



## NETWORK USES IMPROVEMENT SCIENCE TO **SCALE UP CHANGE**

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If you were given the opportunity to design a new way to drive positive change in public education policy and practice *at scale*, what would you do? How would you seek new solutions that bridge the gaps between research and practice?

If you're like many education

stakeholders, you might grapple with some of these challenges:

- Implementing strategies that appear to hold promise but have never been scaled;
- Maintaining the integrity of research-based interventions while addressing the need for

contextual adaptation such as a different timeline or resource challenges; or

- Balancing the benefits of focusing in one area with the pressing need to tackle multiple issues and solutions simultaneously.

We need new sources of innovation to address these classic challenges in improving educational outcomes and break through a history of underwhelming results. *How* we work on these challenges can be just as innovative as *what* we are working on.

Learning Forward's What Matters Now Network is designed to address these challenges using an innovative structure for collaboration and continuous improvement. The network focuses on classroom- and school-level rapid-cycle testing of innovative strategies so that promising practices that lead to positive changes in one classroom or one school can be scaled up to include others and can inform and impact statewide policy at the same time.

### WHY IMPROVEMENT SCIENCE?

There is a buzz in education around improvement science. There are also a lot of questions. What does improvement science mean? How does

it work, and is it effective? How can I use improvement science in my practice?

Very simply, improvement science is an alternative to traditional research structures. Instead of waiting until you have all of the evidence in hand, you iteratively test interventions or strategies that are very small in nature, reflect on the progress these changes have made, and then plan for another cycle of testing.

The learning from the cycles is shared very quickly so that any impact of the change can be discussed by the coalitions to determine whether to continue as planned or to change course.

This could mean that a new practice is adopted or adapted or that a strategy that is not working is abandoned. Either way, you can be actively improving your practice and student outcomes while contributing to research. Improvement science allows testing of ideas and addressing implementation gaps in real time.

### WHAT MATTERS NOW NETWORK

The What Matters Now Network was launched in 2017 with support from the Carnegie Corporation of New York. It comprises coalitions from three states: Maryland, Ohio, and Rhode Island.

Each state coalition includes stakeholders at local, district, and state levels working together to strengthen professional learning that supports the use of high-quality instructional materials.

The What Matters Now Hub brings coalition leaders together for cross-state learning, with facilitation and expertise in content and improvement science from Learning Forward and the Columbia University Center for Public Research and Leadership.

### ILLUSTRATIVE EXAMPLE OF CHANGE STRATEGY TESTING AND SCALE-UP

#### WHAT MATTERS NOW NETWORK CHANGE IDEA

Teachers will use a self-reflection tool to assess their instructional materials and professional learning needs after giving a lesson aligned with the Next Generation Science Standards. A structured protocol for sharing reflections during a team meeting will lead to revised professional learning planning and changes in instructional practice.

#### DISTRICT POLICY IMPLICATION

Districts create protocols for the implementation and use of the reflection tool to be shared with all schools in network districts. District science coordinators get feedback about professional learning and instructional materials needs.

#### STATE POLICY IMPLICATION

States make recommendations for the funding structures to account for job-embedded professional learning designs and high-quality curriculum and instructional materials needs in both urban and rural districts.



The What Matters Now Network is a community of state-based coalitions of educators and policymakers focused on supporting educators in implementing high-quality curriculum and instructional materials. Members of the network include, from left, Jim Short, Dan Ochs, Melinda George, Elizabeth Foster, Claire Morgan, Daniela Fairchild, Melissa Weber-Mayrer, Andrea Clay, Liz Chu, Segun Eubanks, Laura Liccione, and Nick Morgan.

For Learning Forward, improvement science is appealing as a research strategy that can both strengthen and streamline the pathway of information from classroom practice to district and state level policymaking.

We believe that practitioners understand local school and classroom needs and context better than almost anyone, so it is critical that we involve practitioners in policy decision-making. But we also want them to be able to continue their work as educators and improve their practice as they grow through these experiences.

### PLAN-DO-STUDY-ACT

The improvement science testing cycle, known as Plan-Do-Study-Act, aligns with Learning Forward's theories of continuous and collaborative learning. Teams come together to determine a shared problem of practice and then, together, determine the factors that directly impact the problem.

These factors are called drivers, and they are divided into primary and

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secondary levels of impact. The team determines potential change ideas associated with these drivers, then sets up a strategy for testing the change ideas in classrooms and schools.

Examples of change ideas might include testing a new protocol for running a professional learning community meeting or developing an observation tool that teachers could use when visiting one another's classrooms. The key is that the tool is developed collaboratively and educators have time to reflect on what they *think* will change as a result of using the new method or tool, and then have time to come back together again to reflect on what *actually* happened.

The Plan-Do-Study-Act cycle encourages a discussion of measures and

predictions related to the change idea — a critical step in the process. Teams articulate what they think is going to happen as a result of this change and how they will know.

Based on the change data, the team can decide whether to repeat the test as is, tweak the instrument to focus on a different potential outcome, or change strategies and tools altogether.

### NETWORK FOCUSES ON A SHARED GOAL

The What Matters Now Network aims to build knowledge at two levels: across and within states.

The network as a whole is focused on the shared goal of accelerating the improvement of job-embedded professional learning focused on selecting and implementing high-quality curricula and instructional materials. (For more information on the importance of this goal for student learning, see the December 2018 issue of *The Learning Professional*.)

Specifically, the network seeks progress on the following goals:

- Identification and enactment of enabling conditions that promote job-embedded professional learning focused on high-quality curricula and instructional materials;
- Design of more coherent and effective systems for this type of professional learning; and
- Increased alignment of a state's professional learning policies, investments, and systems with district- and school-level policies and programs.

### STATES TACKLE UNIQUE PROBLEMS OF PRACTICE

At the same time the network works toward its overarching goal, the state teams are tackling their own discrete problems of practice relevant to their local priorities and context.

The states' focus areas include:

- Helping teachers align their lessons, grounded in high-quality instructional materials, to the Next Generation Science Standards.
- Improving early literacy via the use of a flowchart decision-making tool to assess student progress and identify the instructional materials needed to personalize learning.
- Supporting teacher teams to use a protocol for collaboratively examining student work and using results to inform the design of job-embedded coaching on instructional materials.

Each state is tackling these change ideas using small-scale testing in selected schools and districts. Using a structured continuous improvement process, the change approaches will be adapted, adopted, or abandoned over time as the testing proceeds and more is learned from real implementation.

In the next 18 months, each state

### RELATED RESOURCES

- December 2018 issue of *The Learning Professional*: [learningforward.org/publications/jsd](http://learningforward.org/publications/jsd)
- Carnegie Foundation blog: [www.carnegiefoundation.org/blog/category/thinking-about-improvement](http://www.carnegiefoundation.org/blog/category/thinking-about-improvement)
- Center for Public Research and Leadership: [cpri.law.columbia.edu](http://cpri.law.columbia.edu)
- 2016 National Commission on Teaching and America's Future report, *What Matters Now: A New Compact for Teaching and Learning*: [nctaf.org/research/what-matters-now](http://nctaf.org/research/what-matters-now)

### Scaling up these strategies to more classrooms and schools will only occur when sufficient evidence exists to warrant the confidence for expansion.

will engage in at least six rapid-cycle tests of new strategies aligned to their specific problem of practice and working toward the network aim. In all of the states, the work happening in schools is shared with the districts and the state so that policies can be modified, enacted, or discarded in order to put in place the enabling conditions that the tests identify as needed. Scaling up these strategies to more classrooms and schools will only occur when sufficient evidence exists to warrant the confidence for expansion.

The figure on p. 47 shows an example of a possible strategy and how it could be scaled.

### STAY TUNED

In fall 2018, all three states identified a short-term aim for December 2018 and conducted their first two Plan-Do-Study-Act cycles, including testing in their local schools, collecting data, and coming together to assess, reflect, and determine their next test. The state coalitions are also analyzing the data from these first cycles to consider how to address needed changes.

Beginning in 2019, the states will identify a new aim or long-term goal for June 2020 as well as benchmarks that they will measure at various points over 18 months to ensure that the work of the coalition is on track to achieve the June 2020 aim.

Learning Forward will continue to provide content and facilitation guidance and will bring all three states together for in-person and virtual cross-state learning opportunities.

The ultimate goal of the What Matters Now Network is to design a more coherent set of policies and programs to advance job-embedded professional learning that improves educators' ability to select and implement high-quality curricula and instructional materials. This goal can only be realized through teams learning, collaborating, and problem-solving together around this critical issue.

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