



Introduction to Networked Improvement Basics

In this introductory course, individuals or teams will learn about the key concepts, methodologies, tools, and processes involved in using improvement science to tackle persistent educational problems, particularly by organizing as a Networked Improvement Community (NIC). With its roots in industry and health care, improvement science takes a rigorous approach to educational innovation and improvement that supports teachers, leaders, and researchers in collaborating to solve specific problems of practice. Improvement science brings discipline and methods to:

- Analyzing problems and systems
- Designing solutions
- Measuring processes and outcomes
- Rapidly refining solutions through iterative cycles of testing
- Spreading and adapting change ideas to new contexts

Introduction to Networked Improvement Basics is a 12-week, activity-based online course mediated by instructors from the Carnegie Foundation. Through interactive online modules, live webinars, collaborative team and individual assignments, and readings, participants develop a conceptual understanding of the principles and practices of improvement science carried out in networks and build their skills in applying improvement methods to real problems of practice.

WHAT IS A NETWORKED IMPROVEMENT COMMUNITY?

For over a decade, the Carnegie Foundation has been pioneering a fundamentally new approach to improve systems' performance by joining the discipline of improvement science with the powerful capacities of networks to foster innovation and social learning. This approach is embodied in what Carnegie refers to as Networked Improvement Communities, or NICs. NICs are scientific learning communities distinguished by four essential characteristics in which their work is:

1. **Focused** on a well-specified common aim
2. **Guided** by a deep understanding of the problem, the system that produces it, and a shared theory of practice improvement
3. **Disciplined** by the rigor of improvement science
4. **Coordinated** to accelerate the development, testing, and refinement of interventions, their rapid diffusion out into the field, and their effective integration into varied educational contexts

The Foundation has tested this approach through its three NICs—Carnegie's Math Pathways, Building a Teaching Effectiveness Network, and Student Agency Improvement Community—and with a small number of partners, such as the Tennessee Early Literacy Network and California's Shasta and Tulare County Offices of Education. Positive outcomes from these NICs have engendered confidence in the model so that the learning can now be shared in support of others in the field.



WHAT WILL YOU LEARN?

Upon completion of the course, participants will understand:

- The roles and purposes of improvement science tools
- The purpose and benefits of working in a network and the learning culture of a NIC
- The purpose of a theory of practice improvement for a NIC

Participants will be able to:

- Apply an improvement mindset and way of working
- Describe and explain the principles of improvement science, including how improvement science differs from other improvement efforts
- Productively engage improvement tools in a NIC

HOW IS THE COURSE STRUCTURED?

The course consists of six online modules and six live webinars facilitated by Carnegie Foundation faculty (see Figure 1). Each online module includes videos, readings, journals, and interactive discussion boards that can be completed independently. Throughout the course, small group assignments take participants through a case-based improvement simulation to experience improvement tools applied in a social context. Live webinars are two-hour, interactive sessions that include multiple small group breakout activities and discussions.

Course faculty will facilitate organizing participants into small teams of 4–6 people for simulation activities. Participants should expect to meet in those teams virtually or in person for 45–60 minutes five times through the course to complete the simulation.

WHO SHOULD PARTICIPATE?

This course is designed for individuals and teams wishing to build foundational knowledge of the core principles and practices of improvement science and networked improvement communities. Upon completing the course, individuals will have increased fluency and capacity to engage in improvement science practice with a network of colleagues.

To get the most from the course, individuals should be prepared to participate in all webinars in real time as live webinar sessions include small group activities and discussions that are not captured in a recording. A participant who anticipates missing more than two webinars may want to consider enrolling in a different cohort.

The registration fee for the course is \$2,750 per person. Participants are also expected to obtain a copy of the course text, *Learning to Improve: How America's Schools Can Get Better At Getting Better* by Anthony S. Bryk, Louis M. Gomez, Alicia Grunow, and Paul G. LeMahieu.

For more information about Introduction to Networked Improvement Basics or to register for the next cohort, please visit our website, [CarnegieFoundation.org](https://www.carnegiefoundation.org). If you have questions, please contact a member of our professional learning opportunities team at professionallearning@carnegiefoundation.org.

OUR MISSION

The Carnegie Foundation for the Advancement of Teaching aims to build a field around the use of improvement science and networked improvement communities to solve long-standing inequities in educational outcomes.