BE STEM and the STEM PUSH Network

On behalf of BE STEM & STEM PUSH:
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BE STEM – The Broadening Equity in STEM Center

STEM PUSH – Pathways for Underrepresented Students to Higher Ed

(Re)imagining equitable pathways to higher education.
Racial and Ethnic Underrepresentation in STEM

Pre-College STEM Programs

Higher Ed STEM
NSF INCLUDES Early Results

NSF INCLUDES DDLP:
Diversifying Access to Urban Universities for Students in STEM Fields

Pilot Results:
1. PCSPs form an important bridge between urban communities and urban universities
2. Standardized test scores are not predictive of success in STEM
3. Quality Standards for PCSP to Broaden Participation
Quality Standards: Framework for NIC and Accreditation

• Program Goals

• Student Recruitment

• Program Design and Implementation

• Assessment and Evidence of Performance

• Student Services

• College Pathway
Pitt Receives $10 Million Federal Grant to Boost Racial and Ethnic Diversity in STEM Higher Education

The grant will create a network of pre-college programs with accreditation standards to boost college enrollment for underrepresented students.
STEM PUSH Vision

PCSPs Broaden Participation + PCSPs Communicate Value = Increased URM admission, matriculation, & persistence
STEM PUSH Goals

• Develop a pre-college improvement community

• Develop an accreditation system for STEM pre-college programs

• Provide an equitable, evidence-based metric to higher education institutions to consider participation in accredited STEM pre-college programs for admissions purposes
Networked Improvement Communities (NICs)

Integrating Two Big Ideas:

The tools and technologies of Improvement Science

Joined with
The Power of Networks

*Adapted from materials created by the Carnegie Foundation for the Advancement of Teaching
**Improvement Science Process**

1. **Understand the problem and the system that produces it**
2. **Focus collective efforts**
3. **Generate ideas for change**
4. **Spread and scale**
5. **Test and build evidence**

*Adapted from materials created by the Carnegie Foundation for the Advancement of Teaching*
• Jen here about the NIC (results?)
STEM PUSH NIC and Quality Standards

- Scientific professional learning community
- PCSPs improve along evidence-based quality standards
- Set of research-based best practices for BP in STEM

- Program Goals
- Student Recruitment
- Program Design and Implementation
- Assessment and Evidence of Performance
- Student Services
- College Pathway
Accreditation Strategy

PCSPs join STEM PUSH

BE STEM directs PCSP self-study

NIC supports PCSP improvement

BE STEM refers PCSPs to MSA

BE STEM awarded candidacy

BE STEM accredited as an LSP

BE STEM/MSA designs a new model for PCSPs that uses Quality Standards framework and centers equity

PCSPs are accredited for broadening participation in STEM

Equitable metric for admissions is created and valued
• Disan slides here about other strategies
Thank you!

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