

# THE FUTURE NEEDS A PUSH

JULY 2022

## FEATURED

CONVENING SESSIONS

PRE-COLLEGE STEM  
PROGRAM CORNER

CONVENING KEY  
TAKEAWAYS



## 2022 STEM PUSH NETWORK CONVENING: UNZOOMED

The STEM PUSH Network aims to strengthen pre-college STEM programs (PCSPs) in supporting Black, LatinX and Indigenous students and reimagine the relationship with higher ed admissions to broaden participation in STEM. To forward these goals, we hosted our first national in-person convening, STEM PUSH UnZoomed, from April 26-29. We were excited to welcome 31 PCSP representatives from 24 STEM PUSH programs in all seven of our Ecosystems to Pittsburgh, in addition to our NSF Program Officer and members of our external evaluation team from the University of North Carolina Greensboro and Arizona State University.

COVID-19 prevented us from working together in person for the first two years of the grant and this much-awaited in-person convening let us deepen those virtual relationships by being together in living color. Our overall convening goals were to build and strengthen community, affirm commitment to and PCSPs' role in building greater equity in STEM college admissions and persistence, celebrate progress toward equitable practices, launch new equity-focused improvement cycles, learn together and have fun.

STEM PUSH UnZoomed was a celebration of what STEM PUSH has accomplished so far, a launch of new work for this summer and fall, and a time for our network members to connect beyond our screens.

**Thank you to all of our attendees for  
spending the week with us in Pittsburgh!**



**Dominique Briggs**

STEM PUSH Project Manager

**Olivia Phillips**

STEM PUSH Project Coordinator



# CONVENING SESSIONS

STEM PUSH PCSP representatives gathered for 2.5 days of sessions designed to collectively strengthen PCSPs to broaden participation in STEM. The goal of the convening was to advance our networked improvement community (NIC) which is aimed at strengthening the ability of our PCSPs to recruit and prepare Black, Latinx and Indigenous students for success in undergraduate STEM.

Sessions included:

- *Identifying and measuring STEM competencies that PCSPs develop in students*
- *Consolidation of what was learned during this year's NIC improvement cycles*
- *Equity in Action in PCSPs - Examples of program practices that support Black, Latinx, and Indigenous youth amidst the COVID-19 pandemic, local & national racial violence, CRT bans and changes in higher education admissions.*
- *Sharing STEM PUSH preliminary data on our study of the impact of PCSPs on the persistence of students in STEM*
- *Connecting college admissions with the work of STEM PUSH PCSPs*
- *STEM Teaching Tools as a resource for equity and justice*



At the convening, we launched five equity-focused improvement groups that will advance our theory of change this year. Each group had time for PCSP representatives to talk through how they plan to implement the change idea in their programs. The new improvement groups are all focused on equitable practices through:

- Alum engagement
- Ecological belonging intervention
- Embedded college-going supports
- Racism in STEM discussion routine
- Recruitment

The STEM PUSH convening also featured external speakers, including our NSF Program Officer, Dr. Alicia Santiago, who shared how STEM PUSH fits in with the broader work addressed by NSF INCLUDES.

Our keynote speaker, Dr. Alaine Allen, Associate Dean for Diversity, Equity, and Inclusion at Carnegie Mellon University's College of Engineering, focused on how PCSPs can help students-- particularly Black, Latinx and Indigenous students-- expand their horizons and achieve their college and career goals.

Our closing keynote speaker, Dr. Valerie Kinloch, Renee and Richard Goldman Dean of University of Pittsburgh's School of Education, who shared the challenges in doing equity and justice work as a leader in higher education.



***“STEM PUSH provided the opportunity to network with a whole nationwide group of people who are doing similar work. It is an opportunity to expand, to improve and to share some of the things that we have discovered over the course of our eight plus years of running our 21st Century Scholars Program.”***

- Elizabeth Rodriguez, 21st Century Scholars Program at Camden County College

# KEY TAKEAWAYS

Assembling and working together allowed our Network to accelerate change.

The convening advanced the work of the NIC.

- Shared data and mapped targeted outcomes and measures
- Consolidated learning from testing cycles
- Launched new equity-focused testing cycles

The convening centered the power of PCSPs to advance equity in STEM.

- Celebrated individual and collective progress toward equitable practices
- Shared preliminary data on PCSPs' impact on college-going and persistence
- Identified competencies to communicate to higher education admissions offices

*“What we're all working towards is to try to increase the number of Black and brown students who are prepared to enter STEM careers in college. I think the real strength of the Network is that we don't feel like we're doing this alone; isolated. To me, that's the advantage of working together and seeing what other sites are doing.”*

**Mary Valmont**  
Health Science Academy  
at Arthur Ashe Institute  
for Urban Health



New relationships were built, existing relationships were deepened, and the power of the network was felt by those who attended.

Our external evaluation team found that PCSP representatives were excited to be part of an in-person convening. Participants displayed high levels of engagement throughout the convening and valued opportunities to connect and network with other STEM PUSH members.



**Pittsburgh  
Parks  
Conservancy**

## YOUNG NATURALISTS

We managed to fit in an educational outdoor activity featuring one of our Pittsburgh PCSPs at the convening! Network members Stephen Bucklin and Jen Schnakenberg from Pittsburgh Parks Conservancy's Young Naturalists program led an evening wildflower walk through Panther Hollow in Pittsburgh's Schenley Park. On the walk, Stephen & Jen identified the native spring flowers in bloom, including trillium, trout lily & foamflower.

The Young Naturalists program joined the STEM PUSH Network as part of our first cohort in 2019.

**"I WAS REALLY EXCITED BY A COUPLE OF ASPECTS OF THE PROJECT. ONE WAS THE FOCUS ON BLACK AND BROWN LEARNERS, WHICH IS SOMETHING THAT WE TRIED TO BUILD INTO OUR PROGRAM FROM THE BEGINNING. ANOTHER WAS THE OPPORTUNITY TO FORMALIZE SOME OF OUR PROCEDURES AROUND THE PROGRAM AND REALLY DOCUMENT WHAT WE WERE DOING AND WHAT WORKED AND GET SOME SUPPORT IN THAT."**

**- Jen Schnakenberg**  
Pittsburgh Parks Conservancy's  
Young Naturalists





## JOIN US IN OUR PUSH TOWARDS EQUITY

The STEM PUSH Network is working to create systemic change in college access and admissions for Black, Latinx and Indigenous students in STEM. **[We are recruiting for our next cohort of pre-college programs!](#)**

We are conducting the first large-scale, longitudinal study of the efficacy of PCSPs.

To do this, we are building the first national network of PCSPs focused on equity and we are working together to accelerate change.

The COVID-19 pandemic has elevated the conversation around the inherent inequity of standardized tests in admissions, and the time is right for systemic change.

We hope you join us as we PUSH for equity in STEM. Learn more and [apply here](#).

You can also join STEM PUSH at [www.stempushnetwork.org](http://www.stempushnetwork.org) and engage in the conversation on social media via LinkedIn, Twitter and Facebook.



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This NSF INCLUDES Alliance is funded by NSF Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES), a comprehensive national initiative to enhance U.S. leadership in discoveries and innovations by focusing on diversity, inclusion and broadening participation in STEM at scale. It is also co-funded by the NSF Innovative Technology Experiences for Students and Teachers (ITEST) program and the Advancing Informal STEM Learning Program (AISL).



[www.stempushnetwork.org](http://www.stempushnetwork.org)