

Report to the North Carolina General Assembly

Schools That Lead, Inc., Pilot Program, Year Two Session Law 2018-50, Section 7.25(c)

Date Due: October 1, 2020

DPI Chronological Schedule, 2020-2021

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Introduction

Session Law 2018-50, Section 7.25 (c), requires the Department of Public Instruction to submit to the Joint Legislative Education Oversight Committee and the Fiscal Research Division an annual report on the impacts of the Schools That Lead program, beginning October 1, 2019, and continuing each year thereafter until October 1, 2022. This report addresses the second year of the three-year program by briefly summarizing the background of the Program and the activities that have taken place in Year One and Year Two, outlining an accounting of expenditures, and outlining program impacts. The Program focuses on high schools working to increase on-time graduation rates, middle schools working to prepare students to succeed in high school by reducing the likelihood of retention in the ninth grade, and elementary schools working to reduce the number of students with early warning indicators of course failures, absences, and discipline. This report analyzes program outcomes from two sources: internal data from the North Carolina Department of Public Instruction and an external evaluation conducted by the Education Policy Initiative at Carolina (EPIC).

The North Carolina Department of Public Instruction collected and analyzed internal data most relevant to Program metrics, using data from the school year preceding Program implementation (2017-18) to the second year of program implementation (2019-20). These metrics include:

- on-time graduation rates of participating high schools
- ninth-grade retention rates for middle schools¹
- early warning indicators of course failures, absences, and discipline in participating elementary schools²

The Department of Public Instruction contracted with the Education Policy Initiative at Carolina (EPIC) to conduct an external evaluation that measures the impacts of the Program on student outcomes. EPIC's evaluation had two primary foci:

- to assess programming by establishing an objective rating of professional development quality
- to learn whether/how participation in the program has resulted in observable, measurable changes in instruction, school leadership, and student success

¹ Ninth grade retention data from the 2019-20 school year is not due to NCDPI until after the submission due date of this report.

² Absenteeism and discipline metrics from the 2019-20 school year for elementary schools are not due to NCDPI until after the submission due date of this report. Additionally, academic information is not available for the 2019-2020 academic year due to the pandemic.

Background

Through Session Law 2018-50, Section 7.25, the North Carolina General Assembly appropriated funds to the Department of Public Instruction for the Schools That Lead Pilot Program (Program). With these funds, Schools That Lead, Inc., would provide professional development to teachers and principals in up to 60 North Carolina public schools, beginning with the 2018-2019 academic year and ending in the 2020-2021 school year. The Program committed to offering services to three cohorts of schools: high schools working to increase on-time graduation, middle schools working to prepare students to succeed in high school by reducing the likelihood of retention in the ninth grade for multiple school years, and elementary schools working to reduce the number of students with early warning indicators of course failures, absences, and discipline.

Guided by a Networked Improvement Model, the Schools that Lead Program trains educators on the implementation science framework with the expectation that teachers will implement the framework in their classrooms, principals will support teachers as they set aggressive learning goals for their students, and improvement facilitators will support the relationship between teachers and principals in the program. The Six Principles of the Improvement Science Model are:

- 1) make the work problem-specific and user-centered
- 2) focus on variation in performance
- 3) see the system that produces outcomes
- 4) improve at scale what you can measure
- 5) use disciplined inquiry to drive improvement
- 6) accelerate learning through networked communities

Moving Forward

For the forthcoming reports, NCDPI requests an annual report submission date change from October 1 to December 1. Currently, S.L. 2018-50 Section 7.25 (c) requires DPI to submit the report to JLEOC and FRD by October 1 each year until October 1, 2022. As noted in footnotes throughout this report, ninth grade retention data from the 2019-20 school year is not due to NCDPI until Oct 15 (each year). Furthermore, absenteeism and discipline metrics from the 2019-20 school year for elementary schools are not due to NCDPI until June 30th and require cleaning, and a few districts were delayed in submitting this year due to the data systems they use. Lastly, academic information is not available for the 2019-2020 academic year due to the pandemic. A new due date for the report would, not only, be beneficial to the data collectors, evaluators, and report authors, but also, for the continuity of reports for future years so all reports are submitted using meaningful and complete data.

Program Expenditures

Schools That Lead, Inc. submitted the following budget plan to the Department that outlines how \$316,667 in state funds are used in the delivery of the Program. The actual expenditures below are as of June 30, 2020, and only account for expenditures of state dollars, not local dollars.³

| Category | Budgeted | Actual Y1 | Actual Y2 |
|---------------------------------------|-----------|------------|-----------|
| Salary and Benefits | \$259,000 | \$170,635* | \$269,888 |
| Accounting | \$7,500 | \$7,500 | \$7,500 |
| Liability Insurance | \$1,500 | \$1,628 | \$2,001 |
| Travel | \$13,000 | \$12,194 | ¢10.001 |
| Meetings (rented space and food) | \$15,000 | \$16,353 | \$48,994 |
| Contracted Services (data repository) | \$20,000 | \$0 | \$8,580 |
| Total | \$316,000 | \$208,310 | \$336,963 |

*Salary and benefits in Y1 were calculated using a 12-month schedule, while all other expenditures were calculated using a 10-month schedule.

³ According to the 2018 Schools That Lead, Inc. RFP, participating schools are expected to submit a three-year membership fee of \$6,000, or \$2,000 per year of the three-year program. Expenditures from local dollars are not included in this report.

Program Outputs

Thirty-four schools participated the first year of the Program: 17 elementary schools, 9 middle schools, and eight high schools. At the end of Year One, 32 schools were enrolled in the program. A list of all participating schools in both Year One and Year Two can be found in the list below. In Summer 2019, between Years One and two, five more schools withdrew from the program, leaving 27 schools starting Year Two after having had a full year of STL Networked Improvement Communities programming in their schools. This report will analyze the outcomes of the 27 schools that have been implementing the Program since Year One. At the beginning of Year Two, 59 schools committed to have STL Networked Improvement Communities programming in their schools for the 2019-2020 academic year. Thirty-seven additional schools joined the program as Cohort 2, and this was their first year in the program. A list of participating schools can be found below. A strikethrough indicates the school dropped out of the program.

Professional development services for participating schools were organized around a Networked Improvement Model where educators, as part of an Improvement Team made up of three teacher leaders, one improvement facilitator, and once principal, were given opportunities to solve problems of practice. In the 2019-2020 academic year, 118 teachers, 58 improvement facilitators, and 59 principals completed the program. Throughout the first year of the Program, teacher leaders completed eight days of training, and improvement facilitators and principals completed six days of training. Trainings were offered at various participating schools. A complete calendar of training dates and locations can be found on page 20 of *Appendix B*.

| Program Participants - Year One | | | | | | |
|---------------------------------|-------------------------------|-----------------------------------|------------------------------|--|--|--|
| Aulander Elementary | Lincoln Charter Elementary | Bertie High School | Bertie Middle | | | |
| Bugg Elementary | Millbrook Magnet Elementary | Charlotte Learning Academy | Butner-Stem Middle | | | |
| Colerain Elementary | Rose Hill Magnolia Elementary | James Kenan High | Centennial Campus Middle | | | |
| E.M. Rollins Elementary | Royal Elementary | New Hanover High School | East McDowell Middle | | | |
| East Garner Elementary | Spindale Elementary | Providence Grove High School | Northeastern Randolph Middle | | | |
| Grays Chapel Elementary | Warsaw Elementary | Vance County Early College | Southern Middle | | | |
| Kenansville Elementary | West Bertie Elementary | Warren Co High School | W.A. Pattillo Middle | | | |
| Kestrel Heights Elementary | Windsor Elementary | Wilkes Central High School | | | | |
| Liberty Elementary | AdVance Academy | Albemarle Middle | | | | |

| | Program Parti | cipants - Year Two | |
|-------------------------------|------------------------------|---|-----------------------------------|
| Aulander Elementary | Bertie High School | Douglass Elementary | Northeastern High |
| Bugg Elementary | Charlotte Learning Academy | Eastfield Global Magnet Elementary | Pasquotank County High |
| Colerain Elementary | James Kenan High | Glenwood Elementary School | Randolph Early College High |
| E.M. Rollins Elementary | New Hanover High School | Inborden Elementary STEAM Academy | Southeast Halifax Collegiate Prep |
| East Garner Elementary | Providence Grove High School | J C Sawyer Elementary | East Wake Middle |
| Grays Chapel Elementary | Vance County Early College | Joyner Elementary | Elizabeth City Middle |
| Kenansville Elementary | Warren Co High School | Nebo Elementary | Enfield Middle STEAM Academy |
| Kestrel Heights Elementary | Wilkes Central High School | Northside Elementary | J E Holmes Middle |
| Liberty Elementary | Albemarle Middle | P W Moore Elementary | River Road Middle |
| Lincoln Charter Elementary | Bertie Middle | Scotland Neck Elementary | Southwestern Randolph Middle |
| Millbrook Magnet Elementary | Butner-Stem Middle | Sheep-Harney Elementary | West McDowell Middle |
| Rose Hill Magnolia Elementary | Centennial Campus Middle | Supply Elementary | |
| Royal Elementary | East McDowell Middle | Weeksville Elementary | |
| Spindale Elementary | Northeastern Randolph Middle | Albemarle High | |
| Warsaw Elementary | Southern Middle | Buncombe Early College High | |
| West Bertie Elementary | W.A. Pattillo Middle | Elizabeth City Pasquotank Early College | e High |
| Windsor Elementary | Central Elementary (ECP) | J F Webb High | |
| AdVance Academy | Central Elementary (Stanley) | John M Morehead High | |

Program Outcomes

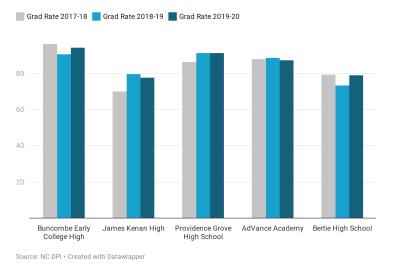
The Program focuses on high schools working to increase on-time graduation, middle schools working to prepare students to succeed in high school by reducing the likelihood of retention in the ninth grade for multiple school years, and elementary schools working to reduce the number of students with early warning indicators of course failures, absences, and discipline. This report analyzes program outcomes from two sources: the North Carolina Department of Public Instruction and an external evaluation conducted by the Education Policy Initiative at Carolina (EPIC).

The North Carolina Department of Public Instruction analyzed internal data most relevant to Program metrics, specifically data from the school year preceding Program implementation (2017-18) to the second year of program implementation (2019-20). These metrics include:

- on-time graduation rates of participating high schools
- ninth-grade retention rates for middle schools⁴
- early warning indicators of course failures, absences, and discipline in participating elementary schools⁵

High Schools – On-time Graduation Rates

While it is understandable for schools to leave the Program before the three-year commitment is completed, program evaluation is best evaluated over the three-year commitment. The figure below represents Cohort 1's graduation rates for the 2017-18 academic year as a baseline, and the 2018-19 and 2019-20 academic years after having completed two years of the three-year Program. Of the five high schools in Cohort 1, three schools saw an increase in their graduation rates from the first year of Program implementation.



Year 1 Cohort Graduation Rates

The schools below completed their second year of the three-year program.

⁴ Ninth grade retention data from the 2019-20 school year is not due to NCDPI until after the submission due date of this report.

⁵ Absenteeism and discipline metrics from the 2019-20 school year for elementary schools are not due to NCDPI until after the submission due date of this report. Additionally, academic information is not available for the 2019-2020 academic year due to the pandemic.

Middle Schools – Ninth-grade Retention Rates

Program staff has defined ninth-grade retention rates as the number of ninth graders who were retained before tenth grade. Retention data is not due from the schools to DPI until the end of October. Thus, participating middle schools will not know whether their program implementation has been effective for at least sixteen months after their students leave their middle schools. For future reporting purposes, it would be helpful for evaluators to review ninth grade retention data for the 2017-2018 academic year as a baseline year of data, then review subsequent academic years with data reported from the schools to Program staff until it can be reconciled with the official state-level data.

<u>Elementary Schools – Early Warning Indicators</u>

In their 2018-2019 report to NCDPI, Program staff reported the percent of students on the attendance watch list, the percent of students on the discipline watch list, and the percent of students on off-grade level watch list, to define early warning indicators of course failures, absences, and discipline, respectively. In their 2019-2020 report to NCDPI, Program staff did not include data from the 2019-2020 school year "due to the COVID-19 pandemic that forced the closure of schools in March 2020."⁶ Relatedly, schools are not required to submit to NCDPI data on the relevant indicators until 30 days or more from the due date of this report.

The Department of Public Instruction contracted with the Education Policy Initiative at Carolina (EPIC) to conduct an external evaluation that measures the impacts of the Program on student outcomes. The evaluation focused on two measures:

- to **assess programming** by establishing an objective rating of professional development quality
- to learn whether/how program participation has resulted in observable, measurable changes in instruction, school leadership, and student success

EPIC's evaluation set out to answer the following questions;

- Evaluation Question 1: To what extent does North Carolina Networked Improvement Communities (NC NIC) professional learning meet the ESSA-aligned *Standards for Professional Learning* adopted by the NC State Board of Education? Evaluators found that the Program met all of the Standards for Professional Learning.
- Evaluation Question 2: To what extent does NC NIC professional learning result in *measurable changes in educator knowledge and skills*? Evaluators found that on average, after each training, there was a seven-fold increase in the number of participants who felt they had a high-level knowledge around the professional learning topics.
- Evaluation Question 3: To what extent does NC NIC professional learning result in *observable, measurable impact* within Networked Improvement Communities schools? Evaluators found that 74% of interview respondents identified an action or outcome as the greatest benefit of their work with the Program.
- Evaluation Question 4: To what extent do educators believe the NC NIC model will ultimately *impact the legislated student outcomes* within their schools? Evaluators found that almost 75% of respondents found the program to be more impactful than other school improvement programs provided by their districts and the state.

Further details on Program outcomes can be found in *Appendix B* of EPIC's evaluation, which also includes qualitative analysis from artifacts collected by Program facilitators.

⁶ Annual report submitted by Program Staff can be found in Appendix A.

Appendix A



Retention Rates of Participants: Sections 4.3.1.3 and 4.3.1.4

At the end of 2018-19, there were 31 schools enrolled in STL Networked Improvement Communities. Over the summer, Warren County High School, Vance Early College, EM Rollins Elementary, Kestrel Heights Charter and New Hanover High withdrew from the Network, leaving 26 Cohort 1 schools. At the beginning of the academic year, 32 schools joined Cohort 2, for a total of 58 schools. Charlotte Secondary School withdrew from the Network at the end of the 2019-20 academic year. All remaining schools have teams in place to return for another year of Network support, resulting in an **84% Cohort 1 retention rate** (26 returned out of 31 schools), a **97% Cohort 2 retention rate** (31 returning out of 32 schools) and an overall **Network retention rate of 98.2%** this year (57 returning schools out of 58).

There has, however, been predictable turnover within school faculties. Notes below.

Principal retention rate: 84.4% (49 principals out of 58)

PLI: Turnover

Principals Replacing Others During 2019-20*

- Antonio Hoggard replaced the principal at Bertie High
- Bridgette Carson replaced the principal at Bertie Middle
- Fannie Williams named Interim Principal at Windsor Elementary in Bertie County
- Chris Jonassen -- replaced Devron Furr at Albemarle Middle in Stanly County
- Ashley Clark replaced the principal at Butner-Stem Middle School in Granville County
- Desarae Kirkpatrick replaced Jennifer Croymans at East McDowell Middle School (who moved to Nebo Elementary in McDowell and joined Cohort 2).

* All schools remained members in the Network and principals participated in PLI during 2019-20.

Principals Leaving Their Schools At The End of 2019-20

- Dominique Teasley leaving Royal Elementary School in Franklin County for a principal position in Wake County
- Jamee Lynch left Millbrook Elementary in Wake County for a position at EL
- Becky Foote reassigned from Bugg Elementary to another position in Wake County



Teacher retention rate: 93.6% (163 teacher leaders out of 174)

TLI: Turnover

Teacher Leaders Replacing Others During 2019-20*

- William Houston replaced TLI participant at Warsaw Elementary in Duplin County who left the school
- Telia Hatfield replaced TLI participant at W.A. Pattillo in Edgecombe County who left the school

Teacher Leaders Leaving Their Schools At The End of 2019-20

- Emily Hendricks retiring at Liberty Elementary in Randolph County; replacement has been named
- Ruth Pershing passed away in June 2020; East McDowell Middle School in McDowell County

IFI: Turnover

Improvement Facilitators Replacing Others During 2019-20*

- Brendan Horohoe replaced the IF at Butner-Stem Middle School in Granville County
- Kelli Kiser replaced the IF at Southern Middle in Person County
- Ashley Bradley replaced the IF at Bertie Middle
- LaCresha Pugh replaced the IF at West Bertie Elementary
- Sandra Smith replaced the IF at Windsor Elementary in Bertie County
- Tamara Lyons replaced the IF at W.A. Pattillo Middle in Edgecombe County

Improvement Facilitators Leaving Their Schools At The End of 2019-20

• Wendy Gooch – retiring at Liberty Elementary in Randolph County

* All schools remained members in the Network and teacher leaders participated in TLI or IFI during 2019-20.



| Cohort 1 | | | Cohort 2 | |
|---------------------|---------|---------|-----------------------------|---------|
| | 2017-18 | 2018-19 | | 2018-19 |
| Albemarle Middle | D | С | Albemarle High | С |
| Aulander Elementary | С | С | Central Elementary (ECP) | С |
| Bertie High | D | D | Central Elementary (Stanly) | D |

School Performance Data: Section 4.3.1.2



| Bertie Middle | D | D | Charlotte Secondary | С |
|----------------------------------|---|---|---|---|
| Bugg Elementary | F | F | Douglass Elementary | С |
| Butner-Stem Middle | D | D | Buncombe Early College | В |
| Centennial Campus Middle | С | D | East Wake Middle | D |
| Colerain Elementary | С | С | Eastfield Global Magnet School | С |
| E M Rollins Elementary | D | D | Elizabeth City Middle | D |
| East Garner Elementary | D | D | Elizabeth City Pasquotank Early College | В |
| East McDowell Middle School | D | С | Enfield Middle S.T.E.A.M. Academy | D |
| Grays Chapel Elementary | С | С | Glenwood Elementary School | В |
| James Kenan High | С | С | West McDowell Middle | С |
| Kenansville Elementary | С | С | Inborden Elementary S.T.E.A.M. Academy | С |
| Liberty Elementary | D | D | J C Sawyer Elementary | С |
| Lincoln Charter School | В | В | J E Holmes Middle | С |
| Millbrook Elementary | D | D | J. F. Webb High | С |
| Northeastern Randolph Middle | С | С | John M Morehead High | С |
| Providence Grove High | В | С | Joyner Elementary | В |
| Rose Hill-Magnolia Elementary | D | D | Nebo Elementary | С |
| Royal Elementary | С | С | Northeastern High | С |
| Southern Middle | С | С | Northside Elementary | С |
| Spindale Elementary School | С | С | P W Moore Elementary | F |
| W A Pattillo Middle | D | D | Pasquotank County High | D |
| Warsaw Elementary | D | D | Randolph Early College High | А |
| West Bertie Elementary | С | D | River Road Middle | С |
| Windsor Elementary | С | С | Scotland Neck Elementary | F |
| | | | Sheep-Harney Elementary | С |
| | | | Southeast Halifax Collegiate Prep | D |
| | | | Southwestern Randolph Middle | С |
| | | | Supply Elementary | D |
| | | | Weeksville Elementary | С |

The data for the following are unavailable due to the COVID-19 pandemic that forced the closure of schools in March 2020.



Elementary School Cohort: Section 4.3.7.1: The number of students with early warning indicators of course failures, absences, and discipline in participating elementary schools.

Middle School Cohort: Section 4.3.6.1: The ninth-grade retention rates of participating middle schools.

High School Cohort: Section 4.3.5.1: The on-time high school graduation rates of participating high schools:

Accounting of Expenditures: Section 4.3.1.1.

| Salary and payroll taxes | Benefits | Insurance | Travel, Meals and convening space | Contracted services (Networked Improvement Learning digital platform) | Accounting | Office supplies |
|-----------------------------------|----------|-----------|--|--|------------|--------------------|
| \$228,732 | \$41,156 | \$2,001 | \$ 48,994 | \$8,580 | \$7,500 | \$3,578 |

Appendix B

Schools That Lead North Carolina Networked Improvement Communities

Year 2 Evaluation Report June 2020

Authors:

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NORTH CAROLINA NETWORKED IMPROVEMENT COMMUNITIES YEAR 2 EVALUATION

EXECUTIVE SUMMARY

Purpose of Report

In January 2019, the North Carolina Department of Public Instruction (NCDPI) engaged the Education Policy Initiative at Carolina (EPIC) as an independent research organization, to assess the ultimate impact of Schools That Lead North Carolina Networked Improvement Communities (NC NIC) professional learning on three primary student outcomes:

- On-time graduation in high school
- Ninth grade retention rates
- Course failures, absences, and discipline in elementary school

This report encompasses a school year that included a sudden and unexpected transition to full time remote learning, beginning in March 2020. While many leading indicators and intermediate outcomes are available, the circumstances brought about by North Carolina's stay-at-home orders due to the COVID-19 pandemic substantially reduces the reliability and validity of annual administrative data.

In lieu of this, the NC NIC Year 2 evaluation report will have two primary foci: 1) establishing an objective rating of professional development quality, for a holistic assessment of the NC NIC professional learning sessions over the course of a year; 2) taking an inductive approach to learn whether/how participation in the NC NIC has resulted in observable, measurable changes in instruction, school leadership, and student success.

This report focuses on the 2019-20 school year, encompassing the first year of service for Cohort 2, and the second year of service for Cohort 1, and addresses the following evaluation questions:

Evaluation Question 1: To what extent does North Carolina Networked Improvement Communities (NC NIC) professional learning meet the ESSA-aligned *Standards for Professional Learning* adopted by the NC State Board of Education?

Evaluation Question 2: To what extent does NC NIC professional learning result in *measurable changes in educators knowledge and skills*?

Evaluation Question 3: To what extent does NC NIC professional learning result in *observable, measurable impact* within Networked Improvement Communities schools?

Evaluation Question 4: To what extent do educators believe the NC NIC model will ultimately *impact the legislated student outcomes* within their schools?

North Carolina Networked Improvement Communities

In July 2018, the North Carolina General Assembly passed legislation requiring the Department of Public Instruction to contract with Schools That Lead (STL) to provide professional learning to teachers and principals in up to 60 schools, beginning with the 2018-19 school year and ending in the 2020-21 school year¹.

The STL approach is grounded in a Networked Improvement Communities (NIC) framework, a blend of improvement science and networked science, developed by the Carnegie Foundation.

Six Principles of the Improvement Science Model:

1) make the work problemspecific and user-centered

2) focus on variation in performance

3) see the system that produces outcomes

4) improve at scale what you can measure

5) use disciplined inquiry to drive improvement

6) accelerate learning through networked communities. Between September 2019 and March 2020, Schools That Lead provided 43 NC NIC professional development, via face-to-face networked professional learning sessions and virtual school-specific follow-up, grouped by the three Improvement Team roles:

- Teacher Leadership Initiative (for two teacher leaders from each school)
- Improvement Facilitator Initiative (for the third teacher leader); and
- Principal Leadership Initiative

Together, these Improvement Teams lead a specific improvement effort at their school focused on achieving better student outcomes, changes in instruction, school leadership, and student success.

Study Sample

As of spring 2020, the STL North Carolina Networked Improvement Communities (NC NIC) is comprised of 58 North Carolina K-12 district and charter schools that serve nearly 30,000 students, 70% of whom live in poverty. The NC NIC is designed to leverage the rich resources found in every school – teachers and leaders – to lead improvement efforts at the classroom level.

Data

EPIC employed a concurrent mixed-methods evaluation design for the NC NIC evaluation, with the following data sources:

- <u>NC NIC Session Evaluations</u>: At the conclusion of each learning session, STL staff administered anonymous surveys to participants that included a quantitative pre-post assessment of knowledge change, and qualitative questions around professional learning quality and value (see Appendix F).
- <u>EPIC Impact Survey</u>: EPIC administered an independent web-based survey to determine the impact of NC NIC on instruction, leadership, and student success; along with the extent educators anticipate NC NIC will impact the legislated outcomes for each school level.
- <u>EPIC Teacher and Principal Semi-Structured Interviews</u>: At the end of the 2019-20 school year, EPIC conducted telephone interviews with eleven NC NIC teachers and principals, focused around observable and measurable changes that have occurred as a result of the skills and tools acquired from participation in NC NIC.
- <u>Program Artifacts</u>: NC NIC session agendas, learning goals, and session evaluations were curated as an evidence source for the Professional Learning Standards.
- <u>NCDPI Administrative Data</u>: School-level sociodemographic variables and school performance data (See Appendix D) were calculated from 2018-19 North Carolina Department of Public Instruction (NCDPI) administrative data and the 2018-19 NCDPI School Report Cards.²

¹ Senate Bill 99; Sec. 7.25

² Found at North Carolina School Report Cards

Findings

Evaluation Question 1: To what extent does North Carolina Networked Improvement Communities (NC NIC) professional learning meet the ESSA-aligned Standards for Professional Learning adopted by the North Carolina State Board of Education?

EPIC developed the Professional Learning Quality (PLQ) rubric, structured around the seven Learning Forward standards adopted by the North Carolina State Board of Education, each with 2-3 sub-criteria (19 total) based on the operational definition of each Standard.

The PLQ rubric serves as an objective measure of the NC NIC professional learning quality, with scoring predicated on the extent there is sufficient evidence from program artificats and related data collection to satisfy each criterion.

• Finding 1: Using five sources of evidence across nineteen criteria, NC NIC professional learning met all Standards for Professional Learning, scoring in the "Excellent" range on a professional learning quality rubric.

Evaluation Question 2: To what extent does NC NIC professional learning result in measurable changes in educators knowledge and skills?

A total of 3961 self-assessment items (1771 items for Cohort 1 & 2190 items for Cohort 2) were used to calculate changes in knowledge after each NC NIC professional learning session. Participants rated themselves on a five-point assessment scale to indicate their change in knowledge before and after completing each NC NIC session.

• Finding 2: On average, there was a seven-fold increase in the number of participants who felt they have a high level knowledge around the NC NIC professional learning topics, at the conclusion of each NC NIC session. Substantial improvement in knowledge and skills were seen for every session, across all cohorts, school levels, and NC NIC roles.

Evaluation Question 3: To what extent does NC NIC professional learning result in observable, measurable impact within Networked Improvement Communities schools?

Two data sources were utilized to identify tangible changes that are occurring due participation in the NC NIC: 1) open-ended written survey item: *"What has been the greatest benefit of your involvement with Schools That Lead"*; and 2) semi-structured interview question: *"Over the past (or past two) school year(s), can you provide examples of concrete changes you've made, or plan to make, within your school directly due to the skills and practices you have learned from STL?"*

• Finding 3: Analysis of open-ended survey items showed that 128 out of 174 of respondents (74%) identified an action or outcome as the greatest benefit to their work with NC NIC. Qualitative coding of interview data revealed changes in practice or measurable outcomes were grouped into five main categories: 1) school level changes; 2) student success; 3) instructional changes; 4) use of data; 5) leadership practices.

Evaluation Question 4: To what extent do educators believe the NC NIC model will ultimately impact the legislated student outcomes within their schools?

• Finding 4: 100% of NC NIC members working in high schools survey believe that NC NIC will ultimately impact the legislated outcomes. Elementary and MS have distributions similar to each other, with close to 90% indicating their work with NC NIC will impact the desired school-level outcomes.

SCHOOLS THAT LEAD NETWORKED IMPROVEMENT COMMUNITIES YEAR 2 EVALUATION REPORT

I. The Need: A Constitutional Right

Almost 25 years ago, the North Carolina Supreme Court provided a ruling in *Leandro v. State of NC* that "an education that does not serve the purpose of preparing students to participate and compete in the society in which they live and work is devoid of substance and is constitutionally inadequate."³. Over two decades later, an independent consulting group recently reported to the Supreme Court that North Carolina has failed to provide that constitutional right to all children.⁴

At present, state-level resources and infrastructure are not sufficient to meet the needs of struggling schools across the state. Due to waning budgets and competing priorities, the North Carolina Department of Public Instruction (NCDPI) has had to restructure its school transformation model four times in the past five years⁵. Over this same time period, schools have not attained the substantial and sustained growth necessary to provide every student a "sound and basic education."

The history of instability from state level supports, and lack of sufficient progress, suggests that schools themselves may be the most effective locus of control to bring about change.

II. The Approach: Networked Improvement Communities

In July 2018, the North Carolina General Assembly passed legislation requiring NCDPI to contract with Schools That Lead (STL) to provide Professional Learning to teachers and principals in up to 60 schools, beginning with the 2018-19 school year and ending in the 2020-21 school year⁶.

The STL approach is grounded in a Networked Improvement Communities (NIC) framework, a blend of improvement science and networked science, developed by the Carnegie Foundation. A January 2020 systematic review revealed that the use of NIC models in education has increased substantially over the last five years.⁷ Areas of focus include improving novice teacher retention, academic achievement in high school and middle school students, developmental math success, and quality of instruction in mathematics. One practitioner-focused NIC project, the National Board for Professional Teaching Standards "Networks to Transform Teaching (NT3)" demonstrated that the nine networked states outpaced the growth of board certified teachers compared with all other states⁸.

"I feel like now more than ever. we have to invest in our schools. We have to stop this school to prison pipeline. It's not through these roll-out things I know that they're going to try, and I get it because...there's a huge problem we need to fix it. But it hasn't worked. Schools That Lead is the way." -NIC Teacher

³ Leandro v State; 488 S.E.2d 249 (1997)

⁴ Sound Basic Education For All; An Action Plan for North Carolina

⁵ Race to the Top TALAS model in 2015; North Carolina Transformation (2016-18); Educator Support Service (2018-2019); currently District and Regional Support

⁶ Senate Bill 99; Sec. 7.25

⁷ Evidence for Networked Improvement Communities; American Institutes for Research

⁸ https://www.nbpts.org/wp-content/uploads/NT3-Overview.pdf

The six principles of improvement science underlying the NIC model are as follows⁹:

- 1) make the work problem-specific and user-centered
- 2) focus on variation in performance
- 3) see the system that produces outcomes
- 4) improve at scale what you can measure
- 5) use disciplined inquiry to drive improvement
- 6) accelerate learning through networked communities

North Carolina Networked Improvement Communities

As of spring 2020, the STL North Carolina Networked Improvement Communities (NC NIC) is comprised of 58 North Carolina K-12 district and charter schools that serve nearly 30,000 students, 70% of whom live in poverty (See Appendix A for list of member schools). The NC NIC is designed to leverage the rich resources found in every school – teachers and leaders, to lead improvement efforts at the classroom level.

Schools That Lead supports each Improvement Team with face-to-face networked professional learning and virtual school-specific follow up through:

- Teacher Leadership Initiative (for two teacher leaders from each school)
- Improvement Facilitator Initiative (for the third teacher leader); and
- Principal Leadership Initiative

Together, the Improvement Team leads a specific improvement effort at their school focused on achieving better student outcomes.

STL conducted a total of 43 NC NIC professional learning sessions between Sept 2019 and March 2020 (see Appendix B for full calendar of service).

| | Principal Leadership Initiative (PLI) | Teacher Leadership Initiative (TLI) | Improvement Facilitators Institute (IFI) | NC NIC Team Convening |
|----------|--|--|---|--------------------------|
| Cohort 1 | 4 | 10 (5 East & 5 West) | 4 | 1 |
| Cohort 2 | 4 | 12 (6 East & 6 West)* | 7 | 1 |
| Total | 8 | 22 | 11 | 2 |

Table 1. NC NIC Professional Learning Sessions, Sept 2019 – March 2020

*Fourteen TLI Cohort 2 sessions were scheduled, the final two cancelled due to COVID-19, along with summer convening for both cohorts.

III. Purpose of Report

In January 2019, the North Carolina Department of Public Instruction engaged the Education Policy Initiative at Carolina (EPIC) as an independent research organization, to assess the ultimate impact of NC NIC on three primary student outcomes:

- On-time graduation in high school
- Ninth grade retention rates
- Course failures, absences, and discipline in elementary school

⁹ LeMahiu et al; Networked Improvement Communities: The Discipline of Improvement Science Meets the Power of Networks; *Quality Assurance in Education: An International Perspective*, v25 n1 p5-25 2017

In a "normal" education policy landscape, intervention effects are challenging, though not impossible, to quantify within the first 12-24 months. However, this report encompasses a school year that included a sudden and unexpected transition to full time remote learning, beginning in March 2020. While many leading indicators and intermediate outcomes are available, the circumstances brought about by stay-at-home orders substantially reduces the reliability and validity of annual administrative data.

In lieu of this, the Schools That Lead Year 2 evaluation report will have two primary foci: 1) establishing an objective measure of professional learning quality, for a holistic assessment of North Carolina Networked Improvement Communities (NC NIC) sessions over the course of a year; 2) taking an inductive approach to learn whether/how NC NIC learning sessions have resulted in observable, measurable changes in instruction, school leadership, and student success.

This report focuses on the 2019-20 school year, encompassing the first year of service for Cohort 2, and the second year of service for Cohort 1, and addresses the following evaluation questions:

Evaluation Question 1: To what extent does North Carolina Networked Improvement Communities (NC NIC) professional learning meet the ESSA-aligned *Standards for Professional Learning* adopted by the NC State Board of Education?

Evaluation Question 2: To what extent does NC NIC professional learning result in *measurable changes in educators knowledge and skills*?

Evaluation Question 3: To what extent does NC NIC professional learning result in *observable, measurable impact* within Networked Improvement Community Schools?

Evaluation Question 4: To what extent do educators believe the NC NIC model will ultimately *impact the legislated student outcomes* within their schools?

IV. Study Design & Data Sources

EPIC is utilizing a concurrent mixed-methods study design, leveraging quantitative and qualitative data to triangulate and enhance the validity of findings. The following data sources were used in the preparation of this report:

<u>NC NIC Session Evaluations</u>: At the conclusion of each NC NIC professional learning session, STL staff administered anonymous surveys to participants that included a pre-post assessment of knowledge change, and open-ended questions around what participants found most valuable, suggestions for improvement, and overall reflections (see Appendix F).

<u>EPIC Impact Survey</u>: A web-based survey was developed by EPIC to assess a) how participation in the NC NIC has benefitted their school; b) how the impact of NC NIC compares with the impact of other school improvement programs; and c) the extent they anticipate NC NIC professional learning will impact the legislated outcomes for each school level.

<u>EPIC Teacher and Principal semi-structured interviews</u>: At the conclusion of the 2019-20 school year, EPIC conducted telephone interviews with eleven NC NIC teachers and principals. The interviews were primarily focused around observable, measurable, concrete changes that have occurred within their schools, directly as a result of the skills and tools received at NC NIC sessions.

<u>Program Artifacts</u>: STL training agendas, learning goals, and session evaluations were curated as an evidence source for the Professional Learning Standards.

<u>NCDPI Administrative Data</u>: School-level sociodemographic variables, along with teacher and principal years of experience, were calculated from 2018-19 North Carolina Department of Public Instruction (NCDPI) administrative data (see Appendix D). School performance data was curated from 2018-19 North Carolina School Report Cards.¹⁰

V. Study Sample

This report focuses on the first and second cohorts of NC NIC schools, engaged throughout the 2019-20 school year. In total, there are currently 58 Networked Improvement Community schools, that serve nearly 30,000 students.



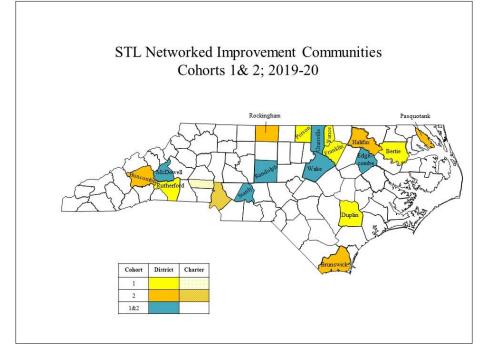


Table 2a. NC NIC Participants by School Level and Role – Cohort 1; 2019-20

| School Level | NC NIC Schools | Principals | Improvement Facilitators | Teacher Leaders |
|--------------|-------------------|------------|-----------------------------|--------------------|
| Elementary | 14 | 15 | 14 | 30 |
| Middle | 8 | 8 | 8 | 16 |
| High | 4 | 4 | 4 | 8 |
| Total | 26 | 27 | 26 | 54 |

 Table 2b. NC NIC Participants by School Level and Role – Cohort 2; 2019-20

| School Level | NC NIC Schools | Principals | Improvement Facilitators | Teacher Leaders |
|--------------|-------------------|------------|-----------------------------|--------------------|
| Elementary | 15 | 15 | 15 | 30 |
| Middle | 7 | 7 | 7 | 14 |
| High | 10 | 10 | 10 | 20 |
| Total | 32 | 32 | 32 | 64 |

¹⁰ Found at North Carolina School Report Cards

| Cohort 1 | | | Cohort 2 | | |
|-------------------------------|---------|---------|---|---------|--|
| | 2017-18 | 2018-19 | | 2018-19 | |
| Albemarle Middle | D | С | Albemarle High | С | |
| Aulander Elementary | С | С | Central Elementary (ECP) | С | |
| Bertie High | D | D | Central Elementary (Stanly) | D | |
| Bertie Middle | D | D | Charlotte Secondary | С | |
| Bugg Elementary | F | F | Douglass Elementary | С | |
| Butner-Stem Middle | D | D | Buncombe Early College | В | |
| Centennial Campus Middle | С | D | East Wake Middle | D | |
| Colerain Elementary | С | С | Eastfield Global Magnet School | С | |
| East Garner Elementary | D | D | Elizabeth City Middle | D | |
| East McDowell Middle | D | С | Elizabeth City Pasquotank Early College | В | |
| Grays Chapel Elementary | С | С | Enfield Middle S.T.E.A.M. Academy | D | |
| James Kenan High | С | С | Glenwood Elementary School | В | |
| Kenansville Elementary | С | С | Inborden Elementary S.T.E.A.M. Academy | С | |
| Liberty Elementary | D | D | J C Sawyer Elementary | С | |
| Lincoln Charter School | В | В | J E Holmes Middle | С | |
| Millbrook Elementary | D | D | J. F. Webb High | С | |
| Northeastern Randolph Middle | С | С | John M Morehead High | С | |
| Providence Grove High | В | С | Joyner Elementary | В | |
| Rose Hill-Magnolia Elementary | D | D | Nebo Elementary | С | |
| Royal Elementary | С | С | Northeastern High | С | |
| Southern Middle | С | С | Northside Elementary | С | |
| Spindale Elementary School | С | С | P W Moore Elementary | F | |
| W A Pattillo Middle | D | D | Pasquotank County High | D | |
| Warsaw Elementary | D | D | Randolph Early College High | А | |
| West Bertie Elementary | С | D | River Road Middle | С | |
| Windsor Elementary | С | С | Scotland Neck Elementary | F | |
| | | | Sheep-Harney Elementary | С | |
| | | | Southeast Halifax Collegiate Prep | D | |
| | | | Southwestern Randolph Middle | С | |
| | | | Supply Elementary | D | |
| | | | Weeksville Elementary | С | |
| | | | West McDowell Middle | С | |

Table 3a. North Carolina School Report Card Grades – Cohort 1 & 2

High School Graduation Rates: 75% of Cohort 1 schools, and 70% of Cohort 2 schools, have four-year graduation rates lower than the state average.

| | 2017-18 | 2018-19 |
|--------------------------|-------------------------------|-------------------------------|
| High Schools | 4-year Graduation Rate (%) | 4-year Graduation Rate (%) |
| Bertie High | 79.4 | 73.3 |
| James Kenan High | 70.1 | 79.5 |
| Providence Grove High | 86.2 | 97.4 |
| Lincoln Charter School | 95.0 | 91.1 |
| NC Average Graduate Rate | 86.3 | 86.5 |

Table 4a. NC NIC High School Graduation Rates; Cohort 1

| Table 4b. | NC NIC High School | Graduation Rates | ; Cohort 2 (2018-19) |
|-----------|--------------------|-------------------|----------------------|
| | | Or addation mates | , conorc r (roto ro) |

| High Schools | 4-year Graduation Rate (%) |
|------------------------------------|-------------------------------|
| Albemarle High School | 86.5 |
| Buncombe County Early College | 90.6 |
| Charlotte Secondary School | 80.6 |
| J.F. Webb High School | 71.4 |
| Morehead High School | 84.1 |
| Northeastern High School | 80.8 |
| Pasquotank County High School | 80.7 |
| Randolph Early College High School | 97.7 |
| Southeast Collegiate Prep Academy | 74.7 |
| Randolph Early College High School | 97.7 |
| NC Average Graduate Rate | 86.5 |

NC NIC Middle Schools / 9th Grade Retention: For Cohort 1, the middle school outcome of decreased 9th grade retention can be calculated from the 2019-20 administrative files from NCDPI, which are not yet available. In a normal year, EPIC would begin receiveing files late summer/early fall, but availability and sharing of data from this year is still uncertain. For Cohort 2, the middle school impact of 2019-20 NC NIC participation will be measured following the end of the 2020-21 school year.

Elementary School Performance Data: All but one of the Cohort 1 NC NIC elementary schools have Math and ELA proficiency rates below the state average. There is slight variability around chronic absenteeism, with schools both above and below the state average. These trends hold for Cohort 2 elementary schools.

| | % Proficient Math 2017-18 | % Proficient Math 2018-19 | % Proficient ELA 2017-18 | % Proficient ELA 2018-19 | % Proficient Science 2017-18 | % Proficient Science 2018-19 | % Chronic Absenteeism 2017-18 | % Chronic Absenteeism 2018-19 | Short Term Suspension Rates [*] 2017-18 | Short Term Suspension Rates [*] 2018-19 |
|------------------|------------------------------------|------------------------------------|-----------------------------------|-----------------------------------|---------------------------------------|---------------------------------------|--|--|---|---|
| Aulander | 56.8 | 54.4 | 50.6 | 52.9 | 70.0 | 79.2 | 0.21 | 0.17 | 0.21 | 0.05 |
| Bugg | 27.3 | 23.2 | 24.2 | 19.6 | 36.5 | 30.6 | 0.12 | 0.12 | 0.08 | 0.06 |
| Colerain | 57.3 | 56.4 | 36.4 | 44.6 | 83.3 | 74.3 | 0.13 | 0.14 | 0.21 | 0.01 |
| East Garner | 45.9 | 46.7 | 38.7 | 44.6 | 59.4 | 56.3 | 0.12 | 0.11 | 0.05 | 0.02 |
| Grays Chapel | 70.6 | 68.3 | 58.0 | 64.3 | 73.5 | 83.3 | 0.03 | 0.12 | 0.00 | 0.03 |
| Kenansville | 52.0 | 49.1 | 52.0 | 49.2 | 59.1 | 72.1 | 0.13 | 0.15 | 0.16 | 0.19 |
| Liberty | 46.1 | 39.1 | 43.2 | 39.1 | 59.2 | 64.9 | 0.13 | 0.11 | 0.05 | 0.04 |
| Lincoln Charter | 77.3 | 77.9 | 82.2 | 78.3 | 83.5 | 93.3 | 0.04 | 0.07 | 0.03 | 0.02 |
| Millbrook Magnet | 38.7 | 36.8 | 33.9 | 35.3 | 50.5 | 31.0 | 0.12 | 0.14 | 0.02 | 0.01 |
| Rose Hill | 41.9 | 44.6 | 32.1 | 32.0 | 46.6 | 62.9 | 0.11 | 0.14 | 0.15 | 0.10 |
| Royal | 57.1 | 53.9 | 48.6 | 43.4 | 72.7 | 70.8 | 0.12 | 0.20 | 0.13 | 0.05 |
| Spindale | 53.8 | 57.6 | 45.7 | 45.4 | 78.3 | 77.0 | 0.14 | 0.15 | 0.13 | 0.20 |
| Warsaw | 31.1 | 33.6 | 37.5 | 35.4 | 55.0 | 54.8 | 0.15 | 0.17 | 0.18 | 0.15 |
| West Bertie | 61.5 | 40.8 | 47.5 | 41.6 | 82.9 | 70.7 | 0.20 | 0.19 | 0.21 | 0.21 |
| Windsor | 61.0 | 51.2 | 49.5 | 45.6 | 74.0 | 72.1 | 0.16 | 0.16 | 0.21 | 0.06 |
| State Average | 56.1 | 58.6 | 57.3 | 57.2 | 72.1 | 75.5 | 0.15 | 0.16 | 0.14 | 0.13 |

Table 5a. NC NIC Elementary School Performance Data; Cohort 1

Note: *Short-term suspension rates are per 1000 students

| | % | % | % | % | Short Term |
|-----------------------------|------------|------------|------------|-------------|------------|
| School Name | Proficient | Proficient | Proficient | Chronic | Suspension |
| | Math | ELA | Science | Absenteeism | Rates |
| Central Elementary (ECP) | 64.9 | 54.1 | 85.5 | | 0.08 |
| Central Elementary (Stanly) | 40.0 | 38.3 | 58.1 | 0.17 | 0.16 |
| Douglass Elementary | 63.1 | 53.6 | 69.2 | 0.13 | 0.11 |
| Eastfield Global Magnet | 46.3 | 47.5 | 72.9 | 0.12 | 0.00 |
| Glenwood Elementary | 68.0 | 60.85 | 89.4 | 0.16 | 0.00 |
| Inborden STEAM Academy | 42.4 | 39.6 | 81.1 | 0.27 | 0.39 |
| JC Sawyer | 53.1 | 47.9 | 73.7 | | 0.15 |
| James Y Joyner Magnet | 49.3 | 49.3 | 76.4 | 0.16 | 0.01 |
| Nebo | 52.7 | 62.0 | 80.0 | 0.18 | 0.00 |
| Northside | 62.2 | 59.4 | 81.4 | 0.00 | 0.05 |
| PW Moore | 29.7 | 31.1 | 40.8 | | 0.26 |
| Scotland Neck Leadership | 26.4 | 33.0 | 41.7 | 0.19 | 0.06 |
| Sheep-Harney | 52.7 | 56.9 | 75.9 | 0.23 | 0.05 |
| Supply | 45.6 | 41.7 | 71.2 | 0.26 | 0.09 |
| Weeksville | 72.2 | 54.3 | 81.5 | | 0.04 |
| State Average | 58.6 | 57.2 | 75.5 | 0.16 | 0.13 |

Table 5b. NC NIC Elementary School Performance Data; Cohort 2 (2018-19)

Note: Short-term suspension rates are per 1000 students

VI. Findings

Evaluation Question 1: To what extent does NC NIC professional learning meet the ESSA-aligned Standards for Professional Learning adopted by the NC State Board of Education?

Finding: Using five sources of evidence across nineteen criteria, *NC NIC Professional Learning met the all Standards for Professional Learning*, scoring in the "Excellent" range on the Professional Learning quality rubric.

The North Carolina State Board of Education adopted the Learning Forward Standards of Professional Learning, to make explicit that the purpose of professional learning is for educators to develop the knowledge, skills, practices, and dispositions they need to help students perform at higher levels¹¹.

While it is recommended that state and district leaders utilize the Standards to guide decisions around professional learning offerings, there has been a missed opportunity to create an evidence base around the extent these standards are being met across professional learning programs.

¹¹ NCDPI Professional Development

"How often are our teachers not provided with the Professional Development that they need to get better?

With STL, teachers get what they need...to look at what they're doing and make it better. Because they're the number one factor in the classroom that will improve achievement" - NIC Principal

To that end, EPIC created the Professional Learning Quality (PLQ) rubric. The PLQ serves as an objective measure of the NC NIC professional learning quality, as well as a tool that could provide continuity in assessing diverse professional learning offerings across the state going forward.

Professional Learning Quality (PLQ) rubric dimension and scoring: The PLQ rubric is structured around the seven Learning Forward standards adopted by NC SBE, each with 2-3 sub-criteria (19 total), based on the operational definition of each Standard. Scoring of the rubric is predicated on the extent there is sufficient evidence from professional learning sessions and related data collection to satisfy each criterion.

Table 6. Professional Learning Quality (PLQ) Rubric Standards and Criteria

| Standard 1: Learning Communities | Standard 2: Leadership |
|---|--|
| Committed to | Leaders who |
| 1-1. Continuous improvement | 2-1. Develop capacity |
| 1-2. Collective responsibility | 2-2. Advocate |
| 1-3. Goal alignment | 2-3. Create support systems |
| Standard 3: Resources | Standard 4: Data |
| Requires | Uses variety of |
| 3-1. Prioritizing resources | 4-1. Student data |
| 3-2. Monitoring resources | 4-2. Educator data |
| 3-3. Coordinating resources | 4-3. System data |
| Standard 5: Learning Designs Integrates 5-1. Theories 5-2. Research 5-3. Models of human learning | Standard 6: Implementation Applies 6-1. Continuous improvement 6-2. Collective Responsibility |
| Standard 7: Outcomes | |

Aligns with... 7-1. Research on change 7-2. Sustained support

9

Though the type and amount of evidence will vary between different professional learning programs, the PLQ scoring can be applied universally:

| PLQ Rubric Score | Requirements |
|------------------|---|
| Exemplary | Multiple sources of evidence is available for all criteria, across all standards |
| Excellent | Multiple sources of evidence is available for at least one criteria, across all standards |
| Sufficient | No more than one source of evidence is available for at least one criterion, across all standards |
| Developing | One or more sources of evidence are present for three to six standards |
| Unsatisfactory | One or more sources of evidence are present for less than three standards |

To illustrate, the first section of the NC NIC PLQ rubric would be (see Appendix E for full rubric and scoring):

| | | NC NIC Professional Learning Evidence Sources | | | | rces |
|-----------------------|---------------------------|---|------------------------------|---------------------|---------------|----------------------|
| | | Session Eval Quant Data | Session Eval Qual Data | Telephone Survey | Web Survey | Program Artifacts |
| Standard 1 | Learning Communities | | | • | | |
| Committed to. | | | | | | |
| Criteria 1-1 | continuous improvement | x | х | х | х | х |
| Criteria 1-2 | collective responsibility | x | | | | х |
| Criteria 1-3 | goal alignment | x | | х | | x |
| Standard 2 Leadership | | | | | | |
| Leaders who | | | | | | |
| etc | etc | | | | | |

Evaluation Question 2: To what extent does NC NIC professional learning result in measurable changes in educators knowledge and skills?

Finding: On average, there was a seven-fold increase each training session in the number of participants who felt they have a high level knowledge around the NC NIC professional learning topics. Substantial improvement in knowledge and skills were seen for every training day, across all cohorts, school levels, and NC NIC roles.

Participants rated themselves on a five-point assessment scale to indicate their change in knowledge before and after completing each NC NIC session. A total of 3961 self-assessment items (1771 items for Cohort 1 & 2190 items for Cohort 2) were used to calculate changes in knowledge as a result of NC NIC professional learning sessions.

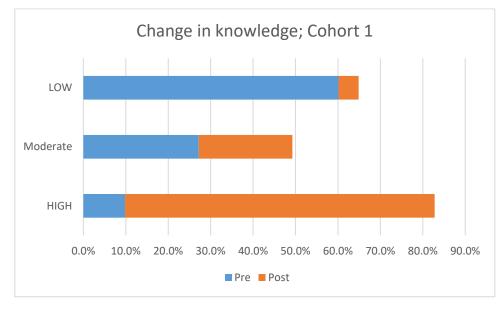
The table below demonstrates that even though it was the second year of training for Cohort 1, participants showed the same gains in learning as the Cohort 2 participants.

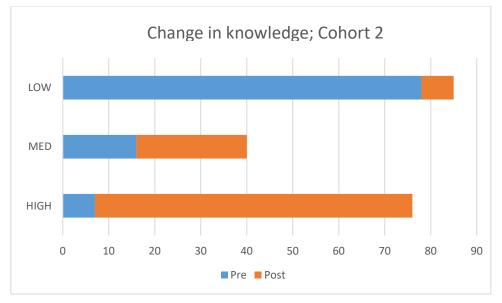
| Tuble 7. Self-assessment of knowledge & Skins | | | | | |
|---|-----------|--------------|------------|-------------|--|
| | Before NC | NIC Sessions | After NC N | IC Sessions | |
| | Cohort 1 | Cohort 2 | Cohort 1 | Cohort 2 | |
| High | 9.8% | 7% | 73.0% | 69% | |
| Medium | 27.2% | 16% | 22.1% | 24% | |
| Low | 60.1% | 78% | 4.8% | 7% | |

Table 7. Self-assessment of Knowledge & Skills*

*Distinction between High/Very High and Low/Very Low ratings were not meaningful, thus combined here for reporting.







Evaluation Question 3: To what extent does NC NIC professional learning result in observable, measurable impact within Networked Improvement Community schools?

Finding: An examination of open-ended written survey items revealed *that 74% of respondents identified an action or outcome as the greatest benefit to their work with STL.*

A hallmark of the Improvement Science model is that actions and outcomes will be tailored and responsive to each unique setting (See Appendix C for an example of a Driver Diagram, one of the core outcomes-oriented tools used among NC NICs). This lends itself to an inductive evaluation approach, which allows for individuals to convey their experiences without labeling or categorizing it.

To this end, two data sources were utilized to identify tangible changes that are occurring due participation in the NC NIC.

1) Open-ended written survey item: "What has been the greatest benefit of your involvement with Schools That Lead?"

2) Semi-structured interview question: "Over the past (or past two) school year(s), can you provide examples of concrete changes you've made, or plan to make, within your school directly due to the skills and practices you have learned from STL?"

An examination of open-ended written survey items revealed that 128 out of 174 respondent (74%) of respondents identified *an action* or *outcome* as the greatest benefit to their work with STL.

When looking at the data by school level, the proportion from elementary school and high school are comparable to the overall rating (77% and 79%, respectively), however only 58% of middle school respondents indicated the greatest benefit of STL is related to an action or outcome.

| Table 8. Proportion of open-ended survey responses indicating an Action or Outcome as |
|---|
| the greatest benefit from STL |

| | Proportion of Action or Outcome Focused Responses |
|-------------------|--|
| Overall | 74% |
| Elementary School | 77% |
| Middle School | 58% |
| High School | 79% |

The Constant Comparative qualitative research method¹² was then used to categorize the 128 action-oriented responses, to better understand their foci. This yielded five categories, shown below with their relative frequency¹³ and an exemplar from the data. (See Qualitative Addendum for other action/outcome qualitative data that did not group in these categories, but reflect concepts such as Buy-in, Scale, and Sustainability).

¹² Glaser, B. Social Problems, Vol. 12, No. 4 (Spring, 1965), pp. 436-445

¹³ Note the percent will not sum up to 100%, because some responses might capture multi foci, eg how a change instruction resulted in student level improvements

| Data Category | Relative Contribution | Exemplar of Action/Outcome Focused Responses, by Category |
|-----------------------|--------------------------|---|
| School Performance | 35% | We were the only school in the district that was low performing with horrible growth data We got involved with STL and probably the moment that was the biggest was whenever they showed us the little water spout analogythey provided us with some tools to be able to slow down, because we wanted to fix everything, so we needed to spend time just focusing on the parts that are leaking out more water. <u>After that school year, the middle school ended up</u> having the top growth in the district, and it was no longer listed as low performing, and so I personally called (STL facilitators) and told them thank you! (NC NIC Principal) <u>"We've also exceeded growth every year that we've been in STL, and also our</u> most recent growth results were in the top 5 percent of schools in NC for growth and those things don't happen by accident. It happens by an intentional designa shared lift of what we already know to be true about good pedagogy and teaching, but then also that micro-level changes occurring in a classroom." (NC NIC Principal) "It has worked hand-in-hand with our school improvement plan. We have been able to take a deeper look at issues in our school to find solutions." (NC |
| Student Success | 34% | NIC Principal) "Actually observing and recording immediate positive academic, attendance, and/or behavioral results for the students that need it the most. <u>This is very empowering to me because I don't have to wait for benchmarks,</u> <u>EOGs, or graduation to see that what I am doing for these students is moving</u> <u>them in the right direction!"</u> (NC NIC Teacher) |
| Instruction | 24% | "Schools That Lead has transformed me as a teacher to be more vocal about things that work for my students. <u>STL has pushed me outside of my comfort</u> <u>zone to try new things and grow as a professional. STL has changed my</u> <u>perspective from "Why aren't my students learning this?" to "What can I try</u> <u>with this one (or small group of students) that may improve their</u> <u>learning?"</u> and being very specific about the who, what, where, why, when, how of doing so." (NC NIC Teacher) |
| Data | 15% | <u>When I started looking at my data, one of the things that I actually thought</u> <u>was a problemit was not attendanceit was not behavior. It was our Math</u> <u>scores</u> it makes you look at all of the piecesare their reading scores so low that it also crosses over into their Math? It made us look at how all of those pieces fit together, and then how many of those kids fall in every single category, so it was hugeit was an eye opener. (NC NIC Principal) <u>we thought behavior, behavior, behavior, but then I started looking at the</u> <u>data and I was like, no - our issue is attendance and our behavior is bad</u> <u>because our attendance is poor and it goes hand in hand.</u> So we really tried to push attendance now, we're using the same improvement science to try to fix the tardies. So much so that I'm trying to convince the district to change the (school start time) policy. (NC NIC Teacher) |

Table 9. Proportion of action/outcome related benefits from qualitative data, by category

| | | Part of looking at that data was pulling from improvement science so <u>the</u> way we incorporate that was look at standards as we're preparing for kids to get ready for those Benchmarkslook and see are there trends that you're <u>seeing?</u> I want you to tell me is it over a race of kids? Is it a (gender) of kids? Is it your high kids? Is it your low, your middle? Dig deep! So, improvement science helps us to look at that, dig deeper and checking it over period of time. What does the data tell you? (NC NIC Principal) |
|------------|-----|---|
| Leadership | 11% | "Without question, the greatest benefit has been the impact that Schools That Lead has had on teacher leadership. <u>I've watched teachers take the reins</u> with specific projects and truly demonstrate effective leadership throughout <u>the school.</u> They have also changed our perspective as to how we view school improvement and how we should approach problem areas within our school." (NC NIC Principal) |

Evaluation Question 4: To what extent do educators believe the NC NIC model will ultimately impact the legislated student outcomes within their schools?

A Qualtrics survey administered in June 2020 asked respondents how likely they thought their NC NIC work will impact the legislated outcome relevant to their school.

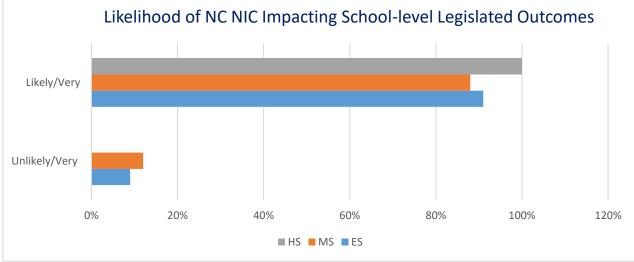
Finding: 100% of NC NIC educators working in high schools *believe that NC NIC will ultimately impact the legislated outcomes*. Elementary and middle schools have distributions similar to each other, with close to 90% indicating the NC NIC professional learning will impact the desired school-level outcomes

Table 10. Likelihood NC NIC Sessions will Impact the Legislated Student Outcomes

| | Elementary | Middle | High |
|------------------------|------------|--------|------|
| Unlikely/Very unlikely | 9% | 12% | 0% |
| Likely/Very likely | 91% | 88% | 100% |

*Distinction between Unlikely/Very Unlikely and Likely/Very Unlikely ratings were not meaningful, so were combined here for reporting.





Survey respondents were also asked to consider the impact of their participation in NC NIC compared with the impact of other district- and/or state-led school improvement programs.

Finding: Overall, close to three-quarters of respondents *found the NC NIC program to be more impactful than other school improvement programs* provided by the district- and state, and only 2% felt it was less impactful.

The distribution of responses were similar for Teacher Leaders and Improvement Facilitators, however a slightly greater proportion of principals (33%) rated NC NIC as *equally* impactful, compared with less than a quarter for TLIs and IFI.

| Table 11. Impact of NC NIC Program, by Participant Type | | | | |
|---|-------|---------|--|--|
| | Count | Percent | | |
| STL is a more <i>impactful approach to school</i> <i>improvement</i> compared with district or state-level school improvement efforts | 123 | 72% | | |
| STL is an <u>equally impactful approach to school</u> improvement compared with district or state-level school improvement efforts | 44 | 26% | | |
| STL is a <i>less impactful approach to school</i> <i>improvement</i> compared with district or state-level school improvement efforts | 4 | 2% | | |

"I've been teaching for 18 years, but I've never participated in anything like this. I was our county teacher of the year and then I was the regional teacher of the year, so I've had a lot of opportunities to do things, but so far this has been, in my career, the most valuable." -NIC Teacher

VII. Conclusion & Value to Educators

Findings from the Year 2 North Carolina Networked Improvement Communities (NC NIC) evaluation are highly promising – educators reported concrete changes in leadership, classroom instruction, and consequently student outcomes such as attendance, discipline, and test scores. Qualitative data reflects strong educator buy-in, and appreciation for an approach that empowers them to help their students succeed.

Improvement Science, the cornerstone of Networked Improvement Communities, provides educators with the tools to identify, diagnose, and systematically test solutions to break down barriers impeding student success. Findings from this study suggests that NC Networked Improvement Communities is a promising approach, allowing schools to be nimble while having systematic methods for solving never-before seen problems as they arise.

When the General Assembly funded Schools That Lead in 2018, no one could have conjured the dramatic shift in education that is currently underway due to the COVID-19 pandemic. The only certain thing about the upcoming school year in North Carolina is that it will be a novel experience for everyone, and thus will require novel approaches to ensure all students continue to learn and grow.

QUALITATIVE ADDENDUM

I think looking at it from the angle of the improvement science is so important. We'll try something and then we're like, oh well, it worked or not....but *(improvement science)* really makes us follow through with these ideas and what we're working on. *My hope would be that* everybody would have the opportunity to participate in something like this.

- NIC Teacher

BUY-IN

I wouldn't even know (improvement science) was a thing unless we participated in STL and that just doesn't seem okay...Make sure your leaders know how to do (improvement science). Teach that to students when they're in their undergrad classes for college to be a teacher. - (NC NIC Teacher)

I think from a professional perspective...I've gotten so much more from working with (STL facilitators) than I did in graduate school....you're comfortable talking to them about your weaknesses and sharing things that you may not do inside your district...It's a very free environment to do that. I think for staff, it just really builds leadership. I'm looking forward to the second year...I can see the progression of how it's going to be a successful opportunity for us.

- (NC NIC Principal)

SCALE

This has moved far beyond just the 4 walls of our classrooms, so now, they're really getting us ready to lead further than our classroom in our own school as well as within our district and even beyond that too. From the teacher perspective, where we started off with just academic approaches and improvement, we're now looking at things like attendance and social

emotional and behavior, and we're applying the same improvement techniques to those aspects, which is awesome.

- (NC NIC Teacher)

When we really get clear about the issues that we're seeing within our own population, when we start to see improvements after we've tested our ideas and we're starting to actually see results, to scale that up...we're able to share now to other middle schools in our district and talk to other teachers a little bit about what we're seeing in our own classrooms and it's become kind of contagious... and we actually have value and credibility behind what we're teaching them because we have the data to back that up.

- (NC NIC Teacher)

SUSTAINABILITY

Normal initiatives are very much top down, where you might have a school improvement team, but at the end of the day, it's pretty much, this is a principal vision...so, this flips that model on its head and really allows teachers to work with other teachers to see what works for them, with which kids and why...and then once two or three teachers are using it, those two or three teachers come to me and say, hey, look at what we're doing, what about if we give this to more teachers and maybe put some financial backing behind it. - (NC NIC Principal)

"I think the biggest piece for us is what we've learned is the relationship piece. The building of relationship between the teacher and the child has helped remove some of these kids off of multiple lists, simply because now, someone cares, so it has definitely taught us the *importance of building* relationships with kids and getting to know them." -NIC Teacher

SOCIAL EMOTIONAL LEARNING

So when we do...reviews with the stakeholders, students and their parents, to demonstrate why kids aren't coming to school, we found that a lot of our problem was actually in our locus of control. While we assumed it was things like transportation or secondary responsibilities, it actually was things like kids not feeling represented in what we were learning, and low historical gains in feeling student success, or the way in which we did discipline or how certain teachers talk to kids, or the fact that they had Math first block of the day. So, when we got really curious, we found that we could actually change all those things and so, we've embarked on an entire different master schedule. - (NC NIC Principal)

IMPACT ON REMOTE LEARNING

(Some of my students) don't have access to the internet. Using improvement science, I started this Pen Pal thing with my kids where I send them postcards and then I have some sort of social emotional activity that they respond to. Some children haven't done a stitch of academic work, but they're responding to these postcards and that's what I want because eventually, they're going to come back to school....and if I can keep up that positive connection to school, it's going to make next year and whoever their teacher is next year's job much

easier....I wouldn't have even done that if I had not been exposed to this program. - (NC NIC Teacher)

Some (approaches to remote learning) didn't work at all and instead of us being frustrated, we embraced that process and said, okay, we're going to end this now then because we agree that this doesn't work and we're going to try a new approach with this cohort of kids that we thought was missing. Whereas before, we would have just continued to do the same thing over and over again because that was the plan. - (NC NIC Teacher)

APPENDIX

APPENDIX A: NORTH CAROLINA NETWORKED IMPROVEMENT COMMUNITIES MEMBER LIST

COHORT 1

Elementary School Networked Improvement Community (n=14)

- Aulander Elementary, Bertie County Schools
- Bugg Elementary School, Wake County Public School System
- Colerain Elementary, Bertie County Schools
- East Garner Elementary School, Wake County Public School System
- Grays Chapel Elementary School, Randolph County Schools
- Kenansville Elementary, Duplin County Schools
- Liberty Elementary, Randolph County Schools
- Millbrook Environmental Connections Magnet Elementary, Wake County Public School System
- Rose Hill Magnolia Elementary, Duplin Country Schools
- Royal Elementary School, Franklin County Schools
- Spindale Elementary School, Rutherford County Schools
- Warsaw Elementary, Duplin County Schools
- West Bertie Elementary, Bertie County Schools
- Windsor Elementary, Bertie County Schools

Middle School Networked Improvement Community (n=8)

- Albemarle Middle School, Stanly County Schools
- Bertie Middle School, Bertie County Schools
- Butner-Stem Middle School, Granville County Schools
- Centennial Campus Magnet Middle School, Wake County Public School System
- East McDowell Middle School, McDowell County Schools
- Northeastern Randolph Middle School, Randolph County Schools
- Southern Middle School, Person County Schools
- Pattillo Middle School, Edgecombe County Schools

High School Networked Improvement Community (n=4)

- Bertie High School, Bertie County Schools
- James Kenan High School, Duplin County Schools
- Lincoln Charter School
- Providence Grove High School, Randolph County Schools

COHORT 2

Elementary School Networked Improvement Community (n=15)

- Central Elementary, Elizabeth City Pasquotank County Schools
- Central Elementary, Stanly County Schools
- Douglass Elementary, Rockingham County Schools
- Eastfield Global Magnet, McDowell County Schools
- Glenwood Elementary, McDowell County Schools
- Inborden Elementary S.T.E.A.M Academy, Halifax County Schools
- J.Y. Joyner Magnet Elementary, Wake County Schools
- JC Sawyer Elementary, Elizabeth City Pasquotank County Schools
- Nebo Elementary, McDowell County Schools
- Northside Elementary, Elizabeth City Pasquotank County Schools
- P.W. Moore Elementary, Edgecombe County Public Schools
- Scotland Neck Elementary Leadership Academy, Halifax County Schools
- Sheep-Harney Elementary, Elizabeth City Pasquotank County Schools
- Supply Elementary, Brunswick County Schools
- Weeksville Elementary, Edgecombe County Schools

Middle School Networked Improvement Community (n=7)

- East Wake Middle School, Wake County Schools
- Elizabeth City Middle School, Edgecombe County Schools
- Enfield Middle S.T.E.A.M Academy, Halifax County Schools
- J.E. Holmes Middle School, Rockingham County Schools
- River Road Middle School, Elizabeth City Pasquotank County Schools
- Southwestern Randolph Middle School, Randolph County Schools
- West McDowell Middle School, McDowell County Schools

High School Networked Improvement Community (n=10)

- Albermarle High School, Stanly County Schools
- Buncombe County Early College, Buncombe County Schools
- Charlotte Secondary School, Charter School
- Elizabeth City Pasquotank Early College, Elizabeth City Pasquotank County Schools
- J.F. Webb High School, Granville County Schools
- Morehead High School, Rockingham County Schools
- Northeastern High School, Elizabeth City Pasquotank County Schools
- Pasquotank County High School, Elizabeth City Pasquotank County Schools
- Randolph Early College High School, Randolph County Schools
- Southeast Collegiate Prep Academy, Halifax County Schools

APPENDIX B. CALENDAR OF SERVICE



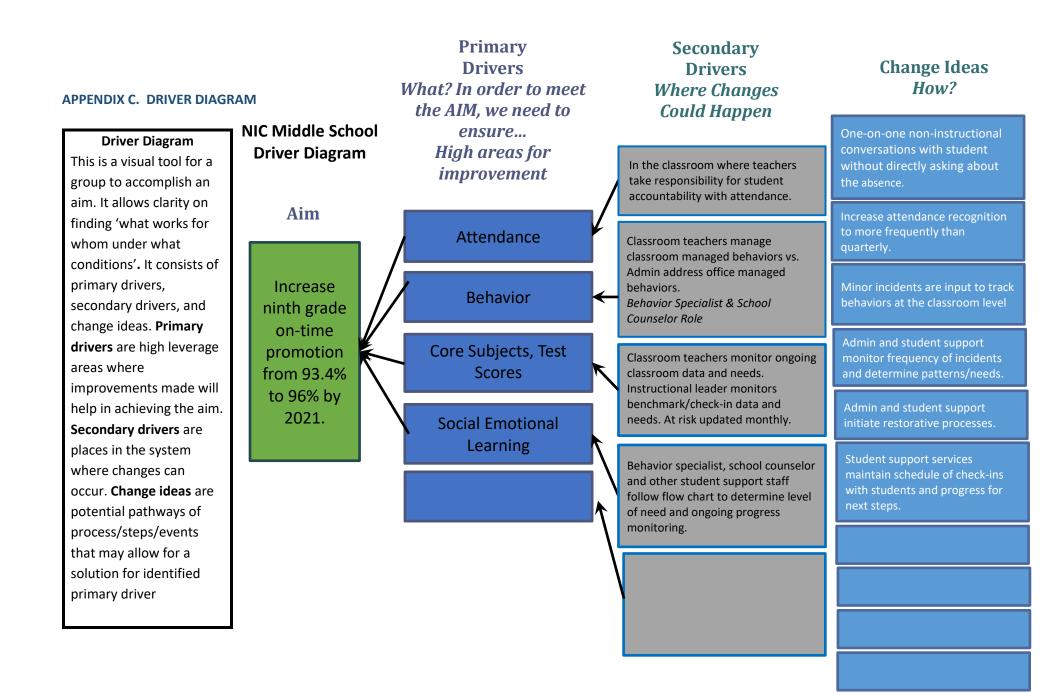
NC Networked Improvement Communities Cohort 1 Calendar of Service 2019-2020

| Principal Leadership Initiative (PLI) | Improvement Facilitator Initiative (IFI) | Teacher Leadership Initiative (TLI) – East | Teacher Leadership Initiative (TLI) – West | | | | | |
|--|---|---|---|--|--|--|--|--|
| • • | • | | · · | | | | | |
| Tues, Sept 17 | Thurs, Sept 19 | Tues-Wed, Oct 1-2 | Thurs-Fri, Oct 3-4 | | | | | |
| Albemarle Middle | Southwestern Randolph | Centennial Campus | Pleasant Gardens | | | | | |
| Albemarle | Middle School | Magnet Middle | Elementary | | | | | |
| Stanly County | Asheboro | Raleigh | Marion | | | | | |
| | Randolph County | Wake County | McDowell County | | | | | |
| Tues, Oct 22 | Thurs, Oct 24 | Wed, Nov 6 | Thurs, Nov 7 | | | | | |
| East Garner Elementary | East Garner Elementary | Franklin County Schools | Liberty Elementary | | | | | |
| Garner | Garner | Louisburg | Liberty | | | | | |
| Wake County | Wake County | Franklin County | Randolph County | | | | | |
| | NC NIC Team | Mid-Year | | | | | | |
| | Tues, D | ес 3 | | | | | | |
| | Hampton Inn | Carrboro | | | | | | |
| Tues, Jan 28 | Thurs, Jan 30 | Thurs-Fri Feb 27-28 | Tues-Wed Feb 25-26 | | | | | |
| Millbrook Environmental | Millbrook Environmental | Bugg Elementary School | Lincoln Charter School | | | | | |
| Connections Magnet | Connections Magnet | Raleigh | Lincolnton | | | | | |
| Elementary | Elementary | Wake County | Lincoln County | | | | | |
| Raleigh | Raleigh | | | | | | | |
| Wake County | Wake County | | | | | | | |
| Tues, March 10 | Thurs, March 12 East | | | | | | | |
| East Garner Elementary | Garner Elementary School | | | | | | | |
| Garner | Garner | | | | | | | |
| Wake County | Wake County | | | | | | | |
| | , | | | | | | | |
| | Summer Co | nvening | | | | | | |
| | Wed, June 24 | | | | | | | |
| | *(Cancelled due to COVID-19) | | | | | | | |



NC Networked Improvement Communities Cohort 2 Calendar of Service 2019-2020

| Principal Leadership Initiative (PLI) | Improvement Facilitator Initiative (IFI) | Teacher Leadership Initiative (TLI) – East | Teacher Leadership Initiative (TLI) – West |
|--|---|---|---|
| Wed, Sept 18 | Fri, Sept 20 | Tues-Wed, Oct 8-9 | Thurs-Fri, Oct 10-11 |
| Albemarle Middle School | Southwestern Randolph | Centennial Campus | Nebo Elementary |
| Albemarle | Middle School | Magnet Middle School | McDowell County |
| Stanly County | Asheboro | Raleigh | |
| | Randolph County | Wake County | |
| Wed, Oct 23 | Fri, Oct 25 | Tues-Wed, Nov 19-20 | Thurs-Fri, Nov 21-22 |
| East Garner Elementary | East Garner Elementary | East Wake Middle School | Buncombe Early College |
| Garner | Garner | Raleigh | Asheville |
| Wake County | Wake County | Wake County | Buncombe County |
| | NC NIC Team | Mid-Year | |
| | Tues, D | Dec 3 | |
| | Hampton Inr | n Carrboro | |
| Wed, Jan 29 | Fri, Jan 31 | Thurs-Fri, Feb 13-14 | Tues-Wed, Feb 11-12 |
| JY Joyner Elementary | JY Joyner Elementary | JF Webb High School | Morehead High Eden |
| Raleigh | Raleigh | Oxford | Rockingham County |
| Wake County | Wake County | Granville County | |
| Wed, March 11 | Fri, March 13 | Thurs, March 19* | Wed, March 18* |
| East Garner Elementary | (Virtual due to | Centennial Campus | Impact Alamance |
| Garner | COVID-19) | Magnet Middle School | Burlington Alamance |
| Wake County | | Raleigh | County |
| | | Wake County | |
| | Summer Co | onvening | |
| | Tues-Wed, J | une 23-24 | |
| | *(Cancelled due | to COVID-19) | |



APPENDIX D. NC NIC SCHOOLS SOCIODEMOGRAPHICS

COHORT 1

| School Name | School Size | % Caucasian | % African American | % Latino | Rural/Urban | % Free & Reduced Lunch | School Performance Grade | Teacher Turnover (%) |
|-------------------------------|----------------|----------------|--------------------------|-------------|----------------|---------------------------|--------------------------------|-------------------------|
| Albemarle Middle | 370 | 33 | 39 | 15 | Rural, Distant | 56.53 | С | 0.21 |
| Aulander Elementary | 130 | 13 | 78 | 5 | Rural, Remote | 65.19 | С | 0.56 |
| Bertie High | 521 | 10 | 87 | 2 | Rural, Remote | 56.73 | D | 0.28 |
| Bertie Middle | 486 | 13 | 83 | 2 | Rural, Remote | 58.43 | D | 0.21 |
| Bugg Elementary | 347 | 2 | 74 | 19 | City, Large | 70.69 | F | 0.19 |
| Butner-Stem Middle | 470 | 25 | 35 | 31 | Rural, Distant | 60.75 | D | 0.24 |
| Centennial Campus Middle | 475 | 14 | 78 | 3 | City, Large | 46.23 | D | 0.10 |
| Colerain Elementary | 187 | 10 | 78 | 6 | Rural, Remote | 64.25 | С | 0.07 |
| East Garner Elementary | 540 | 75 | 3 | 17 | City, Large | 65.37 | D | 0.18 |
| East McDowell Middle | 609 | 81 | 1 | 13 | Rural, Fringe | 61.44 | С | 0.12 |
| Grays Chapel Elementary | 474 | 16 | 34 | 48 | Rural, Fringe | 49.37 | С | 0.00 |
| James Kenan High | 665 | 38 | 30 | 27 | Rural, Distant | 74.13 | С | 0.27 |
| Kenansville Elementary | 583 | 54 | 8 | 29 | Rural, Distant | 68.93 | С | 0.06 |
| Liberty Elementary | 420 | 81 | 3 | 10 | Rural, Fringe | 58.17 | D | 0.23 |
| Lincoln Charter | 2113 | 10 | 46 | 35 | Rural, Fringe | 7.02 | В | |
| Millbrook Elementary | 498 | 73 | 5 | 17 | City, Large | 66.13 | D | 0.12 |
| Northeastern Randolph Middle | 564 | 76 | 6 | 14 | Rural, Fringe | 45.04 | С | 0.12 |
| Providence Grove High | 744 | 15 | 27 | 55 | Rural, Fringe | 36.93 | С | 0.13 |
| Rose Hill-Magnolia Elementary | 1130 | 40 | 34 | 20 | Rural, Distant | 78.53 | D | 0.22 |
| Royal Elementary | 433 | 53 | 28 | 11 | Rural, Distant | 65.71 | С | 0.16 |
| Southern Middle | 452 | 49 | 33 | 7 | Town, Distant | 46.51 | С | 0.26 |
| Spindale Elementary | 410 | 12 | 77 | 10 | Rural, Fringe | 65.08 | С | 0.08 |
| W A Pattillo Middle | 292 | 12 | 47 | 37 | Rural, Fringe | 65.58 | D | 0.26 |
| Warsaw Elementary | 778 | 5 | 89 | 4 | Rural, Distant | 85.13 | D | 0.17 |
| West Bertie Elementary | 243 | 15 | 79 | 1 | Rural, Remote | 69.49 | D | 0.18 |
| Windsor Elementary | 374 | 33 | 39 | 15 | Rural, Remote | 65.43 | С | 0.14 |

Note: Dash indicates data isn't available.

COHORT 2

| School Name | School Size | % Caucasian | % African American | % Latino | Rural/Urban | % Free & Reduced Lunch | School Performance Grade | Teacher Turnover (%) |
|-----------------------------------|----------------|----------------|--------------------------|-------------|-----------------|------------------------------|--------------------------------|----------------------------|
| Albemarle High | 410 | 36 | 40 | 11 | Rural, Distant | 62.95 | С | 0.18 |
| Central Elementary (ECP) | 403 | 53 | 35 | 9 | Rural, Distant | 50.48 | C | 0.04 |
| Central Elementary (Stanly) | 552 | 36 | 36 | 14 | Rural, Distant | 57.24 | D | 0.17 |
| Charlotte Secondary | 290 | 23 | 41 | 24 | City, Large | 28.62 | C | - |
| Douglass Elementary | 365 | 60 | 19 | 13 | Town, Distant | 55.47 | С | 0.08 |
| Early College | 272 | 68 | 3 | 22 | Suburb, Midsize | 30.91 | В | 0.14 |
| East Wake Middle | 659 | 12 | 37 | 46 | City, Large | 60.95 | D | 0.12 |
| Eastfield Global Magnet | 314 | 52 | 5 | 36 | Rural, Fringe | 63.04 | С | 0.20 |
| Elizabeth City Middle | 628 | 41 | 43 | 9 | Rural, Distant | 60.63 | D | 0.21 |
| Elizabeth City Pasquotank EC | 105 | 45 | 30 | 15 | Rural, Distant | 42.72 | В | - |
| Enfield Middle S.T.E.A.M. Academy | 239 | 1 | 89 | 8 | Rural, Distant | 72.80 | D | 0.28 |
| Glenwood Elementary | 384 | 87 | 0 | 6 | Rural, Fringe | 47.00 | В | 0.07 |
| Inborden Elementary | 254 | 1 | 94 | 4 | Rural, Distant | 74.33 | С | 0.26 |
| J C Sawyer Elementary | 398 | 32 | 53 | 8 | Rural, Distant | 54.18 | С | 0.30 |
| J E Holmes Middle | 661 | 55 | 23 | 16 | Town, Distant | 60.41 | С | 0.13 |
| J. F. Webb High | 480 | 25 | 60 | 11 | Rural, Distant | 63.67 | С | 0.19 |
| John M Morehead High | 778 | 56 | 20 | 17 | Town, Distant | 49.43 | С | 0.17 |
| Joyner Elementary | 656 | 61 | 21 | 13 | City, Large | 23.79 | В | 0.14 |
| Nebo Elementary | 361 | 82 | 4 | 7 | Rural, Fringe | 59.35 | С | 0.04 |
| Northeastern High | 653 | 36 | 51 | 7 | Rural, Distant | 45.68 | С | 0.25 |
| Northside Elementary | 485 | 58 | 26 | 8 | Rural, Distant | 45.93 | С | 0.15 |
| P W Moore Elementary | 403 | 24 | 62 | 8 | Rural, Distant | 66.74 | F | 0.27 |
| Pasquotank County High | 756 | 45 | 41 | 7 | Rural, Distant | 51.23 | D | 0.28 |
| Randolph Early College High | 357 | 58 | 3 | 33 | Rural, Fringe | 32.02 | Α | 0.08 |
| River Road Middle | 586 | 34 | 51 | 9 | Rural, Distant | 59.77 | С | 0.27 |
| Scotland Neck Elementary | 214 | 1 | 89 | 9 | Rural, Distant | 76.82 | F | 0.14 |
| Sheep-Harney Elementary | 376 | 31 | 46 | 15 | Rural, Distant | 52.92 | С | 0.16 |
| Southeast Halifax Collegiate | 234 | 1 | 91 | 6 | Rural, Distant | 64.57 | D | 0.52 |
| Southwestern Randolph Middle | 549 | 67 | 2 | 28 | Rural, Fringe | 53.09 | С | 0.12 |
| Supply Elementary | 573 | 54 | 18 | 21 | Rural, Distant | 81.91 | D | 0.13 |
| Weeksville Elementary | 293 | 57 | 29 | 7 | Rural, Distant | 50.34 | С | 0.15 |
| West McDowell Middle | 654 | 79 | 3 | 12 | Rural, Fringe | 48.20 | С | 0.04 |

Note: Dash indicates data isn't available.

APPENDIX E. PROFESSIONAL LEARNING QUALITY Professional Learning RUBRIC

| | | NC | NIC Profession | al Learning Evi | dence Sour | ces |
|--------------|---------------------------|--------------|----------------|-----------------|------------|-----------|
| | | Session Eval | Session Eval | Telephone | Web | Program |
| | | Quant Data | Qual Data | Survey | Survey | Artifacts |
| Standard 1 | | Learn | ing Communiti | es | | |
| Committed t | 0 | | | | | |
| Criteria 1-1 | Continuous improvement | х | х | х | х | х |
| Criteria 1-2 | Collective responsibility | х | | | | х |
| Criteria 1-3 | Goal alignment | х | х | х | | х |
| | | | | | | |
| Standard 2 | | | Leadership | Γ | | I |
| Leaders who | | | | | | |
| Criteria 2-1 | Develop capacity | х | х | х | Х | x |
| Criteria 2-2 | Advocate | х | | х | | х |
| Criteria 2-3 | Create support systems | х | x | х | Х | х |
| Chandand 2 | | | | | | |
| Standard 3 | | | Resources | | | |
| Requires | Duioviticio e un composi | | | | | |
| Criteria 3-1 | Prioritizing resources | | | | | X |
| Criteria 3-2 | Monitoring resources | | | | | |
| Criteria 3-3 | Coordinating resources | | | X | Х | |
| Standard 4 | | | Data | | | |
| Uses variety | of | | | | | |
| Criteria 4-1 | Student data | х | x | х | х | x |
| Criteria 4-2 | Educator data | х | x | х | х | x |
| Criteria 4-3 | System data | х | х | х | х | х |
| | | | | | | |
| Standard 5 | | Learn | ing Communiti | es | | 1 |
| Committed t | 0 | | | | | |
| Criteria 5-1 | Theories | x | x | x | х | х |
| Criteria 5-2 | Research | x | x | | | х |
| Criteria 5-3 | Models of Human learning | х | | x | | х |
| <u> </u> | | | | | | |
| Standard 6 | | Im | plementation | | | 1 |
| Applies | | | | | | |
| Criteria 6-1 | Continuous improvement | Х | x | x | Х | Х |
| Criteria 6-2 | Collective responsibility | Х | | | | x |
| Standard 7 | | | Outcomes | | | |
| Aligns with | | | | | | |
| Criteria 7-1 | Research on change | х | x | x | х | x |
| Criteria 7-2 | Sustained support | | x | x | | x |

APPENDIX F. SESSION EVALUATION QUESTIONS

A total of 156 questions were answered by the participants over the 42 NC NIC meetings that were conducted by STL in year 2. The session evaluation questions were structured as pre- and post- Likert style questions with values ranging from 1 to 5.

| Session Day | C1 | C2 | Question Focus | Principal | Teacher Leader | Improvement Facilitator |
|----------------|----|----|---|-----------|-------------------|----------------------------|
| 1 (&2 TLI) | x | | Advancing collective efficacy | х | х | x |
| 1 (&2 TLI) | | x | Understanding different ways teacher leadership is conceptualized | | х | |
| 1 (&2 TLI) | x | | Drafting Plan-Do-Study-Act (PDSA) cycles for testing | х | х | x |
| 1 (&2 TLI) | | x | Understanding predictive power of early warning | х | x | |
| 1 | | x | Being prepared to create a Watch List | x | | |
| 1 (&2 TLI) | x | | Setting benchmarks for watchlists | x | x | x |
| 1 (&2 TLI) | | x | Collecting Quality evidence of student learning | | x | |
| 1 (&2 TLI) | | x | Selecting key problem of practice in classroom | | х | |
| 1 | x | | Establishing firm family of measures | x | | x |
| 1 (&2 TLI) | x | | Having concrete measures for success for building skills in other | | x | |
| 1 (&2 TLI) | | x | Collecting Quality evidence of student learning | | | |
| 1 | | x | Being able to distinguish an Improvement Science approach from other efforts | | | x |
| 1 (&2 TLI) | | x | Knowing key tenets of improvement science | x | x | |
| 1 (&2 TLI) | | x | Creating interview protocol for understanding school outcomes | х | х | |
| 1 (&2 TLI) | x | | Communicating key messages and tools of improvement science | | х | x |
| 1 | x | | Communicating effectively about NC NIC work to different audiences | х | | |
| 1 | x | | Recruiting and leading new people | х | | |
| 1, 3 | x | | Updating schools network charter | х | | |
| 2 | x | | High-leverage areas on Driver diagram based on Watch List | х | | х |

| Session Day | C1 | C2 | Question Focus | Principal | Teacher Leader | Improvement Facilitator |
|----------------|----|----|--|-----------|-------------------|----------------------------|
| 2 | x | | Causal analysis on high-level drivers | | | x |
| 2 | x | | Communication plan for watch list | x | | |
| 2 | x | | Plan for causal analyses at school | | | x |
| 2 | x | | Determining essential artifact and measures to test change | | | х |
| 2 | х | | Sharing PDSA cycle to determine whether to adapt, adopt or abandon | х | | |
| 2,4 | x | | Key learnings / misconceptions in PDSAs | | | x |
| 2 | x | x | Constructing empathy interview to better understand teachers' perspectives | х | | |
| 2 | x | | Drafting new PDSA building on tested practices | x | | |
| 2 | | x | Drafting 3-year school aim & driver diagram | х | | x |
| 2 | | x | Key learnings from empathy interviews from students | x | | х |
| 2 | | x | Examining beliefs about powerful student learning | х | | |
| 3 | x | | Scale & measures for PDSA | | х | |
| 3 (&4 TLI) | | x | Begin first student Learning Reflections Cycle | | х | |
| 3 | x | | Soliciting feedback form peers on Student Learning Reflection Cycle | | х | |
| 3 (&4 TLI) | | x | Feedback practices in schools from data collection and reflection | | х | |
| 3 (&4 TLI) | | x | Focus on student learning using video case studies | | х | |
| 3 (&4 TLI) | | x | Creating data collection tools aligned with Student Learning Questions | | x | |
| 3 (&4 TLI) | | x | Deepening practices of quality data collection and reflection | | х | |
| 3 (&4 TLI) | | x | Protocol for reflexive dialogue with colleagues based on student observation | | х | |
| 3 (&4 TLI) | | x | Strengthening listening and questioning skills | | х | |
| 3 (&4 TLI) | | x | Begin first student Learning Reflections Cycle | | х | |

| Session Day | C1 | C2 | Question Focus | Principal | Teacher Leader | Improvement Facilitator |
|----------------|----|----|--|-----------|-------------------|----------------------------|
| 4 | | x | Knowing purpose of a Us | | | x |
| 4 | x | x | Quarterly plan for collecting and analyzing data for watch lists | х | х | x |
| 4 | x | x | Capture learning on Networked Improvement Learning & Supports (NILS) platform | | | х |
| 4 | | x | Determining data collection plan for PDSA | х | | х |
| 4 | x | x | Key learnings from empathy interviews with teachers | х | х | |
| 4 | x | x | Crafting PDSA to Advance Collective Efficacy | х | | x |
| 4 | x | x | Crafting PDSA tied to students on the watch list | | х | |
| 4 | x | x | Key learnings from PDSA cycles | х | х | |
| 4 | x | | Run charts to determine if an idea results in change or improvement | | х | |
| 5&6 | x | | Data collection plan for PDSA | | х | |
| 5 | x | x | Identifying learning from PDSA cycle on collective efficacy | х | | |
| 5 | x | x | Use of Watch List as a tool of improvement | х | | |
| 5 | x | | Holding effective NC NIC Team meetings | x | | |
| 5&6 | | | Identifying practice to focus advance efficacy | | х | |
| 5 | x | x | Construct run chart for PDSA | | | x |
| 5 | x | | Post run chart and artifacts from the change idea to Networked Improvement Learning & Supports (NILS) platform | | | x |
| 5 | | x | Using NILS to share learning and learn from others | | | х |
| 5 | | x | Understand purpose of run chart | х | | x |
| 5 | | x | Naming and addressing barriers to NC NIC Team | х | | |
| 5 (&TLI 6) | | x | Reflecting on Student Learning Reflection Cycles and identifying areas for growth | х | | |
| 5 (&TLI 6) | | | Identifying target area for growth based on feedback from student surveys | | x | |

| Session Day | C1 | C2 | Question Focus | Principal | Teacher Leader | Improvement Facilitator |
|----------------|----|----|--|-----------|-------------------|----------------------------|
| 5 (&TLI 6) | | x | Using a protocol for looking at student work with colleagues | | х | |
| 5 (&TLI 6) | | x | Refining practice of Student Learning Reflection Cycle | | х | |
| 5 (&TLI 6) | | x | Drafting classroom improvement to advance powerful student learning | | х | |
| 5 (&TLI 6) | | x | Consider potential partners to scale the Student Learning Reflections Cycle | | х | |
| 5 (&TLI 6) | | x | Understanding micro-credential processes and products | | х | |
| Convening | x | x | Updating Driver Diagrams | x | х | x |
| Convening | x | x | Sharing PDSAs tied to primary drivers | х | x | x |
| Convening | x | x | Understanding role of an online tool (NILS) in advancing networked improvement | х | x | x |
| Convening | x | x | Clarifying Roles of NC NIC team members and sharing learnings | | | |
| Convening | x | x | Committing to concrete plan for year's school-based NC NIC Team work | | | |

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