



## Increasing Access and Success for Underrepresented Students in STEM

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**Empower Minds. Create Opportunities.**



# Agenda

- Rush Education and Career Hub Introduction
- Challenge and Our Approach to a Solution
- Signature Programs
- Impact and Organizations Compositions
- Collaborative Partnerships



# RUSH EDUCATION & CAREER HUB

## Dedicated Team to Support Youth Workforce Development



Rukiya Curvey Johnson, MBA  
*Executive Director*



Natalia A. Gallegos, MPH  
*Director, Engagement and Impact*



Dr. Heather Hampton, EdD  
*Director, Education and Pathways Programs*



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*IT Pathways Project Manager*



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*Community Education Associate,  
STEMagineers 3<sup>rd</sup>-5<sup>th</sup>*



Nia K. Benton-Roberson, MSW  
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High School & College*



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*Student Success Coach*



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*Data Analyst*



T.S. Culbreath-Byrd, MSIT  
*IT Pathway Program  
Coordinator*



Caroline Kerr, MAT  
*Program Development  
Associate, Middle School  
STEM Specialist*



Ellen Vigil, MAT  
*Community Education  
Associate, STEMagineers  
PreK-2<sup>nd</sup>*



Lauren White, MPH  
*Program Coordinator*



## Who We Serve



**80%**  
Black & Latinx



**72%**  
Female



**70%**  
Low-Income



**65%**  
1<sup>st</sup> Generation College



# MISSION



RUSH EDUCATION  
*and* CAREER HUB

Provide **innovative, hands-on STEM learning** for underrepresented students from cradle to career to increase postsecondary achievement and **diversity in health care and STEM professions.**



# OUR VALUES

**Empower through education.** We help our students see education as fuel for a fulfilling, impactful career, and teach them the skills, resilience and accountability they need to turn their dreams into reality.

**Strive for excellence.** We push ourselves and our students to see more, do more and be more. We take accountability for our actions through research and practical application, and we ask the same of our students so they can take what they learn into real-time experiences that make a difference.

**Lead with equity.** Students of color are highly underrepresented in STEM and health care fields. We must actively interrogate our roles in perpetuating inequitable systems and work together to develop better practices, systems and structures within education and workforce development.

**Commit to community.** The more organized and connected we are, the greater our impact on our students. That means leveraging the expertise, resources and contributions of our partners rather than reinventing the wheel. We work collaboratively and take the time to listen to each other, to our partners and to the communities we serve.

**Center the student.** While the outcomes of our work have a meaningful impact on Chicago's economy, at the center of it all are young people with unique aspirations and challenges. What we do directly affects their lives, and we never lose sight of that.



# VIDEO INTRODUCTION

## Rush Education & Career Hub (REACH)



# CHALLENGE:

## Inequitable Outcomes in Education, Wealth, & Health



**Large gaps in educational attainment and aspirations**



**Shortage of health care professionals; lack of diversity in middle & high-skilled STEM fields**



**Disparities in education, employment and earning potential affect health and economic outcomes**

Source: <https://data.hrsa.gov/tools/shortage-area>



# SOLUTION: Support Occupational Identity Development in STEM & Healthcare



Access to **high quality STEM learning** experiences from PreK-to College



**Paid work-based learning** experiences paired with **professional & personal development**



**Articulated career pathways** aligned to **labor market demand** and ability to **earn industry-recognized credentials**



**Wraparound supports and mentoring** to facilitate student and family participation and engagement

How does your school/organization execute activities to help meet the benchmarks in the PaCE Framework?



# WHAT WE PROVIDE

## Cradle-to Career Pipeline of STEM/Healthcare Programs



### Early Exploration in STEM and Career Awareness

**Key Outcomes:**

- Interest in STEM
- Foundational academic skills
- Awareness of own interests
- Early career aspirations
- Enrichment experiences

### Early Childhood & Primary

- STEMagineers
- Community OutREACH
- Educator Learning Labs
- IT Explorations

### Career Awareness, Skill and Attitude Building

**Key Outcomes:**

- Ability to collaborate Planning, goal setting
- Career awareness, aspirations
- Connections between school and work
- College-going attitude

### Middle School

- Future Ready Learning Labs
- Vitals for STEM Success
- Future Health Professionals (HOSA Jr)

### Career Exploration, Exposure, Strengthening Skills

**Key Outcomes:**

- Employability and life skills
- College preparatory
- Self-efficacy
- Occupational identity

### High School

- MedSTEM Explorers
- MedSTEM Pathways & Mentoring
- MedSTEM+ IT\* (New)

### Career Pathway Training and Development

**Key Outcomes:**

- Technical training Workplace experiences Social capital
- College persistence and graduation
- Employment in healthcare or STEM

### College & Beyond

- College Career Pathways
- Community Health Equity
- Rush Career Care Plan
- MedSTEM Careers (new)

Programs



## PreK- 5<sup>th</sup> – Elementary School



### STEMagineers

- Builds a foundational interest in STEM (science, technology, engineering and mathematics) and health care with students in preschool through 5<sup>th</sup> grade.
- Provides PreK - fifth graders the opportunity to engage in discoveries and active STEM/health care learning that promotes inquiry
- Develops STEM-focused instructional practices for teachers
- Provide families and community with awareness and exposure to STEM and healthcare fields





- An after-school curriculum enrichment program for middle school students interested in STEM or healthcare careers. There are three 10-week sessions during the school year hosted at various school campuses predominately on the west side of Chicago.

## FUTURE READY LEARNING LAB



*(In-School Enrichment Elective for select schools)*

- Focused on building interest and awareness of STEM/health care careers, increasing self-efficacy, developing 21st century learning skills and supporting the transition to high school.
- Incorporated into the school day and include field trips, labs, career panels, and family and community engagement.



- After school student-led club focused on building leadership capacity, community service, and career exploration in the health science field.





## 9<sup>th</sup>- 12<sup>th</sup> Grade – High School

### Med<sup>+</sup>STEM explorers

- MedSTEM Explorers is a paid enrichment program for rising high school sophomores and juniors. During this 6-week summer session, students attend classes at Rush University Medical Center exploring various STEM and healthcare careers, developing workforce skills, and researching real-world issues that affect their Chicago communities.

### Med<sup>+</sup>STEM pathways

- MedSTEM Pathways is a paid internship program for rising high school juniors through recent high school graduates. There are three sessions: Summer, Fall, and Spring. Students will spend up to 20 hours per week gaining work-based learning skills while interning in departments throughout Rush University Medical Center and several other partner organizations. Pathways interns also have an opportunity to earn an industry-recognized credential aligned to labor-market career pathways. Students also spend one day per week strengthening college readiness and life skills through academic and professional development classes.

### ***Bridges Mentorship Program – UIC***

- The Bridges to Mentorship Program is for high school students interested in a career in nursing and medicine. Mentoring, career exploration, and academic supports will be made available to student participants. Students will gain the opportunity to learn about nursing and medical careers from current nursing and medical students. In collaboration with UIC School of Medicine and School of Nursing.

### ***Ru Ready –Academic Enrichment and Professional Development***

- The RU Ready Series is a virtual space for Chicago high school teens to strengthen core college & career readiness skills including, writing, math, interviewing, communicating in the workplace and personal development. We seek to equip students with dedicated workshops, small-group and 1-on-1 sessions for developing prepared candidates for college and career.





## 9<sup>th</sup>- 12<sup>th</sup> Grade – High School

# MedSTEM+

- The MedSTEM+ IT Program is a four (4) year career development program that allows students to participate in classroom experiences, job shadowing, internships, and receive technical certifications in Cybersecurity, AI, and Health IT. This program specifically targets students in 11th – 12th grade; 1st and 2nd-year college students; and adult learners without a 4-year degree.



# 5th - 12th Grade – Middle & High School

## IT EXPLORATIONS

- The IT Exploration Program provides access to outreach and enrichment opportunities to expose 5th - 12th grade students to college and career opportunities in Cybersecurity, AI, and Health IT. Options may include clubs, competitions, classroom integration (problem-based learning), etc.
- Through partnerships with various program and content providers, the IT Exploration Program will identify offerings that satisfy the criteria of the REACH for IT program to develop this network of enrichment opportunities for Black and Latinx youth throughout the city of Chicago.
- **STEM Enrichment and Curriculum**
  - STEM Curriculum
    - Cybersecurity
    - AI
    - Health IT
  - STEM Enrichment
    - Computer Deconstruction
    - Coding Camps
    - Gaming Clubs\*
    - After School Programs

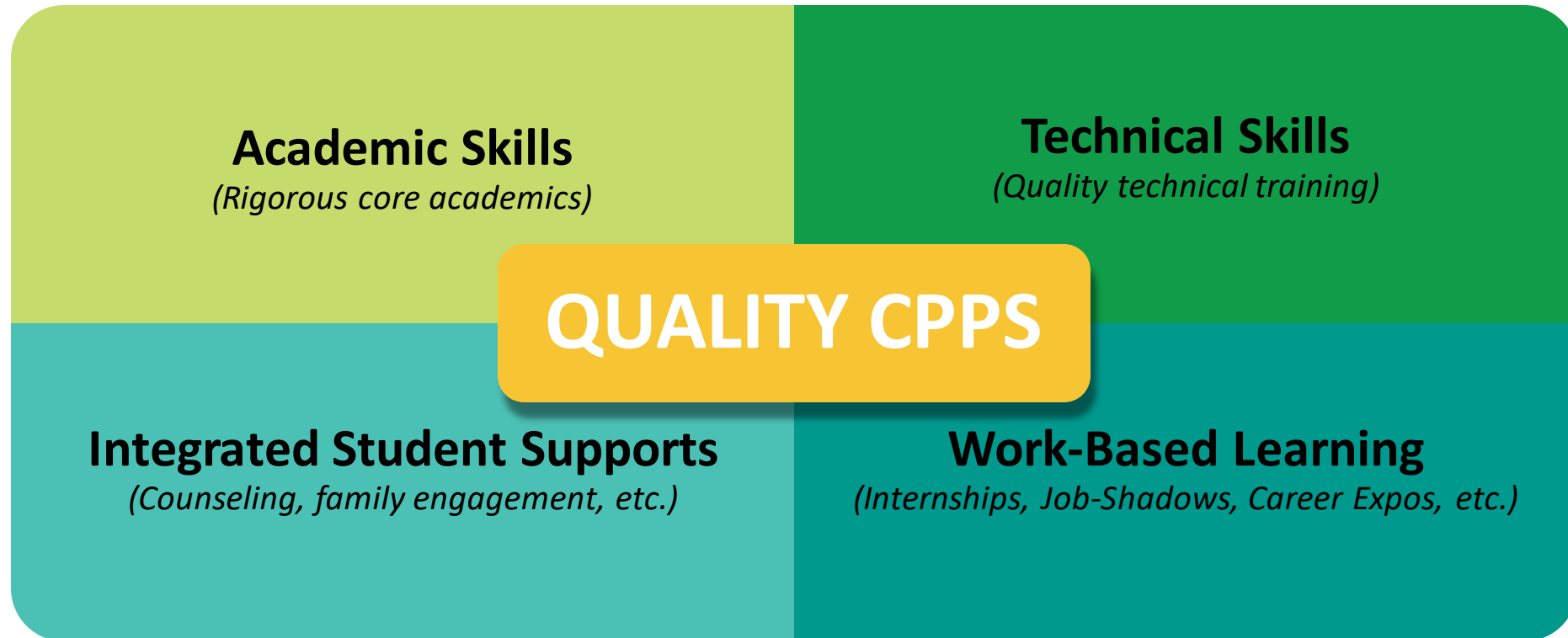


Ways in which the PaCE Framework has helped your community in supporting students on postsecondary and career readiness?



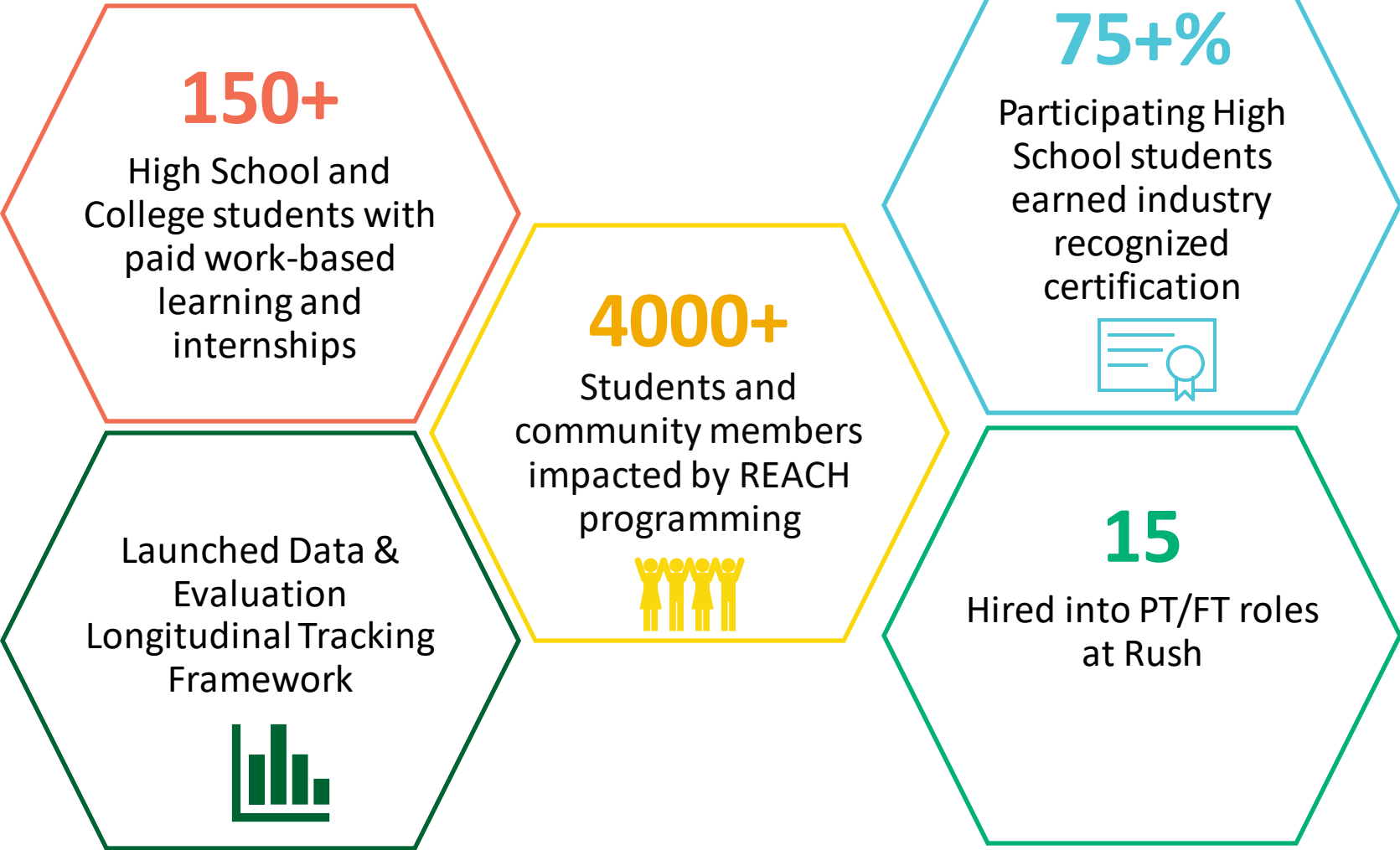


# COMPONENTS OF QUALITY CAREER PATHWAYS PROGRAMS



**Soft skills reinforcement should be embedded across components.**

# 2021–2022 HIGHLIGHTS

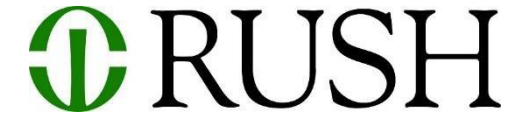


# PARTNER FOR IMPACT

## Strength through Collaboration



Annually serve 3000+ students, teachers, and families through programming and outreach with partner organizations



**WEST SIDE UNITED:** Building Blocks to Better Health



# Any Questions?



Contact: <https://reachatrush.org/>



**RUSH EDUCATION**  
*and* **CAREER HUB**

Excellence is just the beginning.