

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.



Technology & Innovation Collaborative Meeting

Theme: Dual Enrollment



NJ Pathways to Career Opportunities

Technology & Innovation 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.



VEDA SHAMSID-DEEN, ESQ.

Director, Technology & Innovation Strategy and Workforce Partnerships

& JOHN MILLER

Program Manager, Technology and Innovation/Manufacturing and Supply Chain Management Sectors Workforce Partnerships







Give Us Your Feedback

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





Please use the hashtag:

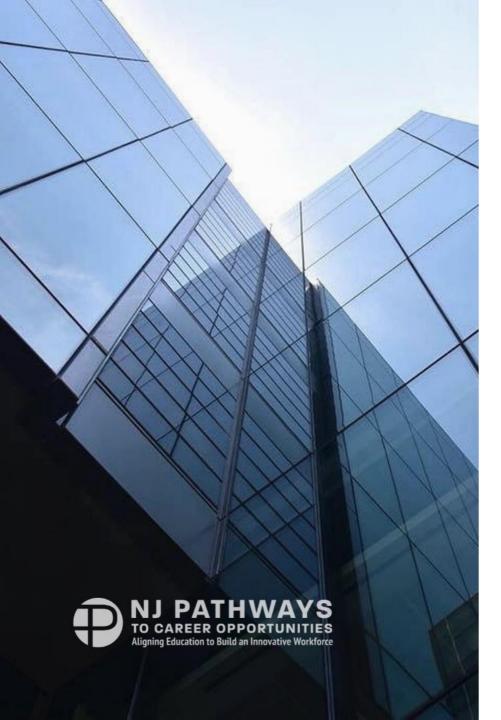
#NJPathways

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









TODAY'S AGENDA:

- The Importance of Dual Enrollment and Best Practices
 - <u>Elisabeth Barnett</u>, Sr. Research Associate (Community College Research Center at Columbia University)
- Pathways to Career Opportunities
 - Collegiate High School & High School Option programs
 - <u>Dr. Elvy Vieira</u>, Dean of Community, Continuing Education & Workforce Development (Essex County College)
 - <u>Carmen Morales</u>, Principal (Essex County Newark Tech High School)
 - <u>Doussou Toure</u>, 2021 Alumna (Essex County Newark Tech High School)
 - <u>Katreena Deodatt</u>, current senior (Essex County Newark Tech High School)
- Pathways to Career Opportunities
 - CGI's Partnerships with P-Tech (<u>Pathways in Technology Early College High School</u>)
 - Mike Reagan, Sr. Vice President Consulting Services (CGI)



Expert Speaker



ELISABETH BARNETT

Sr. Research Associate (Community College Research Center at Columbia University)

The Importance of Dual Enrollment





Optimizing the Role of Dual Enrollment in CTE Pathways

Elisabeth Barnett

Senior Research Scholar, CCRC

NJ Pathways Workshop

May 2022



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 fouryear colleges
- Guided pathways, institutional reform, and performance funding
- Workforce education and training and the economic returns to higher education



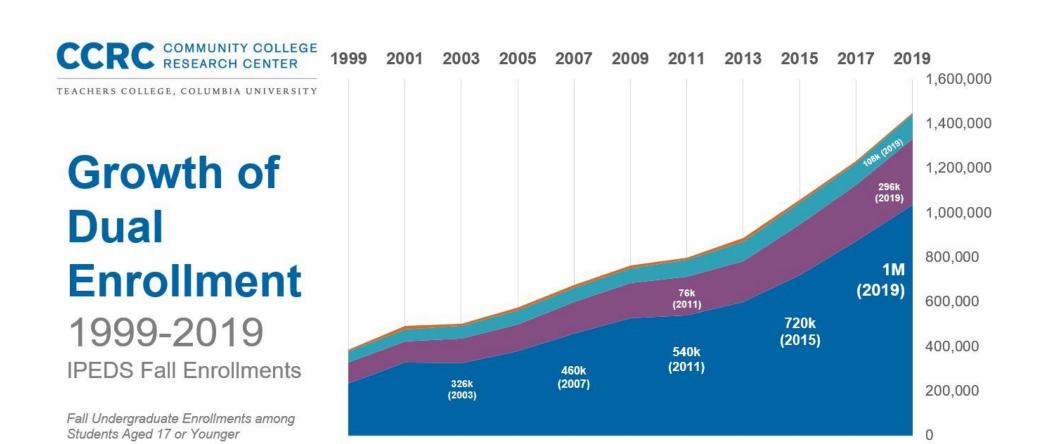




Graduating from high school is a beginning, not an ending. CCRC studies how to make the transition to postsecondary education a launching pad for success.

Fast Facts

- Dual enrollment students are more likely to finish high school, persist in postsecondary education, and accumulate college credits than their non-dually-enrolled peers.
- Dual enrollment participation is associated with better college outcomes for Black, Hispanic, and White students, but the vast majority of school districts have racial/ethnic gaps in dual enrollment participation.
- O3 Transition courses are offered in an increasing number of states across the nation. A 2017 CCRC scan found students in 39 states had access to such courses, up from 29 states in 2012–13.
- Summer bridge programs can contribute to student success during the first year of college.



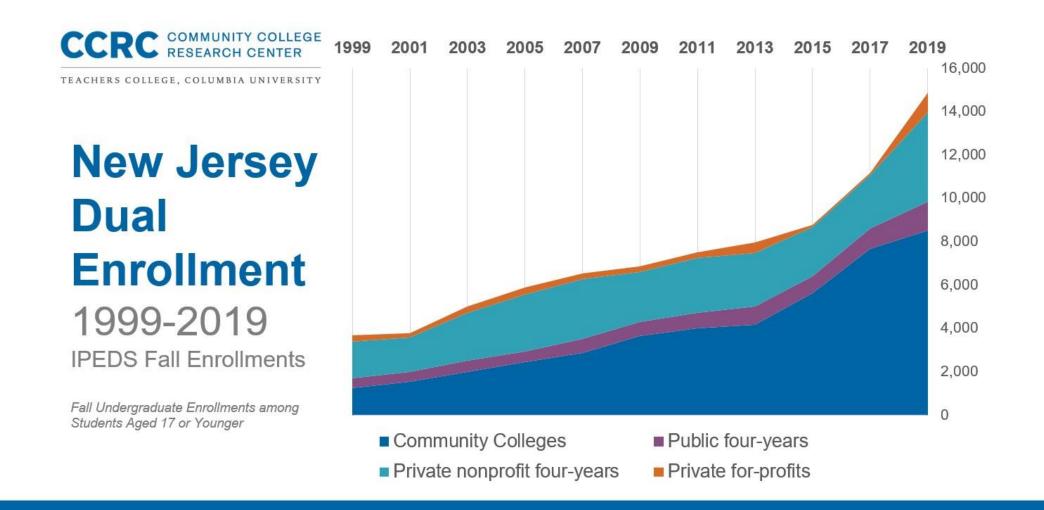
■ Public four-years

Private for-profits

Expansion of Dual Enrollment Concentrated at Community Colleges

Community Colleges

Private nonprofit four-years



Expansion of Dual Enrollment Concentrated at Community Colleges

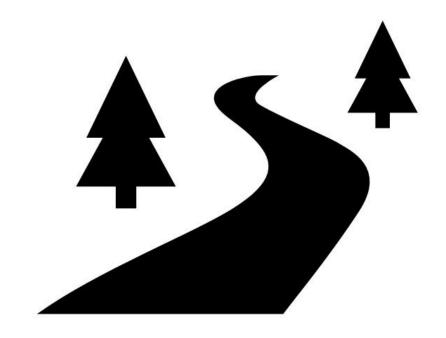
A few of our projects on dual enrollment

- Dual enrollment equity playbook (CCRC)
- STEM Early College Expansion Project (NCREST)
- NAF evaluation (CCRC)
- Dual enrollment equity pathways (CCRC)



Dual enrollment and CTE pathways

- Dual enrollment can serve as an on-ramp to high quality career pathways.
- Dual enrollment can increase equitable opportunities.



Dual enrollment as an on-ramp - key practices

(from D. Jenkins, 2022)

Backward map educational paths from high school to career-path jobs

Motivate students thru opportunities for networking, exposure, and realworld experience Help all high school students to develop a career-connected post-secondary ed plan

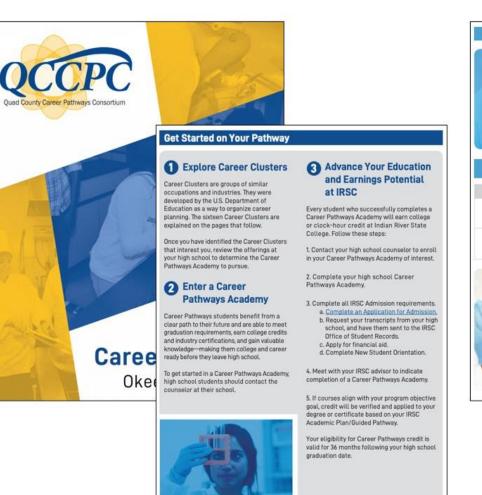
Market these as roadmaps to debt-free degrees and good careers







Aligning high school career clusters with meta-majors to create on-ramps into advanced workforce credentials (IRCC)









Provide strong academic advising aligned to smart choices

Coordinate advising across partners

Proactively provide supports for struggling students

Mapping transfer pathways for DE students at Lorain County Community College



25+ Pathways Completed! www.lorainccc.edu/MyUniversity

HS Periods HS Credit		HS Credit	HS Course LCCC Course		College Credit	
1		1	English II			2000
2		1	Geometry or Alg. II			
th Grade 1 1 1 1 1 1		Biology	BIOG 151: General Biology		4	
		1	Chemistry CHMY		161: General, Organic & Biochemistry I	4
		1	United States History		162: US History	3
		1		HUMS	S 151: Introduction to Humanities *	3
⊢ HS	Periods	HS Credit	HS Course		LCCC Course	College Credit
1 12 th Grade		1	Humanities/Cultural Diversity Humanities Elective		ENGL 266: African American Literature *	3
		1			HUMS 281: Introduction to American Cinema *	3
		1	College Level Math	1	MTHM 181: Calculus I	5
_	Fall Semester		Credit Hours		Spring Semester	Credit Hours
BIOG 252: Microbiology		Microbiology	5	Table de la constant	BGSU required course: BIOL 3510: Evolution	3
Ye	ar 14	red course must be	3		BGSU required course: BIOL 4400: Molecular Neurobiology	3
H	BGSU 3000/4000 elective course		3		BGSU 3000/4000 elective course	3
H	BGSU 3000/4000 elective course		3		BGSU 3000/4000 elective course	3
H	Semester Total		14			12
	Cumulative Total		38			50
y	Grand Total					122



NAF

A well-developed HS career pathway model.

- Academy Development and Structure
- Curriculum and Instruction
- Advisory Board
- Work-Based Learning



INDUSTRY NEED

Prior to the COVID-19 crisis, The Bureau of Labor Statistics predicted a growth in the IT sector of 557K new jobs by 2026, but what we are now seeing is that workers in nearly every industry are going to need to have the fundamental technical skills to be able to keep up with the changing workforce.

As the industry evolves, there will be a greater focus on filling positions in cloud computing, the collection and storage of big data, and information security. Because of this exponential growth, there is an urgent need to address the skills gap as not enough college graduates are filling.

NAF APPROACH

NAF's educational design is focused on making connections between the classroom and the workplace by integrating career-focused curricula and projects into the traditional high school experience, coupled with opportunities for real-world application. Through a series of coursework, together with a progressive continuum of activities designed to build awareness, enable exploration, and finally prepare students for future studies and career paths, NAF students gain the skills and knowledge needed to make informed choices and be successful in their future careers.



The NAF Model

- Students choose a theme (finance, hospitality and tourism, information technology, engineering, and health sciences)
- Students take career themed courses in addition to their normal high school coursework
- These courses focus on career skills and professionalism
- Most students have a paid internship in one or both of their last two years



NAF approach to career awareness

CONTINUUM OF COLLEGE & CAREER EXPERIENCES

The NAF Continuum of College & Career Experiences includes work-based learning, in which students directly interact with business partners, as well as additional experiences which prepare students for college and careers.

Awareness	Exploration	Preparation				
Work-Based Learning Experiences						
 Guest speaker 	 Job shadow 	 Paid internship 				
 Worksite tour 	 Mock interview 	 Virtual or school-based 				
Career fair	 Informational interview 	enterprise led by business partner				
 Mentor with business partners 		 Senior presentation to business partner 				
	Career Experiences					
 Individualized student learning, college & career plan 	 Community planning project 	Industry certificatesCommunity planning project				
 Career interest inventory 	 Industry competition or conference 	 Academy student recruitment NAF Curriculum 				
NAF Curriculum	 Resume development Business dress, behavior, and etiquette training NAF Curriculum 					



P-Tech

- Grades 9-13
- A blend of high school and college courses
- Students engage in work-based learning
- Students graduate with an associates degree





all about?

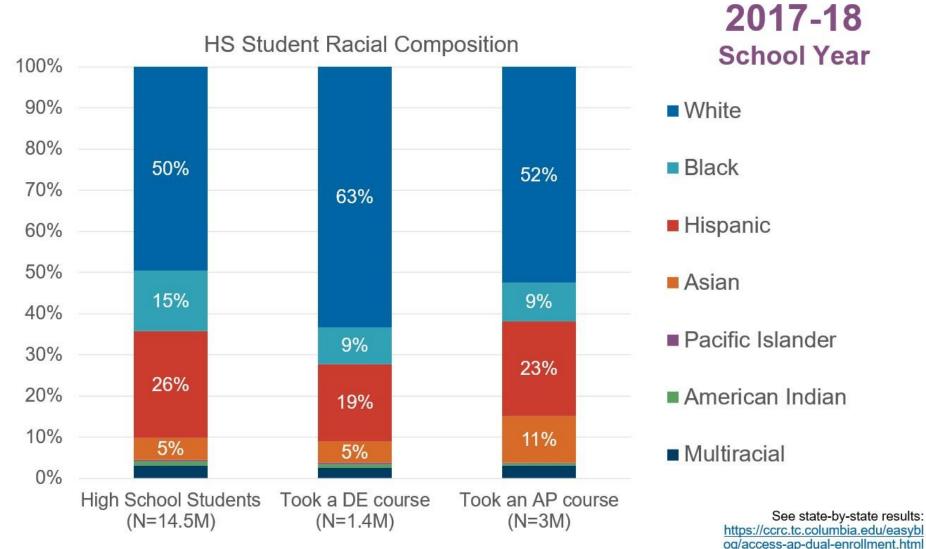
In a P-TECH school, students earn a high school diploma, an industry-recognized associate degree, and gain relevant work experience in a growing field. Explore P-TECH's impact here.

About P-Tech

There's nothing wrong with working at a pizzeria while in high school, but it always amazes me to see P-TECH students finding jobs in the manufacturing industry working alongside 40, 50, sometimes 60-year-old men and women who have made that line of work a career. There's an added sense of maturity in P-TECH students who, at such a young age, are finding themselves already working in a field they're passionate about. They are so far ahead of the game before they even leave this program.



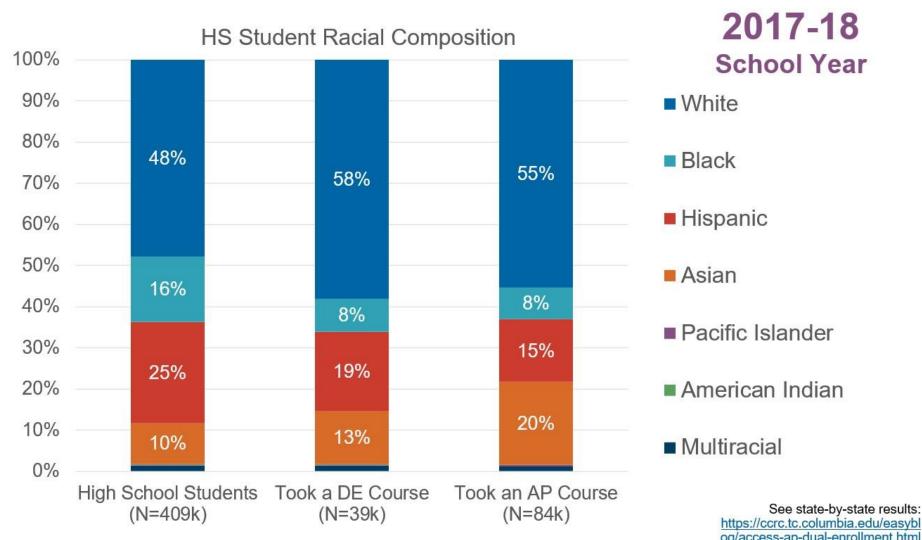
Black and Latinx HS Students Underrepresented in Dual Enrollment & AP courses



Source: CCRC analysis of Civil Rights Data Collection data



New Jersey: Black and Latinx HS Students Underrepresented in Dual Enrollment & AP courses



Source: CCRC analysis of Civil Rights Data Collection data

https://ccrc.tc.columbia.edu/easybl og/access-ap-dual-enrollment.html

Dual enrollment and equity- key practices

Reach out to students and families

Market these as roadmaps to debt-free degrees and good careers

"Differentiate" dual enrollment opportunities

CTE is an excellent access point

Support students to make sure that they're successful in college.





Equity Playbook: EXPANDED ACCESS

The data on equitable access prompted Indian River State College (FL) to discuss with K-12 how to jointly address participation gaps for Black and Latinx students, by proactively encouraging all students to take advantage of dual enrollment.



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		

Students' prior academic record	General education focused SECEP examples	Career focused SECEP examples	
Most advanced academically	 Advanced Placement (AP) 	 DEEP in medical, law, or engineering careers 	
	 Dual/concurrent enrollment 	• Project Lead the Way	
Mid-range	 Middle/early college with a general education focus 	 Career pathways programs 	
	 Dual /concurrent enrollment with seminar or a co-req course 		
Least advanced academically	 Student success or college-ready courses 	 CTE articulated credit programs 	
	 Summer bridges 	· On-campus experiences (use of CTE labs, other)	
	 College brush up programs for placement tests⁶ 		
	 On campus experiences (use of science labs, clubs, library, other) 		

Some Resources

- The Dual Enrollment Playbook: A Guide to Equitable Acceleration for Students
- From "Random Acts" and "Programs of Privilege" to Dual Enrollment Equity Pathways
- Rethinking Dual Enrollment to Advance Equitable Transfer
- Rethinking Dual Enrollment to Reach More Students



For more information, contact us at:

Elisabeth Barnett, Barnett@tc.columbia.edu







ccrc.tc.columbia.edu 🕑 CommunityCCRC 🚹 CommunityCCRC





212.678.3091

Pathways to Career Opportunities



DR. ELVY VIEIRA

Dean of Community, Continuing
Education & Workforce Development
(Essex County College)

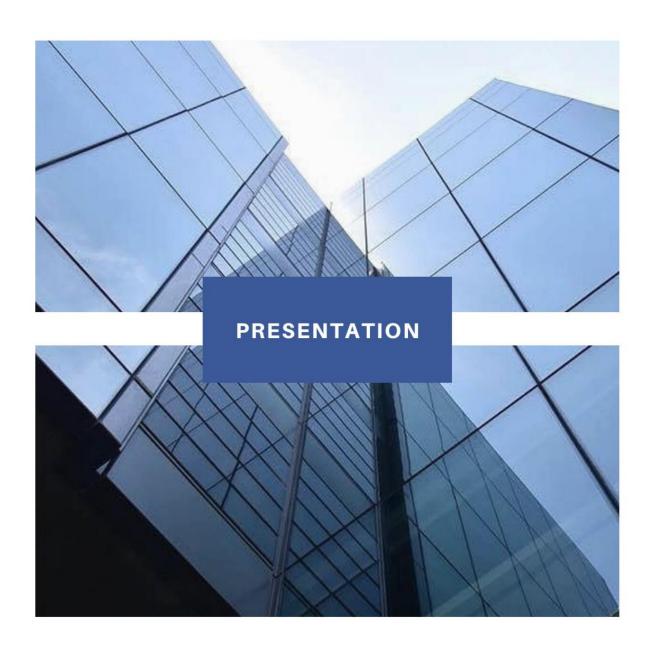


CARMEN MORALES

Principal (Essex County Newark Tech High School)

Collegiate High School & High School Option Programs







Dr. Elvy Vieira Dean of Community, Continuing Education & Workforce Development **Academic Affairs** 973-877-3062 Vieira@Essex.edu

Dr. Boakye, President of ECC

- a jump-start on their college careers in the process.
- In keeping with the mission of Essex County College, the partnership programs provide educational programming that foster readiness, retention and success for all students.
- Taking Essex County College courses while in high school help students to prepare for the social and academic requirements of college while having the additional support available to high school students.



DUAL ENROLLMENT/EARLY COLLEGE MODELS:

Dr. Elvy Vieira

Dean of Community, Continuing Education & Workforce Development
Academic Affairs
973-877-3062

Vieira@Essex.edu

TRADITIONAL



ESSEX COUNTY COLLEGE



Parents pay for students to attend



School Districts pay for students to attend



Students attend classes at the Community College



Students attend first 30 credits at the High School and transition to ECC for the remainder of credits (30)



Predominantly White and Asian



Minority Students-African American/Black and Hispanic/Latino



Program of Privilege



Program of Social Equity



PRE-COLLEGE PROGRAMS: DUAL ENROLLMENT/EARLY COLLEGE

Dr. Elvy Vieira
Dean of Community, Continuing Education & Workforce Development
Academic Affairs
973-877-3062
Vieira@Essex.edu



950+

Number of High School students participating in ECC's Pre-College Program in 2021-22



17
Essex County
High Schools participate



219

Courses Offered



2

Associate Degree Options

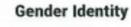
Ethnicity/Race

55%

African American/Black

34% Hispanic/Latino

> 11% Other



64% Females

36% Males



661

Total Credits Earned by HS Students

5.9 Average # Credits Earned Per HS Student



104

Anticipated # of High School Students Graduating From ECC June 2022

3 High Schools

\$87 Thousand

Tuition Money Saved Students and Families



Participating high schools have student populations greater than 85% who receive free / reduced lunch = SOCIAL EQUITY

MORE STATS

- 76% Courses Offered at High School / 21% Virtual / 3% ECC Campus
- 57% Courses Were Taught By ECC Adjunct Faculty / 43% High School Teachers Approved By ECC
- Courses Offered: 49% Humanities / 21% Science / 21% Social Sciences / 9% Business
- . High Schools Pay 100% Tuition & Fees



ESSEX COUNTY SCHOOLS OF TECHNOLOGY:

Dr. Elvy Vieira Dean of Community, Continuing Education & Workforce Development **Academic Affairs** 973-877-3062 Vieira@Essex.edu

Essex County Schools of Technology



THREE SCHOOLS

Donald Payne Sr. Tech



200+ Students

Students enroll in EARLY COLLEGE (General Education courses) West Caldwell Tech



64 Students

Students enroll in EARLY COLLEGE (General Education courses) **Newark Tech**

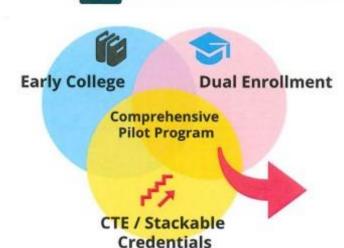


130 Students

Students enroll in EARLY COLLEGE (General Education courses) and DUAL ENROLLMENT (AA Degree - Liberal Arts)

ECST Dual Enrollment began in 2017 with the first cohort of 21 students graduating from ECC in 2021. Twenty-three (23) students are anticipated to graduate in June 2022.

Comprehensive PILOT Program



Computer Science Pilot Program will provide ECST HS students instruction in CompTIA industry recognized credentials (IT Fundamentals ITF+, A+ Core I and A+ Core II). Based upon review of course objectives, learning outcomes and program alignment, students who successfully complete and document content competencies through CompTIA certifications in all three (3) curricula are eligible for the following seven (7) ECC credits:

CSC 104 Networking Fundamentals (3 credits); and CSC 114 Computer Networks I (4 credits) that are both part of the Software Development Technology AAS degree.



ESSEX COUNTY SCHOOLS OF TECHNOLOGY: Essex County Newark Tech High School

Dr. Elvy Vieira
Dean of Community, Continuing Education & Workforce Development
Academic Affairs
973-877-3062
Vieira@Essex.edu

Essex County Newark Tech High School:

Special Thanks to Superintendent Dr. James
Pedersen for supporting the program.

Speakers:

Graduate Class of 2021 Ms. Doussou Toure

Current Student completing in June 2022 Ms. Katreena Deodatt

Principal Carmen Morales

Pathways to Career Opportunities



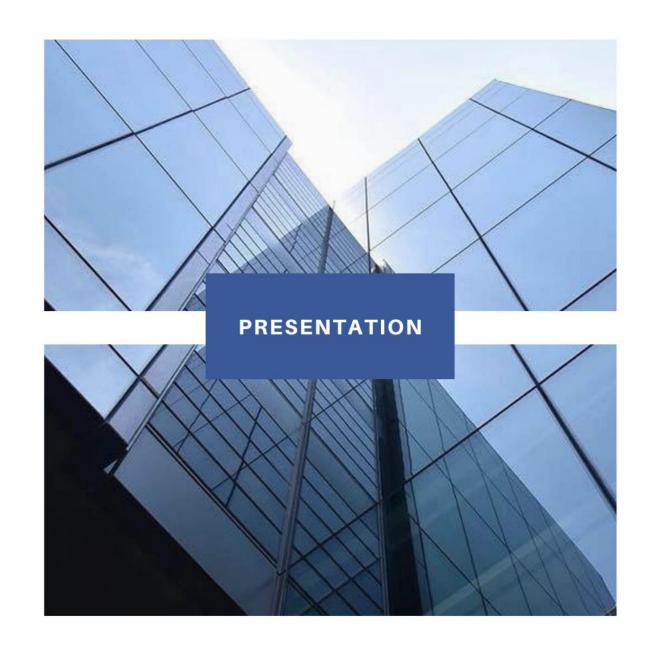
MIKE REAGAN

Sr. Vice President Consultin

Sr. Vice President Consulting Services (CGI)

CGI's Partnerships with P-Tech (Pathways in Technology Early College High School)





Accelerating profitable growth

LOCAL EXPERTS. GLOBAL INSIGHTS.

P-TECH Overview

Mike Reagan SVP CGI



CGI

Experience the commitment®

What is P-TECH (Pathways in Technology Early College High School) CG

- P-TECH is a public education reform model focused on college attainment and career readiness.
- P-TECH schools span grades 9-14 and enable students to earn both a high school diploma and a no-cost, two-year postsecondary degree in a STEM field.
- Students participate in a range of workplace experiences, including mentorship, worksite visits and paid internships.
- The P-TECH Model encompasses six years, students are able to move at their own pace, enabling some to accelerate through the model in as little as four years. P-TECH serves students from <u>primarily underserved backgrounds</u>, with no testing or grade requirements.
- P-TECH is a powerful demonstration of public-private partnership designed to help all students achieve at the highest levels.

P-TECH in New Jersey



- P-TECH Education Model for New Jersey Announced by Governor Murphy on 11/27/2018
- Grants were awarded to three school districts
 - Patterson (North Jersey)
 - New Brunswick (Central Jersey)
 - Burlington City (South Jersey)
- ➤ Initial NJ P-TECH cohort started July 2019.
- Each school district is aligned to a local community college
 - Paterson (Passaic)
 - New Brunswick (Middlesex)
 - Burlington City (Rowan)

CGI's PTECH Partnership



- CGI is an industry partner aligned with the New Brunswick school district
- Our partnership with New Brunswick schools includes:
 - Stem Camps at elementary schools (a feeder program)
 - Curriculum development
 - Mentoring
 - Guest speaker at P-TECH events
 - Work site visits
 - Training Website
 - Partnered with Percipio-Skillsoft to create a NB P-TECH dedicated training website
 - Internships*
 - P-TECH Board Position

^{*} Students must be 18 years old before paid internships can be offered

New Jersey P-TECH Eco-System





- Jobs
- Internships
- Mentoring
- Curriculum Development

NJ Department of Education

CGI's NJ Innovation Center Our new New Brunswick office

Clients

- · State of NJ
- Local NJ Counties & Cities
- NJ Headquartered Commercial Accounts

Skills

- Electric Engineers
- Computer Science
- Analytics

NJ Economic Development Authority

NJ Office of Attorney General

Jobs

College Partner

Middlesex Country College



Diversity & Inclusion: 112 Students & Future CGI Members

By Cohort / Grade

- > 35 students in Cohort 1 Grade 11
- > 42 students in Cohort 2 Grade 10
- > 35 students in Cohort 3 Grade 9

➤ Male / Female

- Cohort 1 26 male / 9 female
- Cohort 2 25 male / 17 female
- Cohort 3 24 male / 11 female

Unique Populations

- ➤ 10 English Language Learners (ESL)
- > 18 Special Education Learners

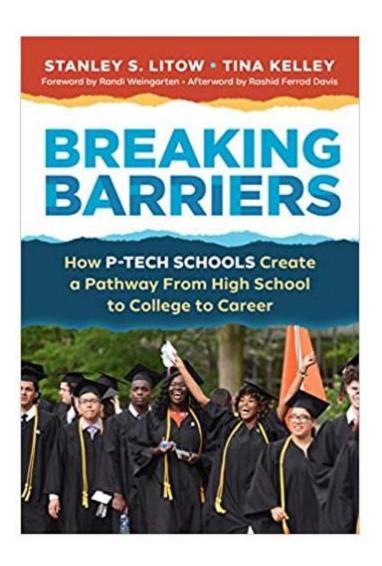
Ethnicity

- > 12 African American
- 2- Caucasian
- > 98 Hispanic

Confidential

Additional Information





Confidential

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.



VEDA SHAMSID-DEEN, ESQ.

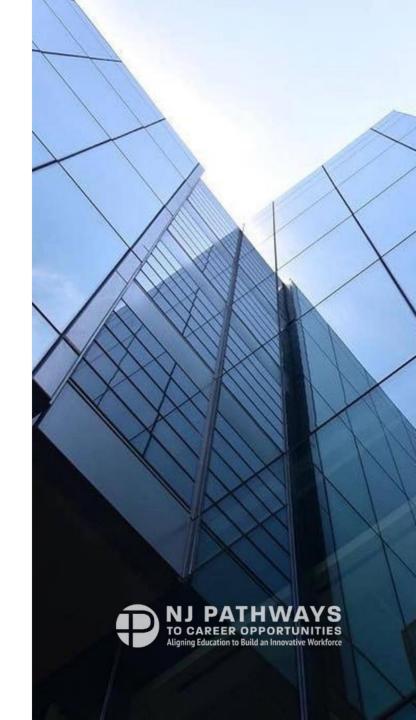
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Email*

Contact NJ Pathways

Get Involved

Name*

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.

Organization*

GET
INVOLVED



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STAY INVOLVED: UPCOMING MEETING DATES IN MAY & JUNE 2022



HEALTH SERVICES COLLABORATIVE

Wednesday, May 18, 2022 10:00 AM to 11:00 AM



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





NJ PATHWAYS TO CAREER OPPORTUNITIES

Aligning Education to Build an Innovative Workforce

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