continuing to grow. Our programs, taught by industry experts, position you to be a leader.



*LENGTH	PROGRAM	AWARD	LOCATION	*IN-STATE COST	*OUT-OF-STATE COST	MEDIAN SALARY
One Year	Computer Numerical Control (CNC) Machinist Technician <sup>1*</sup>	D	P	\$8,700	\$9,744	\$42,562
6-12 Months	Computer Numerical Control (CNC) Operator <sup>1</sup>	CPC	Varies	\$2,589	\$2,589	\$41,320
Two Years	Engineering Technology <sup>1</sup>	A.A.S.	P	\$15,700	\$17,584	\$53,130
6-12 Months	Introduction to Industrial Maintenance <sup>1</sup>	CPC	Varies	\$2,589	\$2,589	\$42,072
One or Two Years	Industrial Maintenance Technician <sup>1*</sup>	D, A.A.S.	P	\$6,800-\$13,400	\$7,616-\$15,008	\$53,636
6-12 Months	Industrial Sewing <sup>1</sup>	CPC	D	\$1,789	\$1,789	\$29,944
One Year	Welding <sup>1*</sup>	D	P	\$7,200	\$8,064	\$39,102
6-12 Months	Welding: Basic <sup>1</sup>	CPC	CRE	\$1,889	\$1,889	\$39,102
6-12 Months	Welding: GMAW <sup>1</sup>	CPC	Varies	\$2,889	\$2,889	\$39,102

**LEGEND**

C - Calmar P - Peosta D - Dubuque CRE - Cresco O - Online <sup>1</sup> - Qualifies for Last-Dollar Scholarship <sup>1\*</sup> - Qualifies for Kibble Grant  
 A.A. - Associate of Arts A.S. - Associate of Science A.A.S. - Associate of Applied Science CPC - Career Pathway Certificate C - Certificate D - Diploma



GUIDED CAREER PATHWAYS



# Aligning high school career clusters with college career pathways to create on-ramps into advanced workforce credentials for CTE dual credit students at Indian River State College

## Get Started on Your Pathway

### 1 Explore Career Clusters

Career Clusters are groups of similar occupations and industries. They were developed by the U.S. Department of Education as a way to organize career planning. The sixteen Career Clusters are explained on the pages that follow.

Once you have identified the Career Clusters that interest you, review the offerings at your high school to determine the Career Pathways Academy to pursue.

### 2 Enter a Career Pathways Academy

Career Pathways students benefit from a clear path to their future and are able to meet graduation requirements, earn college credits and industry certifications, and gain valuable knowledge—making them college and career ready before they leave high school.

To get started in a Career Pathways Academy, high school students should contact the counselor at their school.



### 3 Advance Your Education and Earnings Potential at IRSC

Every student who successfully completes a Career Pathways Academy will earn college or clock-hour credit at Indian River State College. Follow these steps:

- Contact your high school counselor to enroll in your Career Pathways Academy of interest.
- Complete your high school Career Pathways Academy.
- Complete all IRSC Admission requirements.
  - Complete an Application for Admission.
  - Request your transcripts from your high school, and have them sent to the IRSC Office of Student Records.
  - Apply for financial aid.
  - Complete New Student Orientation.
- Meet with your IRSC advisor to indicate completion of a Career Pathways Academy.
- If courses align with your program objective goal, credit will be verified and applied to your degree or certificate based on your IRSC Academic Plan/Guided Pathway.

Your eligibility for Career Pathways credit is valid for 36 months following your high school graduation date.

## Career Pathways Okeechobee County

## Career Cluster 8

### Health Science

Planning, managing and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

#### Pathways:

- Therapeutic Services
- Diagnostic Services
- Health Informatics
- Support Services
- Biotechnology Research & Development



## Career Pathways Academies

### Okeechobee County High School

#### Nursing Assistant Academy

(Completers earn up to 307 Career Pathways clock hours at IRSC, plus up to 12 additional IRSC General Education credits.)

#### Electrocardiography (EKG) Technician Academy

(Completers earn up to 182 Career Pathways clock hours at IRSC, plus up to 12 additional IRSC General Education credits.)



## Health Science



### You've Earned College Credit— Now Get Your Degree!

Academy completers have a head start in completing their college studies—100% will receive IRSC credit. If you have interest in the Health Science Career Cluster, consider IRSC programs in the **Health Science Meta Major**.

### Associate in Arts (A.A.) Tracks

- Biology (General)
- Biology Preprofessional
- Biotechnology
- Chemistry
- Health Science

### Associate in Science (A.S.) Programs

- Dental Assisting Technology and Management
- Dental Hygiene
- Emergency Medical Services
- Health Information Technology
- Health Services Management
- Medical Laboratory Technology
- Nursing—R.N.
- Physical Therapist Assistant
- Radiography
- Respiratory Care

### Bachelor of Science (B.S.) Programs

- Biology
- Healthcare Management
- Nursing

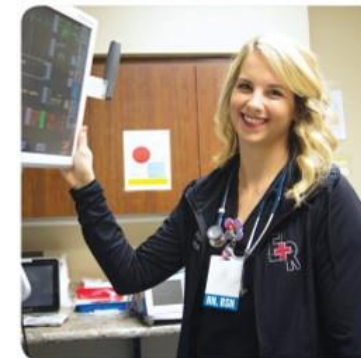
### Certificate and Career Training Programs

- Emergency Medical Technician—Applied Technology Diploma
- Medical Administrative Specialist—Quick Job Training
- Medical Assisting—Quick Job Training
- Nursing Assistant—Quick Job Training
- Paramedic
- Pharmacy Technician—Quick Job Training
- Phlebotomy—Quick Job Training
- Practical Nursing—Quick Job Training
- Surgical Technology—Quick Job Training

### IRSC graduates get great jobs! What they say:

"I love caring for critically ill patients and their families in their time of need. I feel honored with the trust my patients place in me to care for them at their most vulnerable time. I also was attracted to the career because of the stability and ability to move anywhere and still be employable."

—Ayla Messier, B.S.N., R.N.  
Cleveland Clinic Martin Health  
B.S. Degree in Nursing



# For more information, contact us at:

Davis Jenkins, [pdj2102@tc.columbia.edu](mailto:pdj2102@tc.columbia.edu)



[ccrc.tc.columbia.edu](http://ccrc.tc.columbia.edu)



CommunityCCRC



CommunityCCRC



[ccrc@columbia.edu](mailto:ccrc@columbia.edu)



212.678.3091

# Pathways to Career Opportunities



**TERESA MORELLI**

Supervisor, Academics &  
Supervisor, Academy for Health and  
Medical Sciences (Somerset County  
Vocational Tech School)



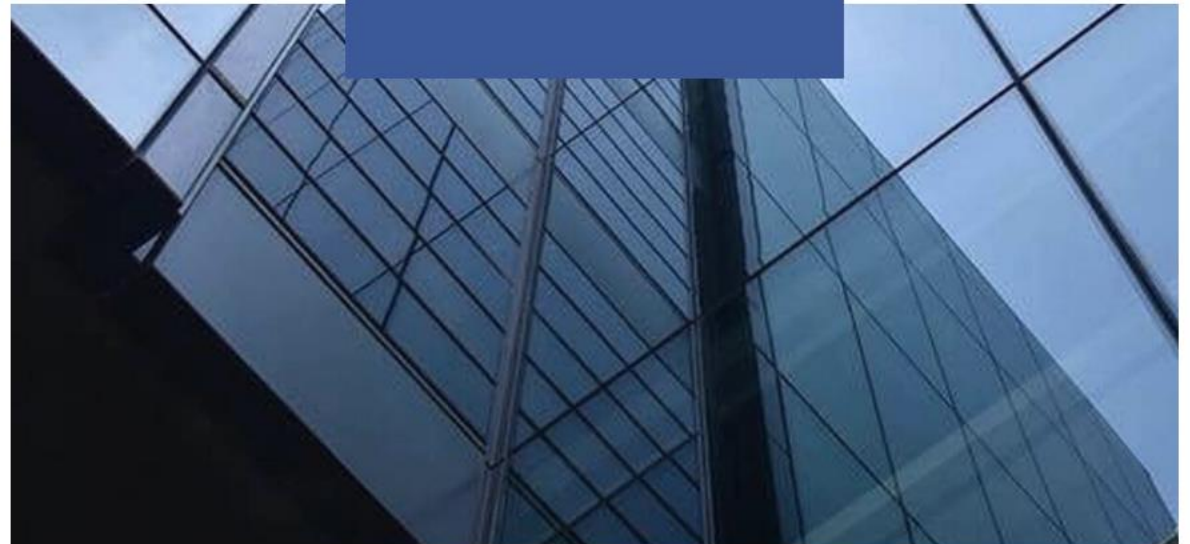
**KATISHA GLOSTER**

Program Manager, High School  
Outreach and Academics (Raritan  
Valley Community College)

**Somerset Co Health Sciences Academy at  
the Somerset Co Vocational Tech School**



**PRESENTATION**



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# Academy for Health & Medical Sciences

Presented by

**Teresa Morelli**

Academy Program Supervisor, Supervisor of Academics  
Somerset County Vocational and Technical High School

**Katisha Gloster**

Program Manager of High School Outreach and Academics  
Raritan Valley Community College

# Program Overview

The Academy for Health & Medical Sciences is a rigorous 4-year honors program for highly focused, college bound students. The program is a partnership between the Somerset County Vocational & Technical High School and Raritan Valley Community College. Successful students will graduate with both a high school diploma and an Associate degree in General Science.



# Benefits

- ✓ Small learning environment/cohort of students
- ✓ Develop supportive rapport amongst peers
- ✓ Academy staff collaboration to ensure student progress
- ✓ Prepares student for a 4-year college upon graduation
- ✓ Partnership with RVCC for dual academic credit



# Brief Overview

9th Grade	10th Grade	11th Grade	12th Grade
Physical Education and Health 1	Physical Education and Drivers Ed	Physical Education and Health 2	Physical Education and Health 3
English 9 Honors	English 10 Honors	English Comp 1 (RVCC)	English Comp 2 (RVCC)
Biology Honors	Anatomy and Physiology 1 & 2 (RVCC)	Biology 1 & 2 (RVCC)	Physics 1 & 2 (RVCC)
Earth and Space Science Honors	Medical Terminology	Chemistry 1 Chemistry 2 (RVCC)	Calculus 1 & Stats 1 (RVCC)
Algebra 2 Honors	Advanced Geometry/Trig Honors	Physical Science Honors	Financial Lit
World History Honors	Medical Math	Pre-Calc 1 Pre-Calc 2 (RVCC)	Moral and Social Issues (RVCC)
Spanish I or II Honors	US 1 Honors	US 2 Honors	Spanish IV or V Honors
Art 1 (1/2 Year)	Cultural Anthropology (RVCC)	Spanish III or IV Honors	
Photography (1/2 Year)	Human Origins (RVCC)	Workplace Experience	
	Spanish II or III Honors		

## Credits Earned

Sophomore Year: 14 credits

Junior Year: 25 credits

Senior Year: 21/22 credits

## Key

	High School Requirement/Dual Credit
	RVCC Only

# Fast Facts



## Admissions

Determined based on GPA, NJSLA test scores, Admissions Test, and Interview



## Transportation

Provided by sending district



## Extracurricular Sports and Activities

SkillsUSA, Soccer, Cheerleading, Model UN, Rotary and more



## Teaching Staff

Faculty from both SCVTHS and RVCC



## Articulation Agreements

Agreements with other colleges and universities



## Challenges

Different student populations

# Questions?



Presented by

**Teresa Morelli**

Academy Program Supervisor, Supervisor of Academics  
Somerset County Vocational and Technical High School

**Katisha Gloster**

Program Manager of High School Outreach and Academics  
Raritan Valley Community College

# Student Spotlights



## SANGEETHA PUNNAM

Student (Raritan Valley Community College & Somerset County Vocational Tech School)



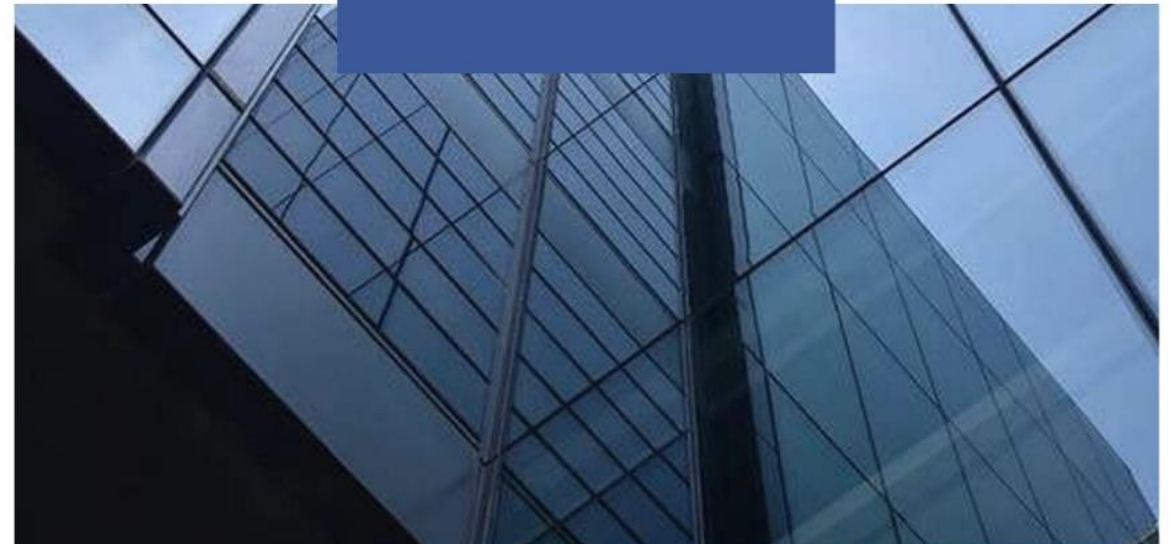
## VARUN PUNNAM

Alum & Current 4-Year University Student (Raritan Valley Community College Alum and UPMC Current Student)

Raritan Valley Community College



**PRESENTATION**



# Closing Remarks

Thank you for Partnering with **NJ's Community Colleges** and the **New Jersey Business and Industry Association** to Align Education to Build an Innovative Workforce.

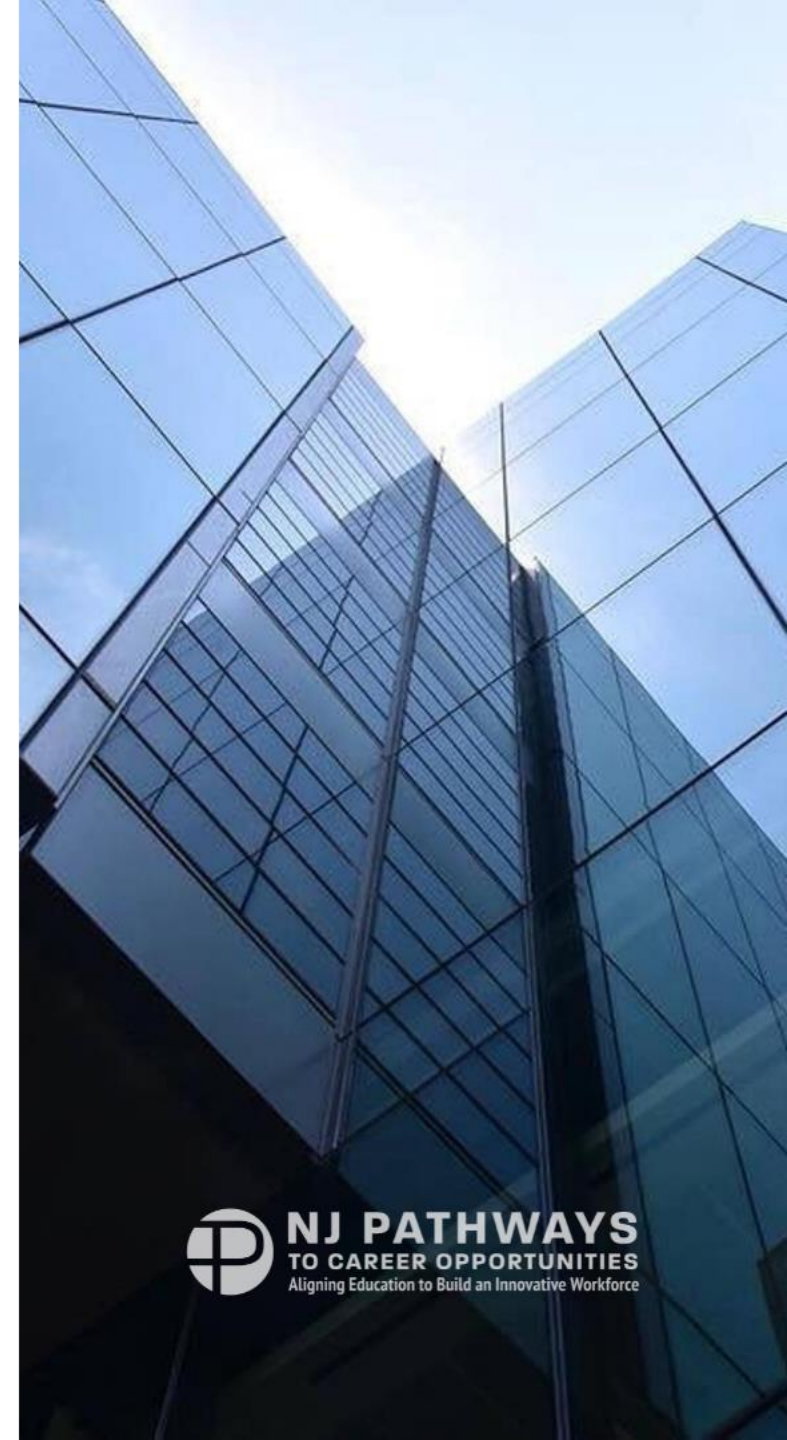


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Director, Health Services Strategy and Workforce Partnerships

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Program Manager, Health Services, Infrastructure & Energy Sectors and Workforce Partnerships



# Give Us Your Feedback



FILL OUT THIS QUICK SURVEY  
BASED ON YOUR EXPERIENCE  
OF THIS MEETING



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## Contact NJ Pathways

### Get Involved



**GET  
INVOLVED**



# STAY UP TO DATE AT NJPATHWAYS.ORG

Get involved in NJ Pathways to Career Opportunities at NJPathways.org. Become a partner to receive updates, meeting invitations, and other materials.

# Stay Connected

Never miss an update when you follow us on our social media platforms



@NJCommColleges



@NJ Community Colleges



@NJCommColleges



@NJCommColleges

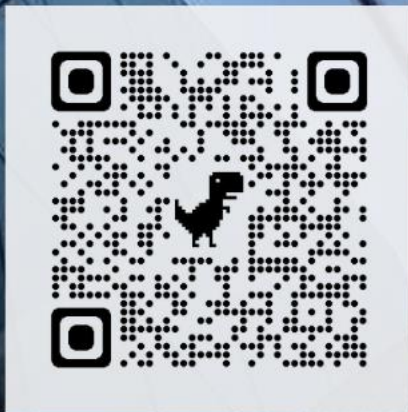


@NJCommColleges

**FOLLOW US**



**STAY INVOLVED:  
UPCOMING  
MEETING DATES  
IN MAY & JUNE 2022**



**INFRASTRUCTURE & ENERGY  
COLLABORATIVE**

Wednesday, May 25, 2022  
10:00 AM to 11:00 AM



**MANUFACTURING & SUPPLY CHAIN  
MANAGEMENT COLLABORATIVE**

Wednesday, June 8, 2022  
1:00 PM to 2:00 PM



**TECHNOLOGY & INNOVATION  
COLLABORATIVE**

Wednesday, June 15, 2022  
10:00 AM to 11:00 AM



**HEALTH SERVICES  
COLLABORATIVE**

Wednesday, June 22, 2022  
10:00 AM to 11:00 AM





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