



Lessons from Networks for School Improvement: School Year 2020-2021

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Individual schools have a unique set of assets and talent that can be mobilized to improve student outcomes. In our experience, no two schools are the same — they have different needs, histories and commitments. At the same time, schools share common problems, such as getting (and keeping) students on track in high school, enrolled in a viable postsecondary program and on the road to success as adults. That’s why since August 2018, the Bill & Melinda Gates Foundation has made grants to 24 organizations that are supporting 38 networks of middle and high schools in 23 states to improve outcomes for students who are Black, Latino, or experiencing poverty by using data-driven approaches to continually improve their practice based on issues they’ve identified.

We’re interested in learning from these Networks for School Improvement (NSI) how schools can use a methodical approach to improvement, widely used in fields such as healthcare, to advance high school graduation and postsecondary success rates for students who are Black, Latino, and experiencing poverty. We also want to encourage use of a growing body of research that tells us which indicators to monitor to ensure that students are on track to graduate from high school and enter and succeed in education after high school. Our work builds on that of other funders and organizations that have invested in early warning systems to predict whether students are on track to high school and postsecondary success and that have used strategies of continuous improvement to improve student performance. Our goals are to understand, spotlight, strengthen, and expand upon this work.



This paper describes what the foundation is learning across NSI grantees in order to supplement a more formal summative evaluation that is underway, with the first report expected in March 2024. While the summative evaluation will analyze school- and student-level data from participating sites, as well from the organizations that support those sites, this analysis draws on grantee check-in notes, artifacts produced by the organizations, interviews by program officers, and foundation documents to identify early themes and trends. The foundation is purposefully drawing on data from multiple sources

and rhythms of data collection and analysis to provide as rich a picture of the NSI work as possible. We want to balance rigorous but slower methodological approaches—that represent the gold standard in program evaluation—with quicker, more action-oriented data reporting and analysis to inform the work of our grantees and the foundation in real time.

To date, we’ve observed four trends, based on the work during the 2019-20 and 2020-21 school years:

- As they’ve gained experience, learned from each other, and responded to the effects of the pandemic, the majority of NSI have begun focusing on common problems and solutions across schools in their network, reducing variation in the evidence-based practices and measures that school teams use. This increases the likelihood that schools can share and learn from each other.

- Increasing the frequency of structured inquiry cycles so that educators can learn more quickly which change practices should be adopted, adapted, or abandoned remains a challenge across networks. This was particularly true given the disruptions to schooling caused by the COVID-19 pandemic. But there are early signals that NSI with shorter, more frequent inquiry cycles are seeing increases in locally defined measures of change.
- All sites are still in the process of developing measurement systems, particularly near-term measures of change, to tell whether the practices they implement are leading to improvements.
- In some sites, changes are extending beyond individual schools to influence the larger system, such as modifications in student grading policies and alignment with other district initiatives.

The foundation is collecting and analyzing important and meaningful student outcome data across the NSI sites. While we don't yet have conclusive data on student outcomes, we are seeing potential early signs of success in some of the more mature NSI networks. Among other things, these networks appear to be hewing more closely to the research base to guide their change practices, focusing explicitly on equity, using more frequent inquiry cycles, and leveraging cross-team learning. We will continue to explore the relationship between network practices and student data both through our ongoing, formative efforts and through the summative evaluation.

About this Analysis

This brief focuses on the work of 22 organizations during the 2019-20 and 2020-21 school years (two organizations are not included in the analysis because their improvement work had not yet started). In particular, it focuses on practices that the networks tested in spring 2020 or intended to test in fall 2020.

While all networks are working to increase the number of Black and Latino students and those experiencing poverty who are on track to graduate from high school ready for college and careers, NSI typically have one of three entry points:



Instructional NSI work with math or English-language-arts teams within schools, often including instructional coaches, special-education teachers, and English learner/multilingual teachers, to improve the quality of instruction within classrooms.

Early Warning and Response (EWR) NSI work with grade-level or cross-functional teams within schools to create more supportive school environments, where young people are connected to adults, each other, and the school community.

Well-Matched Postsecondary (WMPS) NSI work with school-based teams of counselors, service providers, district and school leaders, teachers, and other staff on evidence-based strategies and processes that support postsecondary application, enrollment, and persistence.

In addition to analyzing “what” the networks tested during the spring and fall of 2020, this brief analyzes “how” intermediary organizations supported school teams to test and implement those practices, and the measures that intermediaries and schools used to know if their changes are leading to improvement.

Focusing on Common Problems of Practice and Solutions

As they've matured, the majority of NSI have begun focusing on common problems and solutions across schools in their network, reducing variation in the evidence-based practices and measures that school teams use. This is important because it increases the likelihood that schools can learn from each other's successes and failures and networks can learn about successful practices that have been tried across multiple schools in different contexts. Schools just beginning continuous improvement work can then draw on the common experience of these diverse groups.

Well-Matched Postsecondary (WMPS) NSI, for example, focus on implementing a set of well-documented strategies to support postsecondary success, such as increasing access to federal financial aid. We estimate nearly half of the evidence-based practices in this portfolio relate to improving college access and affordability. Many sites are using and adapting a [Free Application for Federal Student Aid \(FAFSA\) change package](#) developed by one of our grantees, High Tech High, to their own contexts. These grantees report seeing the application process for financial aid as the doorway to developing a strong college-going mindset among students.

This year, we've begun to see Well-Matched Postsecondary NSI focus on additional factors that influence postsecondary enrollment, such as creating a college-going culture, developing a well-balanced list of colleges to apply to, and reducing “summer melt,” or the number of students who are admitted to college but fail to enroll the following fall. High Tech High, for example, is testing practices such as support groups for first-generation college students and interventions between high school graduation and postsecondary enrollment to reduce summer melt, or the number of students who are accepted to college but never matriculate. Arizona META, the Arizona Network for School Improvement, is testing student-centered advising by near-peers who recently graduated from high school.

Early Warning and Response (EWR) NSI focus much of their work on helping school teams develop strong routines for reviewing and using data and on creating a supportive school environment where students have the social, emotional, and academic support and agency to be on-track for college and careers. These two pieces of work are related, as strong data routines enable school teams to identify which students need which types of support. Early Warning and Response school teams test such things as making sure students have consistent and frequent 1:1 contact with an adult and providing academic mentoring. Some NSI—New Visions for Public Schools, City Year, and Connecticut RISE—are testing practices to build academic agency, such as helping students understand the importance of grades, know how to calculate their GPA, and understand how to advocate for themselves. Several are testing practices to increase student voice, and a subset—BARR, Connecticut RISE, New Visions for Public Schools, and the Network for College Success—are implementing practices that [support family and community engagement](#), likely because of lessons learned during the pandemic.

Over the past year, most Early Warning and Response NSI narrowed their scope of work, with clusters of schools coalescing around a few specific practices and many networks supporting similar practices for school teams to test. While no two Early Warning and Response networks have the same improvement strategy, five of the eight organizations—the CORE Districts, Network for College Success (NCS), Connecticut RISE, California Education

Partners, and New Visions for Public Schools—are supporting school teams to test similar practices and sometimes reference each other’s work. For example, CORE built from the Network for College Success’s [Freshman On-Track](#) work to create their approach and adapted it to California. The Network for College Success, in turn, looked at what CORE had done in their [Breakthrough Success Community](#) and incorporated work on developmental relationships into the change package that it was testing.

Part of this convergence around common problems and solutions may be because Early Warning and Response NSI stick closely to the research—popularized by Johns Hopkins University and the Network for College Success—on early warning systems that support student success. Many of their core strategies for creating supportive school environments also draw on research on student belonging, engagement, and resilience. The shift to a more common set of strategies is particularly notable because when we first launched the portfolio, Early Warning and Response NSI were supporting schools to test a wide variety of practices. As these organizations have worked with each other, and with technical assistance partners such as the Carnegie Foundation for the Advancement of Teaching, High Tech High’s [Improvement for Equity by Design](#) (see their [improvement protocols](#) and [change idea library](#)), and the [Institute for Healthcare Improvement](#), it’s helped them refine and adapt their work to be more deliberate, explicit, and targeted about the strategies that school teams test.



Instructional NSI help bridge the gap between research and practice by helping teacher teams use a plan-do-study-act cycle to adapt evidence-based instructional routines to their context. Most Instructional NSI provide school teams with a limited set of practices to test, which has enabled clusters of school teams to test the same practice. For example, most

math-focused NSI are incorporating some of the National Council of Teachers of Mathematics (NCTM) Mathematical Teaching Practices, such as “implementing tasks that promote reasoning and problem solving,” “eliciting and using evidence of student thinking,” and “facilitating meaningful mathematical discourse.” These practices are ripe for improvement because they are high-leverage routines that benefit from iterative testing and refinement as teachers work to embed them into their own classrooms to increase math learning.

Like math-focused NSI, literacy-focused NSI stay close to the research. But because there’s no literacy equivalent to the NCTM Mathematical Teaching Practices, particularly at the secondary level, we see less overlap in the very specific literacy practices being tested across networks. The exception is increasing academic discourse, which shows up in several literacy networks and also figures prominently among math NSI. Since 2018, for example, the Institute for Learning at the University of Pittsburgh has supported 14 Dallas middle and high schools to strengthen ELA and writing instruction by making it more cognitively challenging. At the high school level, teams have been testing and refining three change practices: a strong lesson structure to support [more rigorous comprehension and writing tasks](#), engaging English learners in academic talk, and establishing relationships with students.

Over the past three years, we've learned the importance of having a shared, high-quality curriculum as the foundation for the work of Instructional NSI because it enables teams to focus on the specific, common instructional materials that teachers actually use in classrooms. Many Instructional NSI are using plan-do-study-act cycles to optimize and adapt high-quality texts, tasks, and curricula to their own context by making them more meaningful and relevant to their specific student population. This finding aligns with what we know about most curricular materials—that teachers often adapt them to better reflect the specific students and communities that they serve. For example, many school teams support teachers to optimize curricula by selecting and using culturally relevant texts, tasks, and pedagogies; providing language acquisition support for students learning English; and adapting lessons to incorporate student voice and choice.

Starting in the 2020-2021 academic year, we have begun to see both Instructional and Early Warning and Response NSI move into solution spaces that are new to them, extending their expertise as organizations and creating solutions at the intersection of academic content, social-emotional learning, and equity. Eight Instructional NSI, for example, are testing ways to embed social-emotional learning or relationship-building practices into math classrooms to improve students' sense of belonging. For example, Bank Street Education Center worked with middle schools in Yonkers Public Schools to test practices that promote trust and empathy building in math classrooms. These included integrating student input into lesson planning by collecting feedback through daily exit tickets and using this to inform classroom design; conducting social-emotional learning check-ins as a “do now” part of the lesson to allow students to feel seen and understood; and improving math discourse to allow students to talk regularly with their peers.

Many Instructional NSI are borrowing and adapting practices from their Early Warning and Response NSI colleagues, providing another example that intermediary organizations are learning from and influencing each other's work. Embedding social-emotional learning into academic content is new territory and will yield important lessons and assets for other networks going forward. In addition, seven Early Warning and Response NSI have begun supporting school teams to test equitable grading practices, given the increase in Ds and Fs during COVID-related school closures. This is a new space for our NSI with relevance for both Instructional and Early Warning and Response NSI.

Across all types of NSI, only three networks continue to have high variation in change ideas and measures across schools. We don't yet know if those networks will have less, more, or a similar impact on student outcomes as NSI that have narrowed their change packages. This is something we'll be monitoring. But based on the literature and our experiences with partners, it's common for improvement networks to start broad, often as a way to generate buy-in, only to narrow and focus their scope as they learn the benefits in doing so.

More Frequent Inquiry Cycles

Structured inquiry cycles that enable school teams to plan, execute, study, and then adjust evidence-based practices to their own context based on data are at the heart of NSI work. In their September 2019 report, [Managing for Change](#), Columbia University's Center for Public Research and Leadership (CPRL) found that too few NSI intermediary organizations were using plan-do-study-act cycles with enough discipline and frequency to reach their ambitious aims. CPRL's findings align with the foundation's own observations of work in year one.

Increasing the frequency and discipline of structured inquiry cycles is important because it enables teams—and the network—to learn quickly when practices should be adopted, adapted, or abandoned. It also means teams are testing more practices across a year.

Early signals are that some NSI with shorter, more frequent inquiry cycles are seeing increases in locally defined measures of change. Five NSI that are seeing such increases—Baltimore City Public Schools, Institute for Learning, Network for College Success, CORE, and High Tech High—have weekly or bi-weekly inquiry cycles. In some cases, school teams are even running daily cycles. Although the use of more frequent inquiry cycles across networks remains a challenge, many NSI have goals to shorten their monthly cycles to bi-weekly cycles as they ramp up their work this school year.



NSI face several challenges to shortening inquiry cycles. NSI are still trying to find the sweet spot between a meaningful, high-leverage practice and one that can be tested quickly. This is especially true for Instructional NSI, where newer networks tend to test practices that are either too big to be tested frequently or too small to be consequential in reaching an ambitious aim. The pandemic also has made NSI cautious about placing additional burdens on teachers and, sometimes, increased testing felt like a burden. Finally, disciplined, iterative inquiry cycles are not routine practice in most schools and NSI are still figuring out the best ways to embed them into teachers' and school teams' workflow and tools so they feel seamless and important rather than one more thing to do, especially given the disruptions and uncertainties caused by COVID.

We think rigorous plan-do-study-act cycles hold particular promise as school teams respond to unforeseen circumstances, such as the pandemic, and work to adapt new curriculum and more challenging instruction to their contexts. The teaching practices that Instructional NSI support teachers to test are similar to those that many content-focused professional learning providers help teachers learn and do. But because NSI teach these practices in an improvement context using plan-do-study-act cycles, the work has a clear and deliberate focus on implementation and adaptation, which is often missing from traditional professional learning, where technical assistance providers frequently emphasize “fidelity of implementation” over adaptation, provide practices that are too abstract to be useful, or neglect to help teachers apply their learning together. We hypothesize this focus on testing and adaptation may result in higher levels of teacher ownership and uptake, and ultimately, student outcomes. Teaching Fellows in Baltimore City Public Schools, who are leading inquiry cycles focused on student fluency, for example, report an increased sense of efficacy as they design, pilot, and adjust evidence-based practices in their own classrooms.

Developing Measurement Systems

Structured inquiry cycles depend heavily on data to tell whether the change practices being tested by school teams are an improvement or need to be adjusted or jettisoned. Unfortunately, many existing measures in education—such as end-of-the-year state tests, high school graduation rates, and college enrollment rates—are lagging indicators that occur too infrequently or are too far away from the intervention being tested to provide



useful data to school teams. That’s why all NSI are working to develop measurement systems—including practical, near-term measures—that can inform their work.

Many NSI are still in the process of developing strong measurement systems, routines, and cultures in schools. As expected, some are further along than others. It takes time to develop strong measurement systems, routines, and a culture of trust. Our most mature networks are farthest along on each of these dimensions. At least two things seem to account for

these differences: the ease of access to relevant and actionable data related to the problem that school teams are working on, and the maturity or experience of the network.

For example, some Well-Matched Postsecondary NSI data, such as FAFSA completion rates, are both conceptually easy to measure and practically easy to get, while access to data on college applications can vary by state. Instructional NSI report the most challenges, as they’re limited by a lack of available measures to quickly, easily, and accurately assess improvement in student learning. As a result, they need to find or create measures, which slows progress.

Several Well-Matched Postsecondary NSI are starting to focus data analysis on understanding and addressing variations in student experiences and outcomes. Arizona META and High Tech High have begun applying tools that are widely used in health-care improvement like run charts and control charts. These tools help them and their school partners see and address variations in students’ experience and outcomes and identify bright spots from which to learn. We’ve also seen several Well-Matched Postsecondary NSI help schools build capacity by understanding variation and leveraging data routines as featured in this NCAN (National College Attainment Network) [presentation from Arizona META](#). These types of visualizations and routines can help school members understand variations as a product of the system and connect changes in student performance with adult behaviors. Such practices have the potential to shift adult mindsets and challenge deficit-based beliefs about students that place the onus for poor performance on young people rather than on school practices and policies that serve as barriers to their achievement.

Early Warning and Response NSI are among the strongest intermediaries when it comes to data infrastructure and continue to grow their practices. While these networks have always relied on attendance, behavior, and course performance for flagging students in need of support or identifying inequities in the system, as they’ve matured and developed their expertise, many have begun to integrate additional measures more closely aligned to the practices they’re testing. For example, because a hallmark of Early Warning and Response NSI work is creating a supportive community, most of these networks now incorporate measures of student experience, such as the [PERTS \(Project for Education Research That Scales\) student experience surveys](#). CORE and City Year incorporate the [Search Institute’s developmental relationship surveys](#) into their measurement systems, given these networks’ strong focus on adult-student relationships. Such measures link directly to practices that school teams are testing.

Additionally, several Early Warning and Response NSI are refining their data-tracking systems to make them more student-centered. For example, in response to COVID, New Visions Public Schools incorporated data on the range of ways that students might engage in their learning, including log-ins to Google classroom, assignment completion in Google classroom, and attendance in in-person classes to make sure students didn't fall through the cracks.

At both the school and network level, Instructional NSI are measuring similar kinds of things to see if their work is leading to improved outcomes. We see overlap among these networks in the measures they're using. Many Instructional NSI use NWEA MAP, a computer-adaptive testing program, and all use attendance, behavior, course performance, and standardized tests for outcome measures. However, less overlap exists in the near-term measures that Instructional NSI use. Two reasons help explain this: NSI try to use what is already in place in schools.



That's particularly true when it comes to measuring near-term changes in student learning and perception, where many teams use exit slips, student work analyses, or quick student surveys. Second, low-burden, useful, and consequential measures of near-term change are scarce. As a result, intermediary organizations tend to create them, often by piecing together items from existing surveys. Many have created quick student and teacher perception surveys and teacher mindset surveys. In addition to these technical challenges, Instructional NSI have had to spend considerable time building a culture where teachers embrace data and measurement rather than fear it, given the history of high-stakes testing in math and English Language Arts.

Despite these challenges, Instructional NSI are making progress. Baltimore and the Institute for Learning, for example, have each created a system of measures with [support from the Carnegie Foundation for the Advancement of Teaching](#), and, in Baltimore's case, the [Baltimore Education Research Consortium \(BERC\)](#) as well. They've been able to refine and focus their work because they have a better sense of what's working. Baltimore started with a focus on accelerating student learning in literacy through lesson preparation and planning, the use of high-leverage teaching strategies, maximizing instructional time, and addressing teacher expectations. But over time, relying on research that suggested that fluency could be a bridge from phonics to comprehension for secondary students, Baltimore shifted its focus to improving student fluency, which was also an area for which they had measures they could track over time.

Instructional and Early Warning and Response NSI have not explored varied data analyses to the extent we're seeing among Well-Matched Postsecondary NSI. We think this is a result of two things: First, Well-Matched Postsecondary NSI tend to use data that is binary (such as completion rates) and can be captured and collected easily, often using platforms like Naviance or Salesforce. They haven't had to focus as much attention on developing new measures or data platforms and dashboards because these tools already exist. Second, strong relationships among several Well-Matched Postsecondary NSI—High Tech High, Arizona META, Commit Dallas, and New Tech Network—and between NSI and their technical assistance providers, such as the Improvement Collective (see their [coaching resources](#)), have generated interest and capacity in using analytic tools to drive improvement.

To help networks and the field develop near-term measures of change, the foundation has made several additional investments:

We are supporting WestEd to create a [repository of practical math measures](#), with practice guides and case studies that align with key drivers of math improvement, such as student discourse, equitable access to rigorous tasks, students' math identity and enjoyment, and teacher mindsets. These measures complement important, but more burdensome, measures of student understanding, such as analyzing student work. We anticipate this repository will reduce the number of math NSI creating unique measures and lead to more measurement consistency. When WestEd previewed the repository, 100 percent of math NSI said they are “very likely” or “likely” to use the repository.

We plan to explore how learning management and student information systems might support the use of near-term measures, particularly among Instructional NSI. We know one big challenge is easy access to data. We think if school teams and those who coach and support them have access to useful and relevant data in their student information systems (along with coaching to help interpret and use that data), educators could begin to transform the way they use data to improve practice. For example, making data from software such as ST Math—a PreK-8 visual instructional program—more visible to teachers as well as school and district leaders could encourage its use.

Influencing Larger Systems Change

While NSI are focused on supporting changes at the school level, in some places their work has the potential to influence the larger district system. One example is the work several Early Warning and Response NSI are doing around creating equitable grading practices. This past year, teams tested such things as allowing students to revise their work and instituting a “no zeros” policy for missing work, as zeros are neither mathematically sound nor motivating to students. CORE, California Education Partners, and Connecticut RISE are also supporting district leaders to consider how they might create districtwide policies that ensure grading practices are accurate, resistant to teacher bias, and motivating for students.

We think several things account for this increased focus on equitable grading practices:

- Schools are very concerned about increases in the number of students receiving Ds and Fs during the pandemic.
- School teams find these practices powerful, motivating, and empowering.
- Transforming grading is a consequential, action-oriented, and systemic way to increase equity.
- The foundation's on-track outcomes include GPA and course failures, both of which are likely to improve if schools transform their grading practices.

We find this system-level work promising for two reasons. We think that Instructional NSI could integrate and adapt these new grading practices and policies into their work to complement their deep focus on classroom instruction. Denver, Eskolta, and Partners in School Innovation are doing just that. Second, as continuous improvement has made its way into education, some have criticized it for emphasizing incremental change. We see the work around equitable grading policies as a model for how continuous improvement can drive system transformation for equity.

Some Instructional NSI—particularly Baltimore, Bank Street Education Center, Texas NSI (a collaboration among Educate Texas, Learning Forward, and the Dana Center), and the Institute for Learning—also have dedicated significant time and energy to aligning their improvement work with district priorities. IFL, for example, developed and implemented five professional development sessions for school principals and their supervisors to build their knowledge, capacity, and commitment to the NSI work and to help them support school teams. In addition, IFL worked with district leaders to integrate improvement science methods into a new middle school initiative—Achieve in the Middle—designed to help teachers focus on power standards in order to improve student achievement. Baltimore launched a team dedicated to this work and mapped the district’s ecosystem of inputs and supports to better understand how to align programming to current improvement efforts. Dr. Sonja Santelises, CEO of Baltimore City Public Schools, recently described the district’s continuous improvement work as the “strategic identification of levers—and notice I said plural, there’s not one singular thing in a system—into a synergy that yields results for kids.”

Nonetheless, sustaining NSI work within schools and systems remains challenging, particularly given the pandemic. Empowering educators to use data-based cycles of continuous improvement is a long-term endeavor that requires systems to rethink their use of people, time, and resources. The continuing uncertainty, logistical challenges, and staff turnover related to the pandemic have made it both more important and harder for systems to keep their focus on long-term, transformative change.

Early Signs of Progress

The pandemic has raised alarms about the long-term impact on students’ learning and overall well-being. Schools participating in Networks for School Improvement have not been exempt from these worries, though principals and school leaders overwhelmingly report that NSI tools and continuous improvement techniques have given them valuable resources to help stop the bleeding. And we are seeing important, modest growth, despite COVID’s overwhelming impact.



While we don’t yet have conclusive data on student outcomes, we have several networks that are showing early signs of progress. For example, at least two Early Warning and Response NSI funded in 2018 have seen improvement in local indicators. CORE has seen an increase in the numbers of Black and Latino students who are on-track in 9th grade using composite indicators and their locally defined on-track levels. The Network for College Success has also seen steady improvements in local on-track status among target students.

Two Instructional NSI also are seeing some signs of progress. In Baltimore, early signals from a small sample suggested that students in classrooms taught by an improvement Teaching Fellow appeared to have grown at a faster rate than their peers. Given their shift to a focus on fluency, they are currently collecting relevant data to be able to make more concrete connections between schools’ continuous improvement efforts and local assessment data. In Dallas, the Institute for Learning divided teachers into those implementing many of the practices recommended or supported by the network versus those implementing few practices, based on a teacher survey.

It found that a higher percentage of students in high-implementing classrooms showed significant growth in MAP Reading scores (a computer-adaptive test used in the district), with high-implementing teachers showing an increase in growth among students in every demographic group as well as much smaller growth gaps by race/ethnicity, gender, language status, and disability status.

Across the NSI that are making progress on locally developed, near-term measures, we observe a few common themes:

- *They stick close to the research.* These NSI center their work on bridging the knowing/doing gap and work with school teams to integrate and adapt research and evidence into their practice.
- *They focus on equity.* They all have equitable, culturally relevant policies and practices as cornerstones of their work. CORE and NCS, two Early Warning and Response NSI, work on equitable grading. Baltimore and IFL, two Instructional NSI, work on culturally relevant instruction.
- *They are organized to take advantage of cross-team learning.* These NSI provide school teams with a set of research-based practices that is large enough that schools can enter in contextually relevant ways, but not so large that each school is testing something different.
- *They have shorter, more frequent testing cycles, so they can learn quickly which practices to adopt, adapt, or abandon.* These NSI tend to have weekly or biweekly testing cycles, in some cases even running daily cycles, which means they can test many practices in a school year.
- *They have common, aligned measures that let them know early and often if changes are leading to outcomes.* These NSI have a system of measures that are common across schools in the network, align to the network's theory of improvement, and bridge the gulf between very near-term, individual practice measures and lagging student outcome measures.
- *They're learners.* Each of these NSI study their own work and consistently and strategically make adaptations to increase their effectiveness as the organizational hub supporting schools. At the same time, they're deepening their own continuous improvement and measurement expertise and considering other approaches to solving the problem at hand.

We hope that in the years to come, all NSI can continue to learn from each other and to share their growing knowledge with the field and that this brief will contribute to that work.