



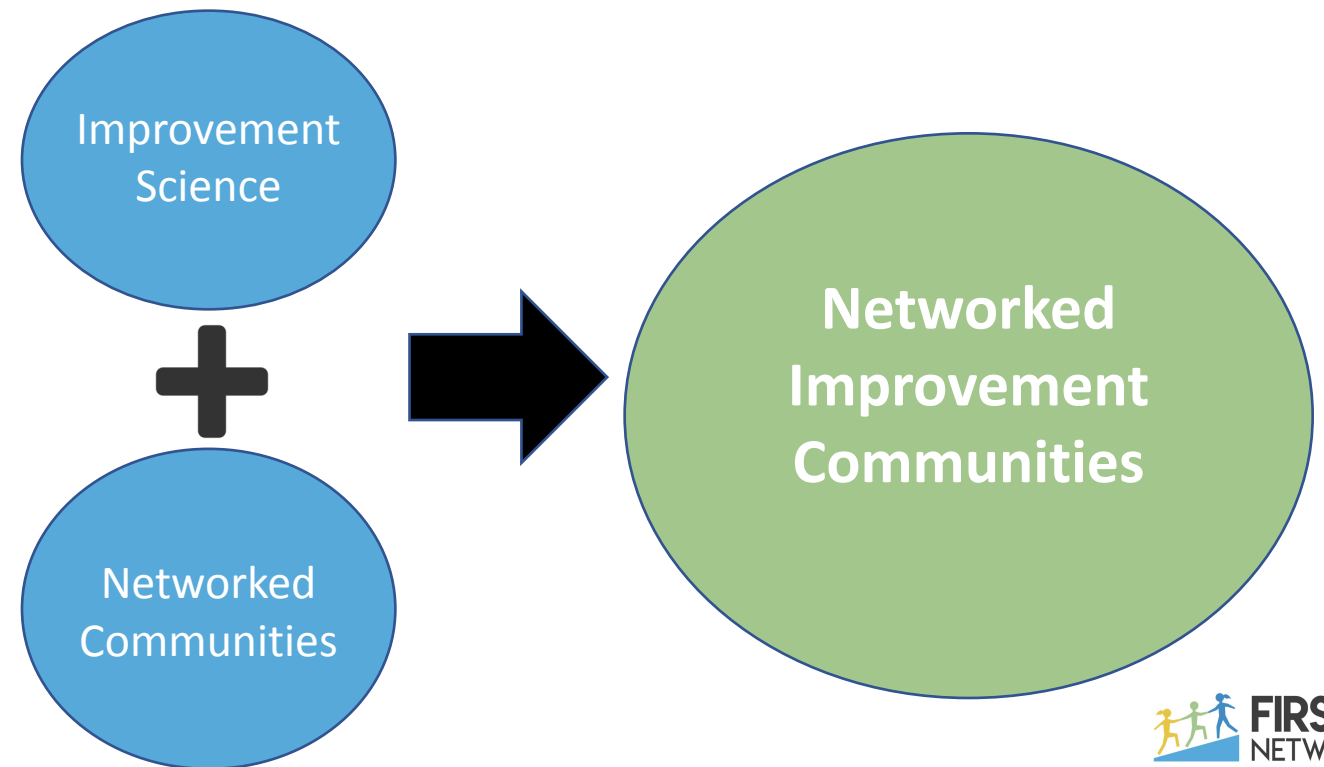
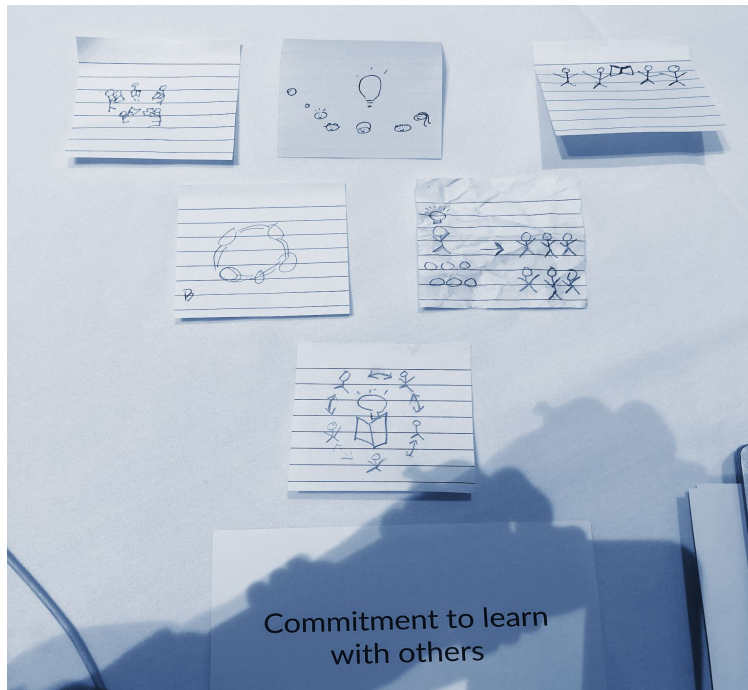
IMPROVEMENT IN EDUCATION
CARNEGIE
SAN DIEGO, CA | MARCH 24-27, 2024 | IN-PERSON & REMOTE
SUMMIT24



Improvement Network Development

Lessons from the Field

Network communities are a journey and each conversation or strategy is an opportunity to collaborate and apply lessons learned. Different perspectives bring new ideas and insights. As First2 moves forward it is an opportunity to grow from each other.



Psychology of Change

Working in teams with people who bring different perspectives and needs is challenging. Listening to everyone – students, faculty, support staff, experts in other fields – is vital to advancing system change. Learning from others can advance the First2 mission: Ask the institutional team PDSA lead whether the coaching session was helpful. Change is difficult and means accepting the loss of something we have known and are comfortable with it. However, this means a chance to really expand and thrive.



Source: Hilton K, Anderson A. *IHI Psychology of Change Framework to Advance and Sustain Improvement*. Boston, MA: Institute for Healthcare Improvement; 2018. [ihl.org/psychology](https://www.ihl.org/psychology)

From Combatants to Collaborators

Learning emerges from discovery, not directive. Set context, share opportunity/quality data, exhibit, and debrief with next steps. These are the tools we can use to structure a collaborative network.

Moving Toward Collaboration

1. Set Context: Problem of Practice Examples
2. Share Opportunity: quality ?s and Data Sources



Equity in Networked Improvement

Take-aways from Gates Foundation investments in equity-focused programs

- HBCU-MSI students struggle to get the classes to **graduate on time**: **Acadeum Network** shares courses among HBCU-MSI schools; this program has changed the student counseling culture in many schools
- Gates supports **Networks for Schools Improvement (NSI)** that involves 600 middle schools, high schools, and some postsecondary institutions. NSI **lifts up “student voices”** in framing the problems and solutions to implicit bias.
- **CT RISE** is an NSI middle school/high school program that focuses on how to **build “psychological safety”** for students and support “personal learning” for teachers/administrators. It is helping to **reduce bias and deficit-assumptions, focus on system change through targeted resource allocation.**



BILL & MELINDA
GATES *foundation*



Student Leadership

“Attending the 2024 Carnegie Summit felt like diving into a pool of creativity! We were buzzing with excitement, already brainstorming how our students could join in and share their own innovative uses of Improvement Science. It's not just about learning—it's about empowering our students to be the next wave of educational change-makers!”

Succession Steps

- Marinating the Focus
- Creating Systems that Continue Beyond People
- Acknowledging the Struggles
- Make it Your Own
- Building Leaders – Making Connections Lives On

Lessons and Reflection from the Carnegie Summit



Student Voice: This is the most important part of the First2 Network. Empowering them to take the lead is a top priority.



Team Work: As they say it makes the dream work. There are a lot of diverse perspectives, and by working together we have grown as a network and expanded the reach of good PDSA work.



Coaching: Coaching is an essential part of Improvement Science. We have worked to develop resources and guides to ensure anyone with interest can be a good coach. We are now looking for one at each institution.

SESSION DESCRIPTION

First2 Network is a state-wide Networked Improvement Community that engages nine higher education institutions and several intermediary organizations. We are working to co-develop a post-secondary model that will improve the success of rural, first-generation and other underrepresented undergraduate STEM students through systems change within higher education in West Virginia and beyond. We will share the story of how we employed multiple trainings, webinars, videos, and coaching methods to socialize understanding of improvement science and support fidelity of implementation. The results, essentially a toolkit and set of new roles and responsibilities for higher education institutions, include clear processes for communication and testing using common PDSA templates, common measures lists, coaching structures and data sharing processes.

FROM CHAOS TO COACHING

2023-2024

- PDSA Tracker
- Coaching Handbook, Best Practices & Response Form
- 21 Coaching sessions

2022-2023

- Create standardized PDSA templates for specific change ideas
- Improve IRB coordination and verification.
- Begin scheduling coaching sessions with Institutions & assign coaches
- Coaching Request Form
- 23 Coaching Sessions

2021-2022

- Hire Improvement Science and Data Manager
- Development of the Improvement Science Team
- Design Network PDSA template
- Critical review of working groups
- Moved from affinity groups (working groups) to structural teams (institutional teams)
- revised driver diagram

NETWORK PDSA COORDINATION

| | ACADEMIC SUPPORT | CAMPUS CLUBS | MATH ANXIETY | STUDENT & FACULTY SOCIAL |
|------------------------------------|------------------|--------------|--------------|--------------------------|
| Blue Ridge Community College | ● | ● | | ● |
| EKU | | ● | | |
| Fairmont State University | ● | ● | | ● |
| Glenville State University | ● | ● | ● | ● |
| Marshall University | ● | ● | | ● |
| Shepherd University | | ● | | |
| UC - University of Charleston | ● | ● | | ● |
| West Virginia University | ● | ● | ● | ● |
| West Virginia University - Kanawha | | ● | | ● |

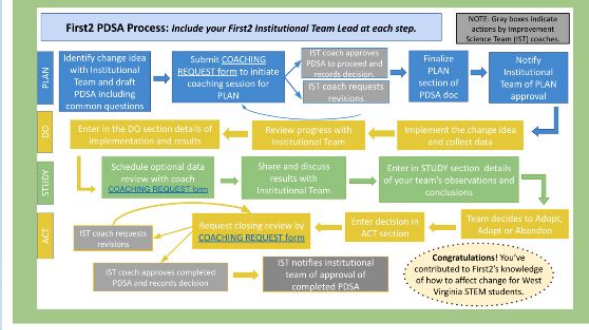
First2 Network has gone through an evolution to accomplish our aim. Initially, First2 Network created affinity groups around primary drivers of change across institutions and the state. These affinity groups were given complete autonomy to develop and test change ideas. This strategy resulted in the development of a culture of sharing between higher education institutions that had been absent in our state, but it did not result in either data collection or scaling of promising practices at the institutional level and systemic change. To address these limitations, First2 transformed our Networked Improvement Community from a collection of affinity groups to institutional teams based at each college and university. We realized that having the 'human touch' around the PDSA process was required to ensure a consistent level of quality data collection and analysis across our institutions.

To support this, we:

- Instituted an Improvement Science Team to guide institutional teams throughout the key steps of creating a quality PDSA cycle.
- Building on Carnegie Foundation resources, developed a coaching process where each institutional team reviews and improves its PDSA plans; this process ensures the use of common change ideas and common metrics aligned with the key drivers of system change within the First2 network.
- Undertook a process of obtaining IRB approvals at each institution to enable data sharing across the network, and
- Continued to socialize improvement science, with the goal of making it part of each institution's culture.

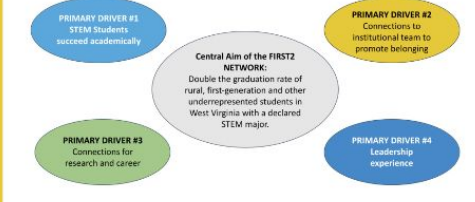
We want to share all of the processes and tools that we have developed and help other organizations and higher education institutions apply what we have learned to their own communities.

STRUCTURED INQUIRY SUPPORTS



DRIVER DIAGRAM

FIRST2 DRIVER DIAGRAM: A look at how First2 Network plans to achieve central goals.



SHARED OUTCOMES

- PERSISTENCE (RE-ENROLLMENT AS A STEM MAJOR)
- COURSE COMPLETION RATE
- COURSE PASS RATE and/or GRADES
- PROBATIONARY STATUS
- BELONGINGNESS
- CRIT
- SELF-EFFICACY



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Carnegie Resources



Carnegie Poster



Coaching Handbook



PDSA Flow Chart





FIRST2 NETWORK

THANK YOU

