

Networked Improvement Communities: Leading Innovation, Spread, and Scale of Equitable, Evidence-based, Effective Instructional Practices

Vermont's model for continuous improvement is built on the belief that all school systems can improve. Using an improvement science approach and a continuous improvement model, the Networked Improvement Communities support Supervisory Unions, Districts, and Schools in building, strengthening, and sustaining equitable, effective, evidence-based programs and practices to ensure all students have high-quality educational experiences. Through shared learning, teams made up from a variety of experts, researchers, and SU/SD practitioners work with each other, and the VT AOE Staff to rapidly test and implement changes that lead to scalable, sustainable, and lasting improvement.

The Networked Improvement Community (NIC)

Different from a sharing or learning network, a NIC is a rigorous, scientific, professional learning community, in which researchers, subject matter experts and practitioners use both theory and practice to investigate common problems of practice, and co-conduct improvement research to collectively test, implement, spread, and scale promising solutions; in this network practitioner risk-taking, experimentation, and innovation is expected and honored. Members test promising change ideas in practice, measure the results of implementation, and adjust strategies based on data that is gathered throughout the process. Specifically, NICs are:

- focused on a well-specified common aim;
- guided by a deep understanding of the problem, the system that produces it, and a shared working theory to improve it;
- disciplined by the methods of improvement research to develop, test, and refine interventions; and
- organized to accelerate interventions into the field and to effectively integrate them into varied educational contexts

Theory of Improvement If we adopt a collaborative approach to problem-solving, in which those closest to the work use improvement science principles to co-learn and co-construct knowledge...then we will accelerate the spread and scale of effective, equitable practices, build systemic capacity for improvement, and sustain improvement effort, improving outcomes for all learners.

Student-Centered Math NIC

The following aim/goal will be co-designed with participants

Contact Information:

If you have questions about this document or would like additional information, please contact:

Lori Dolezal at Lori.Dolezal@vermont.gov

Broad Aim: Improve student-centered mathematics instruction so that all learners will demonstrate growth in [math strand/standards focus area], and the achievement gaps between historically marginalized and privileged learners will be reduced in these areas.

Instructional Focus Areas (based on focus groups and survey results):

Our partners/professional learning provider will engage participants in ongoing, job-embedded professional learning in the following areas related to curriculum; student-centered, evidence-based instructional practices; assessment; and culture:

1. Engaging students in relevant, meaningful, and authentic tasks
2. Teacher and student growth mindset
3. Use of formative assessments to provide meaningful feedback and adjust instruction

NIC Organization

Network Members. NIC members collaborate to tackle a common problem of practice, collectively. They employ improvement science principles and processes to deeply understand the current system, and co-design evidence-based change ideas to test and adapt in classrooms. They share learning and co-construct knowledge to be spread and scaled, reliably. Membership includes educational researchers, practitioners, and other subject matter experts and partners, based on the network’s focus.

Coordinating Hub. The AOE will serve as a coordinating hub, organizing network meetings and coordinating action period tasks.

Member Commitment. Participating educators and their SU/SD/School leadership will engage in/support collaborative problem solving with other network members. Classroom teachers will be involved by co- designing and testing out change ideas in classrooms. The work will occur in both network meetings and action periods.

Member Benefits. As participating members, your team will have the opportunity to collaborate with colleagues, researchers, and other subject matter experts/partners to build data literacy, co-design and co-conduct classroom-based research with evidence-based practices, build collective knowledge to improve instruction and student performance, and reduce achievement gaps.

DRAFT/Tentative Scope & Timeline of Work:

Convening Type	Date	Location/Format	Attendees
Contract Development and Finalize Field Needs Assessment	October-December 2022	Continue data collection to understand the current state Recruit participants	Interested Participants & Professional Learning Partner/Provider
Orientation	December-early Jan	Virtual-- SELF-PACED modules	All NIC participants
Network Convening #1 Launch Event	Mid-January	IN-PERSON FULL DAY event <ul style="list-style-type: none"> • Professional learning, coaching & feedback on change ideas AND 	Educators Coach/Leads

		Systems level leadership support and coaching	Principal & SU/SD Champions
--	--	---	-----------------------------

ACTION PERIOD #1: Teams test change ideas on-site, collect relevant data using [PDSA form](#)

Optional Coaching Calls with Subject Matter Expert/Research Partners

Convening Type	Date	Location/Format	Attendees
Network Convening #2	Mid-February	Virtual 2-hours <ul style="list-style-type: none"> PDSA cycle reflection & data review Professional learning, coaching & feedback on change ideas	Educators Coach/Leads

ACTION PERIOD #2: Teams test change ideas on-site, collect relevant data using [PDSA form](#)

Optional Coaching Calls with Subject Matter Expert/Research Partners

Convening Type	Date	Location/Format	Attendees
Network Convening #3	Late March	In-person half-day <ul style="list-style-type: none"> PDSA cycle reflection & data review Professional learning, coaching & feedback on change ideas AND Systems level leadership support and coaching	Educators Coach/Leads Principal & SU/SD Champions

ACTION PERIOD #3: Teams test change ideas on-site, collect relevant data using [PDSA form](#)

Optional Coaching Calls with Subject Matter Expert/Research Partners

Convening Type	Date	Location/Format	Attendees
Network Convening #4	Late April	Virtual 2-hours <ul style="list-style-type: none"> PDSA cycle reflection & data review Professional learning, coaching & feedback on change ideas	Educators Coach/Leads

ACTION PERIOD #4: Teams test change ideas on-site, collect relevant data using [PDSA form](#)

Optional Coaching Calls with Subject Matter Expert/Research Partners

Convening Type	Date	Location/Format	Attendees
Network Convening #5	Late May	Virtual 2-hours <ul style="list-style-type: none"> PDSA cycle reflection & data review Professional learning, coaching & feedback on change ideas	Educators Coach/Leads

ACTION PERIOD #5: Teams test change ideas on-site, collect relevant data using [PDSA form](#)

Optional Coaching Calls with Subject Matter Expert/Research Partners

Convening Type	Date	Location/Format	Attendees
Culminating Network Convening	Summer (June or August)	In-person full day event <ul style="list-style-type: none"> Celebration, reflection, & plan for next SY planning for spread, scale and sustainability	Educators Coach/Leads Principal & SU/SD Champions

Our Approach to Continuous Improvement

We organize our work around ongoing **Network Convenings** and interim **Action Periods**. During our convenings we gather to engage in ongoing professional learning related to specific evidence-based practices connected to our shared goal(s). We also engage in data inquiry and reflection on the previous Action Period cycle learning. During Action Periods, participants implement the evidence-based change ideas/practices studied during our Network Convenings.

Using iterative **Plan-Do-Study-Act Cycles** of inquiry and learning network participants:

- **PLAN** for the implementation of the evidence-based practice(s)/change idea(s)
- **DO:** implement the practice(s)/change idea(s);
- **DO:** collect relevant data and information related to student learning and integrity of implementation;
- **STUDY** the data/information and reflect on our learning; and
- **ACT:** decide on the actions to take during subsequent cycles.

The purpose of these iterative cycles is to **strengthen our confidence in the effectiveness of the change/practice and understand how it could/should be implemented across contexts.**

Testimonials: What current participants are saying about their experiences in the Early Learning Networked Improvement Community (ELNIC)

“Being part of ELNIC was just what our district needed. It has transformed instruction and student outcomes have drastically improved. Dr. Nell Duke has the unique ability to translate the current research in the field of literacy, in a way that is clear and practical and immediately actionable.”

“Dr. Nell Duke provided meaningful, relevant, and reliable research-based instructional practices for our district to implement. Thank you for letting us be a part of ELNIC.”

“The deliberate process of identifying and implementing a small change idea with support and follow up was very useful to my practice. The ability to get input from others like Doug Clements and Julie Sarama was valuable.”

“Homing in on number talks and thinking about how best to move students forward was career changing for me. I have a way that I can start out my year and hope to move students' thinking toward strategies to compute. Thank you!