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**An Introduction to
NCRERN's New York & Ohio
Rural Research Network**

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An Introduction to NCRERN's New York & Ohio Rural Research Network

Purpose and Goals of NCRERN

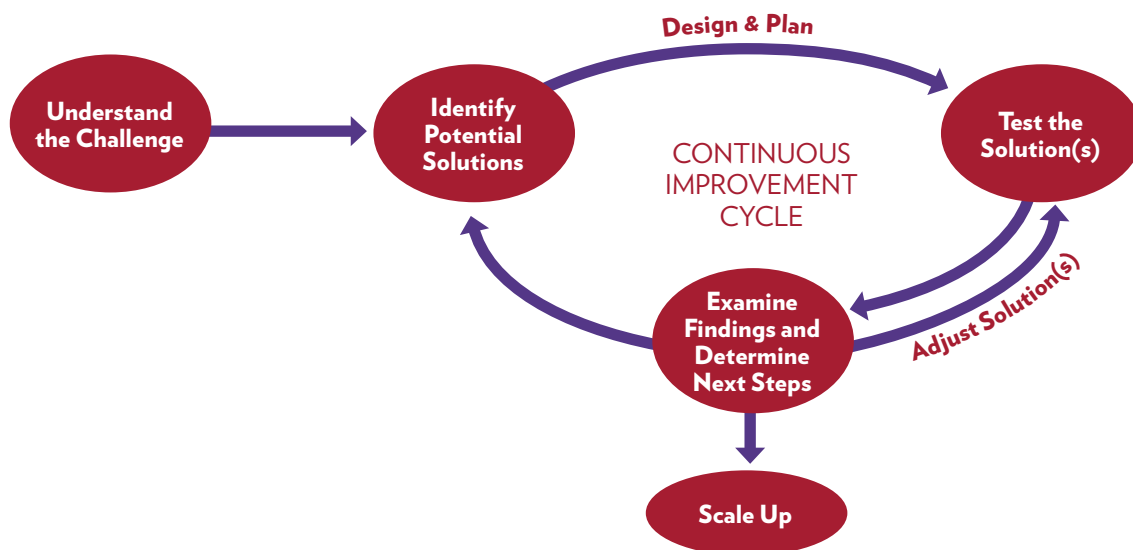
In the Spring of 2019, the Center for Education Policy Research at Harvard University launched the National Center for Rural Education Research Networks (NCRERN) with funding from the U.S. Department of Education's Institute of Education Sciences. NCRERN was founded to expand the use of evidence-based decision-making in rural education. NCRERN partners with networks of rural school districts to generate and evaluate strategies for improving student outcomes.

NCRERN's rural research network originally included 50 rural school districts across New York and Ohio. This model is grounded in supporting partner districts through a continuous improvement process to pilot and test interventions within three different focus areas: attendance (2020-21 and 2021-22 school years), postsecondary readiness (2021-22 and 2022-23 school years), and postsecondary entry (2022-23 school year). This brief is the first in a series describing NCRERN's work with its New York and Ohio rural research network. Subsequent briefs will describe how NCRERN guided partner districts through each stage of the continuous improvement process, "Understanding the Challenge," "Identifying Potential Solutions," and "Testing the Impact of Interventions," in each of the three focus areas. When applicable, the series will include "How-To Guides" for interventions found to be effective.


Proving Ground Continuous Improvement Process

NCRERN provides partner districts in its rural research network with support in selecting, piloting, and testing interventions using the Proving Ground (PG) continuous improvement process. This continuous improvement process creates a framework for partner districts to use data to understand challenges, identify potential solutions (interventions), design and plan discrete interventions, and use rapid-cycle evaluation to determine their effectiveness. Within the PG continuous improvement process, rapid-cycle is defined as giving school leaders results with enough time to decide to scale up, revise and re-test, or discontinue the intervention for the following school year. Figure 1 is a diagram that shows the different steps that occur in the PG continuous improvement process.

FIGURE 1: PROVING GROUND CONTINUOUS IMPROVEMENT PROCESS



In the first step of the PG process, Understand the Challenge, partner districts interpret data diagnostics to gain a deeper understanding of district- and network-wide trends within a focus area (i.e., attendance, postsecondary readiness, and postsecondary entry). Data diagnostics consist of a combination of historical analyses (i.e., trends in absenteeism over multiple years) and predictive analyses (i.e., identifying the strongest early indicators of outcomes like high school graduation or college enrollment). Once partner districts have identified trends revealed in their data diagnostic, they will begin the second step of the PG process, Identify Potential Solutions. This step includes completing a facilitated root cause analysis (often called a logic tree) to identify the “root causes” of the problem they are trying to solve.



After these initial steps, the NCRERN team presents partner districts with an intervention catalog. The catalog includes several evidence-based interventions that have been vetted by NCRERN staff to ensure they can be rigorously evaluated and are aligned with the most common root causes identified across partner districts. Partner districts engage with the intervention options by evaluating which ones best align to the root causes they identified and by conducting an informal impact-effort analysis, in which districts assess the perceived impact an intervention would have compared to the perceived effort an intervention would require to implement. The NCRERN team generally encourages districts to prioritize high impact/low effort interventions and discourages selecting low impact/high effort interventions. Under certain circumstances, districts may also consider high impact/high effort or low impact/low effort interventions.

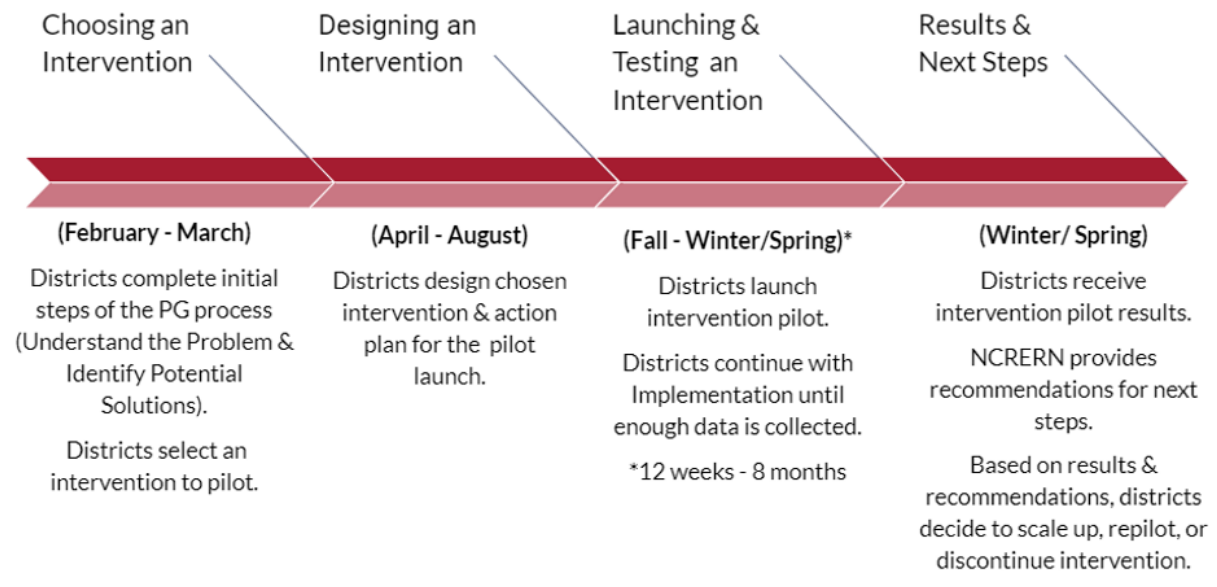
In the final step of selecting an intervention, NCRERN partner districts collectively decide on the intervention option(s) that the network will pilot and test the following school year through a voting process. This step makes NCRERN's rural research network unique since partner districts collectively decide on the finalized intervention options that the network will move forward with to pilot and test the next school year. The total number of interventions that can be piloted and evaluated across the network during a given cycle is determined by a power analysis. Power analyses consider various factors, including the total number of students needed to pilot a potential intervention and whether potential interventions target a specific student population. Given the small student populations of rural districts, NCRERN needs to ensure that there is a large enough sample to determine the impact that an intervention might have with a level of certainty. Once districts vote and the intervention options are determined, NCRERN staff members then work with partner districts to design and plan for the implementation of the intervention.

Partner districts launch the selected intervention(s) at the beginning of the school year and are expected to implement until results are shared. Depending on the intervention, results are presented to districts within three to eight months. Once the level of impact and certainty of this impact can be determined, NCRERN will present the pilot results to districts. Along with results, NCRERN offers districts recommendations for how to proceed with their pilot based on the results. Recommendation options include having districts scale up the intervention, repilot and retest the intervention, or discontinue the intervention completed and dedicate resources towards finding a more promising solution.

Timeline

NCRERN’s improvement cycle begins in the spring prior to the school year in which districts will implement the selected intervention. The steps completed during the spring include examining data diagnostics, conducting a root cause analysis, and voting on and selecting an intervention. Throughout the rest of the spring and over the summer, NCRERN works with districts to design and plan for the implementation of their intervention. The interventions that NCRERN has piloted with partner districts have required launching at the beginning of the school year. However, this launch time frame may vary depending on the intervention. Once districts launch, NCRERN continues to support districts through periodic check-ins and network-wide events. NCRERN will begin to analyze results about three-quarters of the way through the anticipated total time needed for the ongoing implementation of an intervention pilot. If NCRERN does not start to see an impact at the earliest expected point in time, districts are asked to continue with implementation for an additional set of weeks until enough data is collected to be confident in the results. Figure 2 presents a graphic that outlines the timeline in which NCRERN works with partner districts.

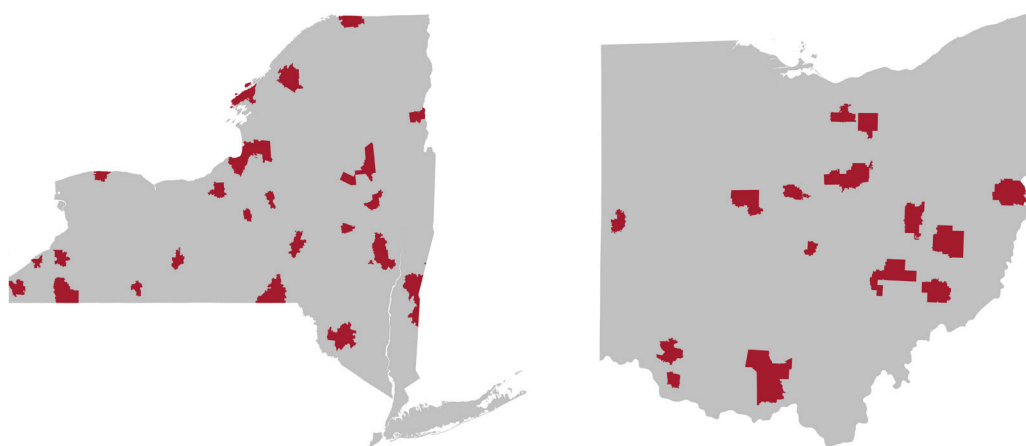
FIGURE 2: NCRERN PILOTING & TESTING TIMELINE



New York and Ohio Rural Research Network

NCRERN initially consisted of 30 New York and 20 Ohio rural school districts. Each partner district went through a competitive application process to become a part of the rural research network. All districts must either meet the National Center for Education Statistics' or the Ohio Department of Education's definition of "rural." As shown in Figure 3, partner districts are located throughout the state in both New York and Ohio.

FIGURE 3: MAP OF ORIGINAL NEW YORK & OHIO NCRERN DISTRICTS



In general, NCRERN's rural research network partner districts tend to have small student enrollments, are predominantly White, and have about half of their student populations living in poverty. However, New York partner districts are smaller, more racially diverse, and have higher rates of eligible students for free and reduced priced-lunches than Ohio partner districts. In the 2018-19 school year, the average NCRERN-New York partner district had an enrollment of 1,090 students, while the average in Ohio was 1,567 students. A majority of partner districts' racial and ethnic makeup include student populations with an average of 80% of students being White in NCRERN-New York districts and 90% of students being White in NCRERN-Ohio districts. New York partner districts have proportions of Black (3%), Hispanic (7.7%), American Indian (5.6%), and multiple race (4.4%) students. The population of students of color in Ohio partner districts has a different composition, consisting of Black (3.7), Asian (1.5%), and multiple race (5.6%) students. More than half of students in New York partner districts qualify for free or reduced-price lunch, while less than half of students in Ohio partner districts are eligible. Page 6 displays the demographic data for the New York and Ohio NCRERN districts.

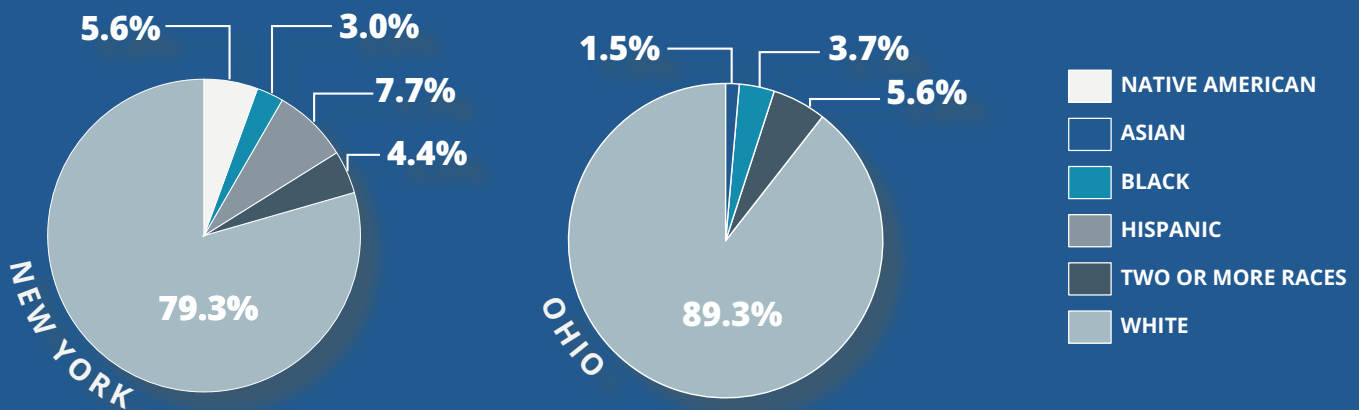
DEMOGRAPHIC DATA

for New York & Ohio NCRERN Districts



	NEW YORK	OHIO
Total District Student Enrollment	30,459	34,596
<i>Minimum district student enrollment</i>	176	839
<i>Maximum district student enrollment</i>	3,049	4,766
<i>Mean district student enrollment</i>	1,090	1,567

Percentage of student racial/ethnic identifications



Other student demographic information

	NEW YORK	OHIO
<i>Percentage of students receiving free or reduced-priced lunch</i>	56.3%	44.3%
<i>Percentage of students with an Individual Education Program (IEP)</i>	14.9%	20.1%

NCRERN Network as of the 2021-2022 School Year

NCRERN was forced to evolve due to the pandemic. All events were transitioned from being in person to being held virtually starting in March 2020. NCRERN pivoted from exclusively providing small-group support at in-person events to providing one-on-one assistance, especially during the early months of the pandemic. Unfortunately, 22 of our original districts had to withdraw from the network due to competing needs and limited staff capacity resulting from the pandemic. Despite the challenges the pandemic has presented, NCRERN was able to pilot four unique attendance interventions and two unique postsecondary readiness interventions with 28 districts in each of the 2020-21 and 2021-22 school years. During this time, NCRERN also recruited additional Ohio and New York school districts and Ohio career centers to join the network.

As of March 2022, the NCRERN network has 45 partner districts, including 29 New York and 16 Ohio districts. This number is likely to change and is often in flux as additional districts are recruited, and current partner districts withdraw from participating in the network due to the reasons previously listed. A significant benefit of NCRERN is that the piloting of interventions can continue, within reason, regardless of attrition. NCRERN has provided districts with the flexibility to pilot interventions based on district capacity throughout the COVID-19 pandemic.



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