Public Schools of North Carolina
State Board of Education
Department of Public Instruction

Report to the North Carolina General Assembly

Schools That Lead, Inc.,
Pilot Program, Year One

Session Law 2018-50, Section 7.25(c)

Date Due: October 1, 2019
Report # ----
DPI Chronological Schedule, 2019-2020

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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 a 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 first year of the three-year program by briefly summarizing the background of the Program and the activities that have taken place in Year One, outlining an accounting of expenditures, and referencing an evaluation from an independent research organization. Since this report addresses the first year of the three-year program, evaluated programmatic impact focuses on capacity and perceptions of Program participants.

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 implementation science 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.

Program Expenditures

Schools That Lead, Inc. submitted the following budget plan to the Department that outlines how $316,667 in state funds would be used in the first-year delivery of the Program. The actual expenditures are as of June 30, 2019.

Category	Budgeted	Actual
Salary and Benefits	$259,000	$170,635*
Accounting	$7,500	$7,500
Liability Insurance	$1,500	$1,628
Travel	$13,000	$12,193.56
Meetings (rented space and food)	$15,000	$16,353.28
Contracted Services (data repository)	$20,000	$0

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

Program Outputs

Thirty-four schools participated the first year of the Program: 17 elementary schools, 11 middle schools, and eight high schools. A list of those schools can be found in *Appendix A*. Professional development services for these 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 2018-2019 academic year, 70 teachers, 37 improvement facilitators, and 40 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 for improvement facilitators and principals were offered at NCAE Headquarters and various public schools in Raleigh. Trainings for teacher leaders were offered at NCAE Headquarters, various public schools in Raleigh, Forest City, North Wilkesboro, and Asheboro.

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. The Department of Public Instruction contracted with the Education Policy Initiative at Carolina (EPIC) to measure the impacts of the Program on student outcomes. Since this report addresses year one of the three-year program, no measurable impacts were available at the time of the evaluation regarding on-time graduation rates of participating high schools, ninth-grade retention rates for middle schools, and early warning indicators of course failures, absences, and discipline in participating elementary schools. The evaluation instead measured two self-reported outcomes:

- the **capacity** of educators to implement implementation science in their schools, and
- the **perceptions** of participants in how implementation science will impact the legislated outcomes of their cohort of schools.

According to an independent impact assessment survey completed by 21 principals, 16 improvement facilitators, and 43 teacher leaders, when asked if the Program's trainings impacted their capacity to implement an improvement science approach to elevate student learning, all participants reflected improvement of at least a one-point on a five-point scale. Regarding perceptions, 90% of principals, 93% of teachers, and 94% of improvement facilitators believe it is either somewhat likely or very likely their involvement with the Program will impact the legislated outcomes of their cohort of schools.

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

Program in Subsequent Years

School Retention. While thirty-four schools participated in the first year of the Program, that number can be expected to change slightly in year two. Charlotte Learning Academy, a middle school, will no longer participate in the Program as the North Carolina State Board of Education did not renew the school's charter. Wilkes Central Academy, an elementary school, withdrew from the Program.

Participant Retention. According to Program reporting, all remaining schools have teams in place to return for the second year of this work, resulting in a 94% retention rate overall. Turnover within school teams are as follows:

- Principal retention rate: 82.3%
    - Windsor Elementary, Bertie County - left district
    - Bertie Middle, Bertie County - replaced
    - Kenansville ES, Duplin County - retiring and replaced by current Program participant

    - Warsaw Elementary, Duplin County - changing roles in district and replaced by current Program participant
    - Warren County High School, Warren County - left position and replaced
- Teacher retention rate: 92%
    - Spindale Elementary, Rutherford County - retiring and replaced by current Program participant
    - Providence Grove High School, Randolph County – left district and replaced by current Program participant
    - Kestrel Heights Elementary, Durham Public Schools – left district
    - Millbrook Elementary, Wake County – left district
- Improvement Facilitator retention rate: 89%
    - Bertie High School, Bertie County - replaced
    - West Bertie Elementary, Bertie County – retiring
    - NE Randolph Middle, Randolph County – retiring

Recommendation for future Program review. The Program commits to serving high schools working to increase on-time graduation rates, middle schools working to reduce 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. It is critical to include in subsequent evaluations and reports the following relevant metrics from the 2017-2018 (pre-analysis), 2018-2019 (year one), and 2019-2020 (year two, if available) academic years:

- On-time graduation rates in participating high schools
- Ninth-grade retention rates in participating middle schools
- In participating high schools, the percent of students on attendance watch list
- In participating high schools, the percent of students on discipline watch list
- In participating high schools, the percent of students on off-grade level watch list

In addition to reporting the above metrics, independent evaluators of the Program should evaluate how Program participants are using the legislated metrics to change their professional practice. Specifically, if a teacher is implementing the implementation science framework in their classroom, how does their classroom look different from classrooms whose teachers are not implementing the framework? What specific actions do principals take in supporting teachers as they set aggressive learning goals for their students? Finally, what does the work of improvement facilitators look like as they support the relationship between teachers and principals in the program?

Schools That Lead Evaluation Report – Year 1

July 2019

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EXECUTIVE SUMMARY

I. Background

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 development to teachers and principals in up to 60 schools, beginning with the 2018-19 school year and ending in the 2020-21 school year.

Guided by a mission of equitable outcomes for students, STL was mandated to provide professional development trainings to at least three cohorts of schools, including those with the following criteria:

- 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.
- Elementary schools working to reduce the number of students with early warning indicators of **course failures, absences, and discipline.**

II. Program Description

Improvement Science Framework

Operating within the context of North Carolina's dynamic education policy landscape, STL introduces a novel and innovative approach to school improvement, grounded in improvement science. While improvement science is a discipline that has been adopted in other sectors[1], STL is considered a pioneer in using improvement science within the education context. The hallmark of STL's continuous improvement initiative is a focus on incremental changes to address identified student learning issues.

Networked Improvement Model

Schools That Lead uses a Networked Improvement model, where education practitioners are brought together to solve problems of practice. This collective action approach enables more rapid dissemination and adoption of data-driven solutions for school improvement. Put into practice, the schools served by STL form a Networked Improvement Community (NIC). STL will provide ongoing professional development for Improvement Teams within each Network school. The Improvement Team is comprised of the principal and three teacher-leaders, one of which serves in the role of Improvement Facilitator.

STL Trainings

In the 2018-19 school year, STL conducted 28 days of trainings, providing direct service to over 150 educators within North Carolina. The focus of STL trainings are tailored to three Improvement Team roles, with common elements woven throughout. Broadly, **Teacher Leaders** were trained on skills to apply improvement science in their classroom to solve student learning problems and lead others to do the same. **Principals** were trained on the skills of improvement science for setting aggressive student learning goals, creating supportive environments for Teacher Leaders to implement solutions, and fostering buy-in at the school level. **Improvement Facilitators** were trained to bridge the work between teachers and administrators, as well as across the cohort of networked schools.

[1] Bryk, A.S., Gomez, L.M., Grunow, A., Lemahieu, P.G. Learning to Improve, How America's Schools Can Get Better at Getting Better; Harvard Education Press, Cambridge MA (2015)

III. Evaluation

Evaluation Questions

The Schools That Lead senate bill included a mandate to contract with an independent research organization to assess the ultimate impact of STL professional development trainings on three primary student outcomes:

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

In January 2019, the North Carolina Department of Public Instruction engaged the Education Policy Initiative at Carolina (EPIC) to serve as the external evaluator over the three-year improvement period.

This evaluation report focuses on the first cohort of schools, served during the 2018-19 school year, and addresses the following evaluation questions:

> **Evaluation Question 1:** To what extent did STL trainings impact the capacity of educators to implement an improvement science approach to elevate student learning?
>
> **Evaluation Question 2:** To what extent do educators believe implementing the skills and tools from STL trainings will ultimately impact the legislated student outcomes within their schools?

Sample Characteristics

The first cohort of the STL pilot consisted of thirty-four North Carolina K-12 district and charter schools that serve 17,000 students. The sample is comprised of seventeen elementary schools, nine middle schools, and eight high schools.

School demographics demonstrate that STL is fulfilling the charge of delivering services to schools that serve vulnerable population at all school levels:

> 100% of enrolled elementary schools' proficiency rates in math are lower than the state average, and 94% of the schools have ELA scores lower than the state average.
> For the enrolled high schools, 60% have four-year graduation rates lower than the state average, and eight out of the ten schools have rates below 90%.
> Middle school performance grades were used as proxy for ninth grade retention, where all enrolled schools have a grade of C or below, and more than half with grades D or F.

Data Sources

Quantitative and qualitative data was extracted from each of the following sources to inform the findings of this report.

Independent Impact Assessment Survey: A web-based survey was developed by EPIC to assess the perceived likelihood that participation in the STL program will impact the legislated student outcomes. The five-question survey was administered via a Qualtrics link at the conclusion of the Year 1 final training session. The items were a combination of Likert style and open-ended questions that branched to reflect the corresponding school-level outcome for each respondent.

Internal Session Evaluations**:** At the conclusion of each training, STL staff administered anonymous surveys to participants that included a pre-post assessment of knowledge change, and two open ended questions around what participants found most valuable, suggestions for improvement, and overall reflections.

Internal Annual Evaluations: STL also administered an annual self-assessment for Teachers Leaders only, capturing perceived changes in knowledge and skills around effective peer observations and reflections.

Program Artifacts: STL provided training agendas, curriculum, and attendance logs to the support the improvement evaluation, as well as to provide context to the findings.

NCDPI Administrative Data Indicators related to legislated outcomes by school level were collected from NC Report Card published by Department of Public Instruction for year 2017-18. Teacher and principal experience data (2016-17) were curated from the NCDPI dataset repository located at Education Policy Initiative at Carolina (EPIC).

IV. Findings

Evaluation Question 1: To what extent did STL trainings impact the capacity of educators to implement an improvement science approach to elevate student learning?

Changes in educational leadership capacity were measured using quantitative and qualitative data from STL training session evaluation forms. Data was categorized across three capacity dimensions, reflecting the content of the training curriculum.

Skill Capacity: mastery of the various technical skills that comprise an improvement science approach within an educational setting

Practice Capacity: integration of improvement science skills into day-to-day activities of school instruction and management.

Process Capacity: participants know-how about the process of implementing STL processes within their school

All participants reported increased capacity in skills, practice, and processes for utilizing improvement science approaches to improve student outcomes. All items were assessing on a 5-point scale, and there was a greater than one-point increase in capacity level by all roles and across all three dimensions.

In addition, striking findings emerged from the annual assessment of Teacher Leaders. When asked about their confidence in implementing improvement science approaches to support their peers in improving student learning, the proportion of responses reflecting high levels of confidence increased 90%, with a total of 95% of Teacher Leader responses reflecting high levels of confidence in their knowledge and skills at the conclusion of year one.

Improvement in responses reflecting *low levels of confidence* was equally compelling. Upon completion of the first year of STL training, the proportion of responses reflecting low confidence in these areas decreased 96%, with only 2% of Teacher Leader responses reflecting low levels of confidence in their knowledge and abilities upon completing the first year of training

Evaluation Question 2: To what extent do educators believe implementing the skills and tools from STL trainings will ultimately impact the legislated student outcomes within their schools?

Upon conclusion of the first year of training, there was an overwhelming consensus among participants (93% of teachers and 90% of principals) that implementing the skills and tools they have learned from STL training can ultimately result in the legislated student outcome within their school.

V. Program Perceptions

Over 900 qualitative responses were coded to identify common themes reflected in educators' perceptions of their experiences with Schools That Lead. The most notable include:

Benefits: Educators reflected an appreciation for the improvement science approach, particularly relating to the opportunity to test different solutions rather than having something prescribed. Principals were particularly appreciative of the opportunity to interact with their peers and hear different perspectives from across the state.

Barriers: Personnel turnover and lack of buy-in at the school level were perceived as the two greatest risks to successful implementation of the STL model within their schools.

Overall Quality: As a whole, perceptions of STL were overwhelmingly positive. Themes shared across participants include:

The learning environment of trainings is perceived be engaging and free of judgement.
Effusive praise was unanimous for the STL leadership/facilitators.
Participants believe STL is a sustainable and scalable school intervention model

SCHOOLS THAT LEAD
YEAR 1 EVALUATION REPORT

I. BACKGROUND

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 development to teachers and principals in up to 60 schools, beginning with the 2018-19 school year and ending in the 2020-21 school year[2].

Operating within the context of North Carolina's dynamic education policy landscape, STL introduces a novel and innovative approach to school improvement, grounded in **improvement science.** Correspondingly, the hallmark of STL's continuous improvement initiative is a focus on incremental changes to address identified student learning issues. While improvement science is a discipline that has been adopted in other sectors[3], STL is considered a pioneer in using improvement science within the education context.

Guided by a mission of equitable outcomes for students, STL was mandated to provide professional development trainings to at least three cohorts of schools, including those with the following criteria:

- 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.
- Elementary schools working to reduce the number of students with early warning indicators of **course failures, absences, and discipline.**

Six key tenets of STL's Improvement Science Framework

1. A focus on solving a specific discrete problem
2. Seeking to understand the problem before developing solutions
3. Utilizing iterative testing of best-practice solutions that can be assessed for efficacy across different contexts
4. Engaging people with the closest connections to the problem
5. Executing decisions based on data-driven evidence of improvement
6. Disseminating and scaling effective approaches within schools and across networked improvement communities

II. PROGRAM DESCRIPTION

STL School Recruitment

STL disseminated information about their program between June and July 2018 through presentations at the school superintendents' quarterly meeting and The Innovation Project's (TIP) restart schools, as well as through a press release about the upcoming call for proposals.

In early August 2018, STL issued a Request for Proposal (RFP) via email to leadership in every public district and charter school in North Carolina. In addition, the RFP was made available through notices by NCPAPA, The Public School Forum of NC, an article in EdNC, and via email to each RESA director. Telephone calls and follow-up emails were made to over sixty community action organizations, assistant superintendents, and principals who had received the RFP.

[2] Senate Bill 99; Sec. 7.25

[3] Bryk, A.S., Gomez, L.M., Grunow, A., Lemahieu, P.G. Learning to Improve, How America's Schools Can Get Better at Getting Better; Harvard Education Press, Cambridge MA (2015)

The RFP was open for 30 days, at which time there were 40 applications. Ultimately, 32 of the 40 schools were enrolled in the first cohort, and 34 completed the first year of training. A list of Cohort 1 schools can be found in Appendix A.

Networked Improvement Model

STL uses a Networked Improvement model, where education practitioners are brought together to solve problems of practice. This collective action approach enables more rapid dissemination and adoption of data-driven solutions for school improvement.

Put into practice, the schools served by STL form a **Networked Improvement Community (NIC)**. STL will provide ongoing professional development for **Improvement Teams** within each Network school. The Improvement Team is comprised of the **principal** and three **teacher-leaders**, one of which serves in the role of **Improvement Facilitator.**

STL provides targeted professional development supports for each of the three Improvement Team roles, through the Principal Leadership Initiative, Improvement Facilitator Initiative, and Teacher Leadership Initiative. Each initiative is comprised of face-to-face cross-network professional learning and virtual school-specific follow up over the course of the school year.

STL Trainings

In the 2018-19 school year, STL conducted 28 days of trainings[4] with 34 North Carolina K-12 districts and charter schools that serve 17,000 students[5]. Trainings were primarily grouped by Improvement Team role – Principles, Improvement Facilitators, and two groupings of Teacher Leaders, divided between East and West regions. The exception to this was two training days shared by both Principals and Improvement Facilitators. Together, each teacher group received eight training days, and principals and improvement facilitators each received six training days.

The focus of STL trainings are tailored to three Improvement Team roles, with common elements woven throughout. Broadly, Teacher Leaders were trained on skills to apply improvement science in their classroom to solve student learning problems and lead others to do the same. Principals were trained on the skills of improvement science for setting aggressive student learning goals, creating supportive environments for Teacher Leaders to implement solutions, and fostering buy-in at the school level. Improvement Facilitators were trained to bridge the work between teachers and administrators, as well as across the cohort of networked schools.

The common training element across each initiative is the provision of hands-on learning around the four core tools of improvement science: Driver Diagram, Fishbone Diagram, Student Learning Reflection Cycle (SLRC) and Plan Do Study Act (PDSA). Explanations and examples of each of these tools can be found in Appendix C.

NETWORKED IMPROVEMENT COMMUNITY

STL provides ongoing professional development for **Improvement Teams** within each Network school. The Improvement Team is comprised of the **principal** and three **Teacher Leaders**, one of which serves in the role of **Improvement Facilitator**.

[4] STL also facilitated a summer convening for all schools in June 2019, which will be included in the data for the Year 2 Evaluation Report
[5] See Appendix B for the STL Training Calendar of Service.

III. EVALUATION

Evaluation Questions

The Schools That Lead senate bill included a mandate to contract with an independent research organization to assess the ultimate impact of STL professional development trainings on three primary student outcomes:

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

In the spring of 2019, the North Carolina Department of Public Instruction engaged the Education Policy Initiative at Carolina to serve as the external evaluator over the three-year implementation period.

Research has demonstrated that it often takes up to two years for effective education initiatives to reflect improved outcomes at the student level[6]. This is particularly salient given that the first year of the STL pilot program was designed to lay the foundation of improvement science principles and networked improvement communities for Cohort 1, with implementation activities commencing in Year 2.

Given these factors, this evaluation report will focus solely on findings around capacity and perceptions of program impact to answer the following questions:

> **Evaluation Question 1:** To what extent did STL trainings impact the capacity of educators to implement an improvement science approach to elevate student learning?
>
> **Evaluation Question 2:** To what extent do educators believe implementing the skills and tools from STL trainings will ultimately impact the legislated student outcomes within their schools?

Evaluation Sample

This evaluation report will focus on the first Cohort of STL Networked Improvement Community schools, engaged throughout the 2018-19 school year. The cohort was comprised of 146 educators representing improvement teams across 34 schools. The distribution of Cohort 1 participants by geographic location, school level, and years of experience is presented in below.

Figure 1: STL Networked Improvement Communities Cohort 1; 2018-19

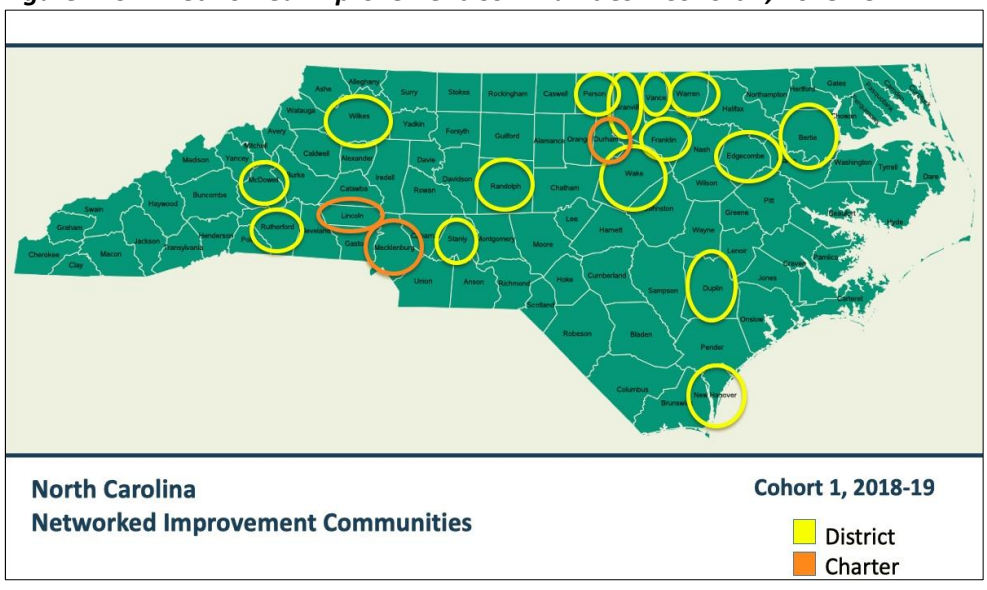


Table 1. STL Cohort 1 by Years of Experience in Current Role; 2018-19

Years of Experience	Number of Teachers	Number of IFSs	Number of Principals	Total Number of Participants
0 to 5	12	3	17	32
6 to 10	6	5	6	17
11 to 20	18	11	3	32
21 plus	6	8	-	14
Total[7]	**42**	**27**	**26**	**95**

Note: Years of experience data was not available for all participants

Table 2. STL Participants by School Level and Role Cohort 1; 2018-19

School Level	STL Network Schools	Principals	Improvement Facilitators	Teacher Leaders
Elementary	17	20	15	35
Middle	9	11	10	16
High	8	8	12	19
Total	**34**	**40**	**37**	**70**

Based on 2017-18 NC School Report Card data, STL is fulfilling the charge of delivering services to schools that serve vulnerable populations at each level[8].

High Schools: For the enrolled high schools, 60% have four-year graduation rates lower than the state average, and eight out of the ten schools have rates below 90%.

Table 3. STL High School Graduation Rates; Cohort 1 (2017-18)

School Name	4-year Graduation Rate (%)	NC Average
Bertie High	79	86
James Kenan High	70	86
New Hanover High	80	86
Providence Grove High	86	86
Advance Academy	87	86
Vance County Early College High	91	86
Warren County High	68	86
Wilkes Central High	85	86

Middle Schools: While we weren't able to access data on 9th grade retention for middle schools in the STL cohort, school performance grades can be used as a rough proxy as they reflect the proportion of students scoring proficient on EOG and EOC tests along with the proportion of students meeting academic growth. As shown in Table 4, all STL middle schools have school performance grades of C and below.

[7] Years of experience was not available for all participants.

[8] Detailed socioeconomic characteristics for all schools is presented in Appendix D.

Table 4. STL Middle School Performance Grade; Cohort 1 (2017-18)

School Name	School Performance Grade
Bertie Middle	D
Butner-Stem Middle	D
Kestrel Heights	C
W. A. Pattillo Middle	D
East McDowell Middle	D
Southern Middle	C
Northeastern Randolph Middle	C
Albemarle Middle	D
Centennial Campus Middle	C
Charlotte Learning Academy	F

Elementary Schools: Of the 17 elementary schools enrolled in Cohort 1, all but one has chronic absenteeism rates above 10%. While we have not been able to access data on course failures, all but one of STL elementary schools have a higher proportion of students not scoring proficient in Math compared with the state average. This trend is also seen in other tested subjects, with over half the STL schools scoring below the state average for science, and 77% scoring lower in ELA. In contrast to the prevalence of these early warning indicators, 76% of Cohort 1 schools have short term suspension rates lower than the state average.

Table 5. STL Elementary School Early Warning Indicators; Cohort 1 (2017-18)

School Name	% Proficient Math	% Proficient ELA	% Proficient Science	% Chronic Absenteeism	Short Term Suspension Rates*
Aulander	57	61	70	0.21	2.34
West Bertie	61	48	83	0.20	0.76
Colerain	57	36	82	0.13	0.15
Windsor	61	49	74	0.16	1.13
Warsaw	31	38	55	0.15	1.75
Kenansville	52	52	59	0.13	1.59
Rose Hill Magnolia	42	32	47	0.11	1.52
Royal	57	49	73	0.12	1.31
Liberty	46	43	59	0.13	0.22
Grays Chapel	71	58	71	0.03	0.06
Spindale	54	46	78	0.14	1.26
E. M. Rollins	29	33	32	0.20	1.16
Bugg	27	24	36	0.12	0.81
East Garner	46	39	59	0.12	0.49
Millbrook Magnet	39	34	50	0.12	0.17
Lincoln Charter	77	82	82	0.04	0.27
Kestrel Heights	47	57	78	0.03	0.77
State Average	**72**	**57**	**72**	**0.15**	**1.39**

*Note: *Short term suspension rates are per 100 students*

Data Sources

Given that the evaluation team was first engaged in the spring semester, direct observations and primary data collection were only possible for the final block of trainings occurring in May 2019. However, STL had been conducting their own post-training assessments of changes in knowledge and skills at the end of every session. This raw data was shared with the evaluation team, along with trainings agendas, supporting materials, and enrollment logs.

Independent Impact Assessment Survey: A web-based survey was developed by EPIC to assess the perceived likelihood that implementing STL practices within their schools will impact the legislated student outcomes. The five-question survey was administered via a Qualtrics link at the conclusion of the final Year 1 training session. The items were a combination of Likert style and open-ended questions and branched to reflect the corresponding school-level outcome for each respondent. A total of 80 respondents; 21 principals, 16 Improvement Facilitators, and 43 Teacher Leaders participated in the survey.

Internal Session Evaluations: At the conclusion of each training, STL staff administered anonymous surveys to participants that included a pre-post assessment of knowledge change, and two open ended questions around what participants found most valuable, suggestions for improvement, and overall reflections.

Internal Annual Evaluations: STL also administered an annual self-assessment for Teachers Leaders only, capturing perceived changes in knowledge and skills around effective peer observations and reflections.

Program Artifacts: STL provided training agendas, curriculum, and attendance logs to support the implementation evaluation, as well as to help provide context to the findings.

NCDPI Administrative Data Indicators related to legislated outcomes by school level were collected from NC Report Card published by the NCDPI for year 2017-18. Teacher and principal experience data (2016-17) were curated from the department of education dataset repository located at Education Policy Initiative at Carolina (EPIC).

IV. FINDINGS

Evaluation Question 1: To what extent did STL trainings impact the capacity of educators to implement an improvement science approach to elevate student learning?

Changes in educational leadership capacity were measured using quantitative and qualitative data from STL. Data was categorized across three capacity dimensions, reflecting the content of the training curriculum.

> Skill Capacity: This dimension covers questions that relate to various technical skills that comprise an improvement science approach within an educational setting.
>
> Practice Capacity: This dimension includes questions which tie in the inclusion of improvement science skills into day to day activities of school instruction and management.
>
> Process Capacity: This dimension includes participants know-how about the process of STL intervention in a school. This involves clarity on participant roles, other team member roles, next steps in the process and scaling up.

Appendix E contains the list of session evaluation questions, and the classification used to include or exclude them from the analysis.

Looking across the three dimensions, all participants reflected improvement by at least one level of a five-point scale, as seen in Table 6. The greatest gains within capacity dimensions were seen among questions related to process, with similar scores between skill and practice. Within Improvement Team roles, teachers showed the greatest average gain, followed by principals and Improvement Facilitators.

Table 6. Average Pre-Post Improvement in Capacity Dimensions; 5-Point Scale

	Principal	Improvement Facilitator	Teacher Leader	Average Scale Improvement within Capacity Dimensions
SKILL	1.37	1.20	1.62	1.40
PRACTICE	1.31	1.21	1.56	1.36
PROCESS	1.83	1.51	1.80	1.71
Average Scale Improvement (by Role)	**1.50**	**1.31**	**1.66**	

Qualitative analysis of open-ended items was conducted using NVIVO qualitative software, following predetermined code categories (e.g. benefits and barriers) and open coding, i.e. common topics that emerged from participant response data. A codebook containing detailed description of code categories, definitions and coding density is available in Appendix F.

The following quotes are representative of the widespread qualitative support for the quantitative improvement scores.

Skill Capacity: The participants are reporting that their lesson planning, classroom activities are more focused on student learning than before.

to harness the power I have as an instructor and the unique knowledge I have

Practice Capacity**:** Participants reported gaining confidence in their practice of profession by their participation in the STL training workshops.

a set structure

Process Capacity: Participants reported that they have gained new insight into processes within their class. They report that trainings have boosted their creativity and enterprise into taking ownership of an issue and starting to affect change, rather than looking to available programs and pre-existing solutions.

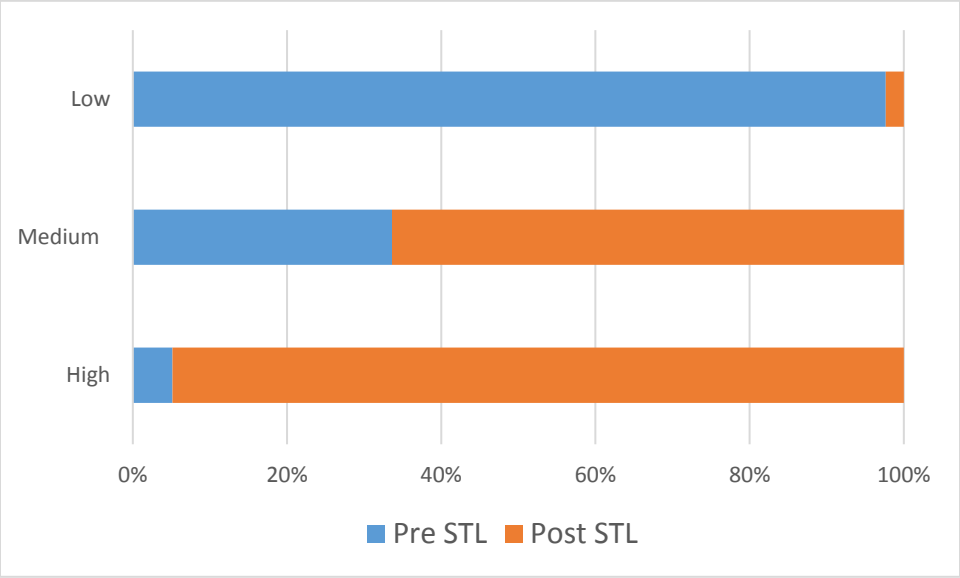
and collecting data.

Annual Self-Assessment

The annual survey of Teacher Leaders produced particularly compelling findings around capacity. When asked about their confidence in implementing improvement science approaches to support their peers in improving student learning, the proportion of responses reflecting *high levels of confidence* increased 90%, with a total of 95% of teacher leader responses reflecting high levels of confidence in their knowledge and skills at the conclusion of year one

Improvement in responses reflecting *low levels of confidence* was equally compelling. Upon completion of the first year of STL training, the proportion of responses reflecting low confidence in these areas decreased 96%, with only 2% of Teacher Leader responses reflecting low levels of confidence in their knowledge and abilities upon completing the first year of training

Figure 2. Teacher Leader Confidence in Improvement Science Knowledge and Practice



Evaluation Question 2: To what extent do educators believe implementing the skills and tools from STL trainings will ultimately impact the legislated student outcomes within their schools?

Given that STL implementation activities begin in Year 2, there are no observable impacts to be measured for the three legislated student outcome measures. In lieu of this, the evaluation team administered a survey to all STL participants asking their perceived likelihood that implementing the STL model within their schools could ultimately influence high school graduation, 9th grade retention, and early warning indicators in elementary school. The survey was branched so respondents only answered in relation to their own school level.

The vast number of respondents felt it was either *somewhat likely* or *very likely* that their engagement with STL will improve the legislated student outcome for their respective school level.

Figure 3. Perceived Likelihood of STL Model Impacting Primary Student Outcome, by School Level.

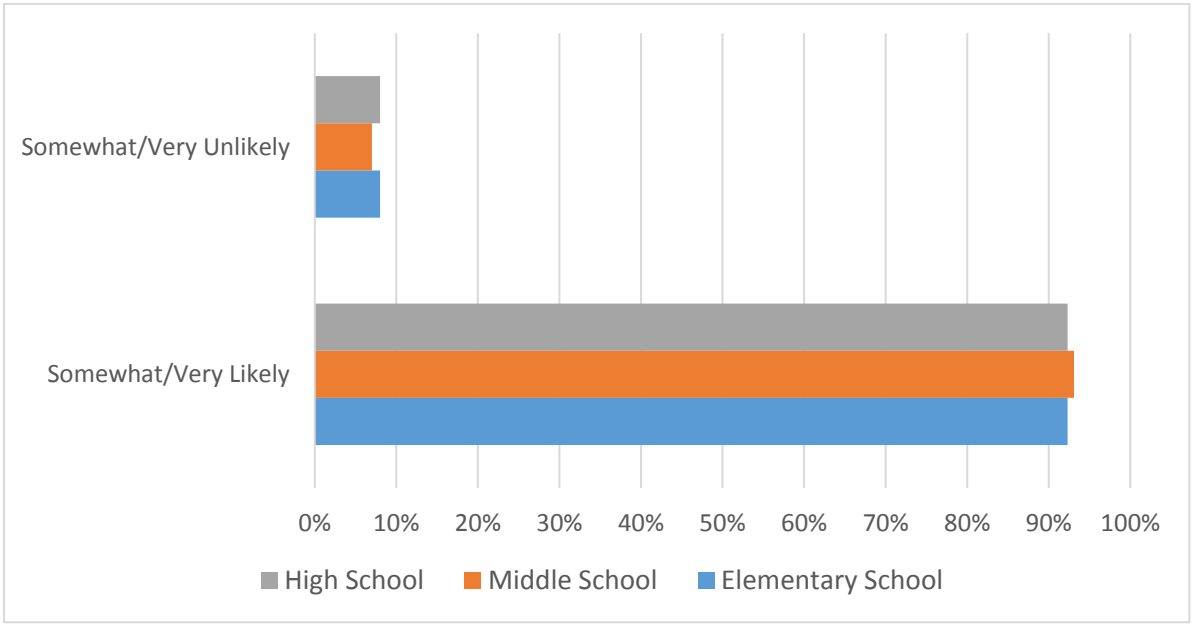
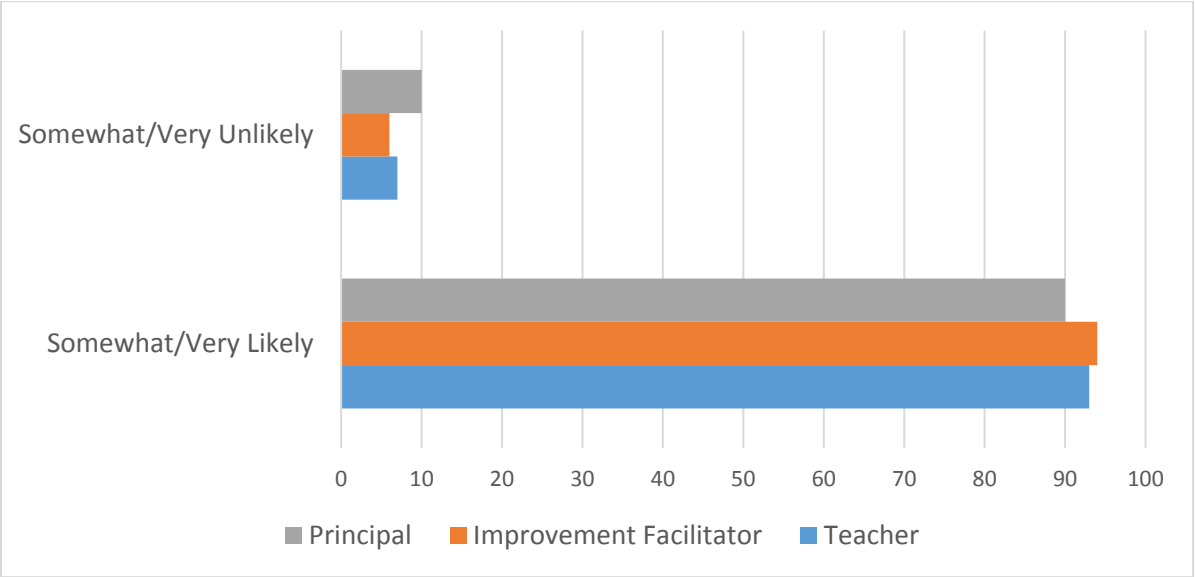


Figure 4. Perceived Likelihood of STL Model Impacting Primary Student Outcome, by Improvement Team Role



There was little variation in the positive perceptions when examined by school level or Implementation Team role. Overall, 90% of principals, 93% of teachers, and 94% of improvement facilitators believe it is either *somewhat likely* or *very likely* their involvement with STL will impact their school-level primary student outcome.

V. OVERALL PROGRAM PERCEPTIONS

Qualitative data from all data sources was analyzed to identify the most pervasive reflections about the STL program overall.

Perceived Benefits

Improvement Science Approach. Many respondents referred to specific aspects of the improvement science approach as perceived benefits of the STL model. The most common responses centered around:

An appreciation of the focus on students rather than teachers
The ability to try different solutions to resolve problems, rather than following something prescribed

> *of the school. A lot of times new initiatives are pushed onto teachers at and they are expected to implement them whether they work or not. This gives teachers a chance to personalize change for their*

Interaction / Networking. The other common theme that emerged from comments about benefits centered around opportunities to meet and exchange ideas, having the time to share thoughts and concerns with other professionals, and to hear different perspectives. It is worth noting that principals cited this as a benefit three times more often than teachers and improvement facilitators.

(Greatest benefit of STL is…)

Perceived Barriers

Two themes emerged when participants were asked what they perceived to be the biggest barrier to the STL model being successful in their school.

Creating Culture of Change/Buy In. The need for support from other teachers, administration professionals, and commitment of leadership to the initiative were commonly expressed.

> (The biggest barrier is..) - *understanding the problem at a deep level and evaluating the progress of small changes is not what people are*

Personnel Turnover. The second prevalent theme that emerged was that of addressing personnel turnover. This issue will be compounded if it results in a loss of institutional memory as additional cohorts are engaged.

> (The biggest barrier is..) "*Maintaining the support required to continue with the Improvement Science dur*

Other themes that emerged from responses about barriers were:

lack of time
competing initiatives
lack of quick results with STL model

Participant Suggestions

While the overwhelming majority of open-ended comments from the session surveys were positive, there were a couple shared threads seen among participant suggestions.

The most common theme among the suggestions was centered around having more clarity earlier in the process around a) what to expect prior to attending the training sessions; and b) specifics about the three different roles and the model overall. This was primarily voiced among Teacher Leaders after the first session.

Suggestions around session content and organization were scarce, but two that emerged were a desire for more real-life examples of data-collection tools, and decreasing the time spent in small group discussion around some of the session topics.

Finally, there were a few comments around scheduling logistics, primarily reflecting a preference for single day sessions, and acknowledging the challenges of being away from school in May.

Overall Program Quality

Unsolicited feedback around program quality was provided by participants in their session feedback assessments. The two primary areas of focus were the learning environment and quality of facilitation.

Learning Environment. Key elements of this theme included perceptions of:

being free of judgement
providing an opportunity for participants to share ideas and reflect on their practice
being devoid of any individual-level performance metrics

> *the change,*

Quality of Facilitation. The most pervasive unsolicited comments across all school-levels, roles, and training sessions centered around appreciation for the leadership of Schools That Lead.

The following comments capture the broad consensus around the quality of program delivery:

."

components. Keeps

enjoyed the process and the leadership provided by Dana and Sofi. Both are very

Overall Support. Participants have also offered their support of the STL intervention overall. Comments explicitly conveyed the belief that STL is a sustainable school intervention model, and there is a desire to scale the work with additional staff.

ed my expectations. I have grown as an instructional leader. I've watched my staff grow as instructional leaders

That Lead is not just another program. It provides a way to find the root of issues in school and to help schools solve those issues. I fully support Schools That Lead and I hope to see its

APPENDIX

APPENDIX A: NETWORKED IMPROVEMENT COMMUNITIES MEMBER LIST (UPDATED NOVEMBER 2018)

Elementary School Networked Improvement Community (n=17)

- Aulander Elementary, Bertie County Schools
- Colerain Elementary, Bertie County Schools
- West Bertie Elementary, Bertie County Schools
- Windsor Elementary, Bertie County Schools
- Rose Hill Magnolia Elementary, Duplin Country Schools
- Warsaw Elementary, Duplin County Schools
- Kenansville Elementary, Duplin County Schools
- Royal Elementary School, Franklin County Schools
- Kestrel Heights Charter School
- Lincoln Charter School
- Liberty Elementary, Randolph County Schools
- Grays Chapel Elementary School, Randolph County Schools
- Spindale Elementary School, Rutherford County Schools
- The STEAM Academy at EM Rollins Elementary School, Vance County Schools
- Bugg Elementary School, Wake County Public School System
- Millbrook Environmental Connections Magnet Elementary, Wake County Public School System
- East Garner Elementary School, Wake County Public School System

Middle School Networked Improvement Community (n=9)

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

High School Networked Improvement Community (n=8)

- Bertie High School, Bertie County Schools
- James Kenan High School, Duplin County Schools
- New Hanover High School, New Hanover County Schools
- Providence Grove High School, Randolph County Schools
- Advance Academy, Vance County Schools
- Vance County Early College High School, Vance County Schools
- Warren County High School, Warren County Schools
- Wilkes Central High School, Wilkes Count

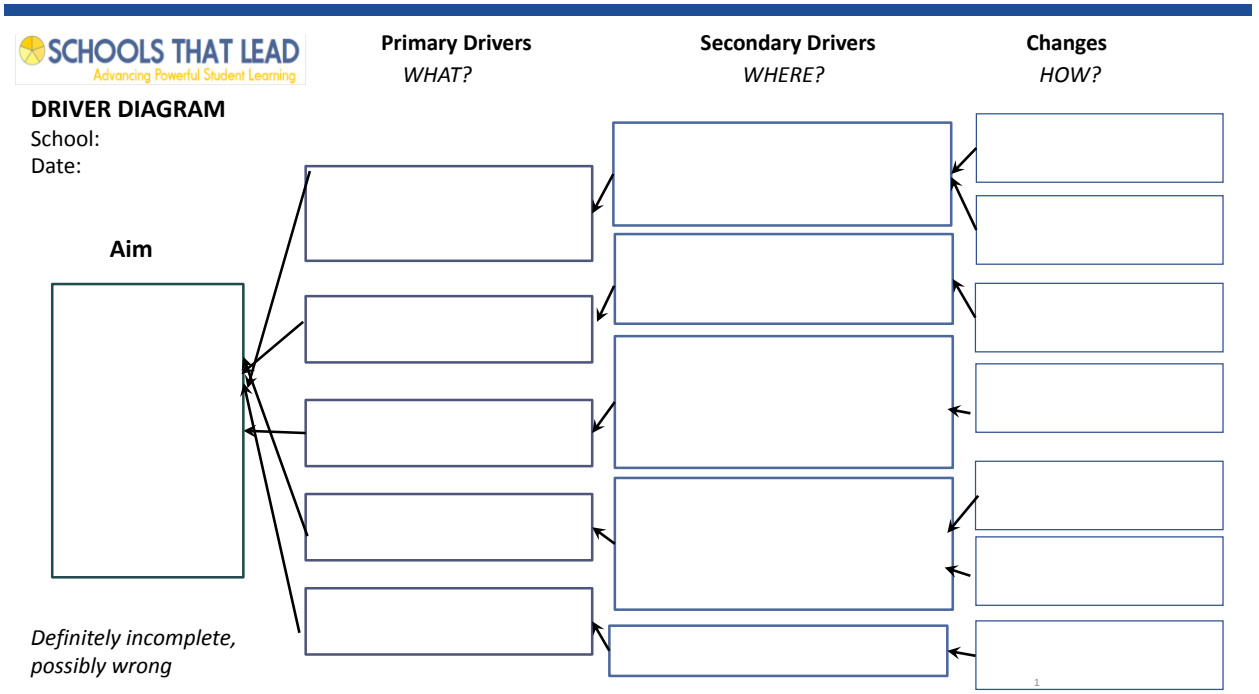
APPENDIX B. COHORT 1 CALENDAR OF SERVICE; 2018-19

<table>
<tr><th>Principal Leadership Initiative (PLI)</th><th>Improvement Facilitator Initiative (IFI)</th><th>Teacher Leadership Initiative (TLI) East</th><th>Teacher Leadership Initiative (TLI) West</th></tr>
<tr><td>Tues, Oct 16 NCAE Headquarters 700 South Salisbury Raleigh</td><td>Wed, Oct 17
NCAE Headquarters
700 South Salisbury Raleigh</td><td>Th-Fri, Oct 25-26
East Garner Elementary School Media Center
5545 Jones Sausage Road Garner</td><td>Tu-Wed, Oct 23-24
Rutherford County Schools Central Office
382 West Main St. Forest City</td></tr>
<tr><td>Wed, Nov 7
East Garner Elementary School Media Center
5545 Jones Sausage Road Garner</td><td>Th, Nov 8
East Garner Elementary School Media Center
5545 Jones Sausage Road Garner</td><td>Tu-Wed, Nov 27-28
NCAE Headquarters
700 South Salisbury Raleigh</td><td>Th-Fri, Nov 29-30
Wilkes County Schools Board Room
613 N. Cherry St. North Wilkesboro</td></tr>
<tr><td colspan="2">Tues, Dec 4 PLI/IFI West
Centennial Middle School
1900 Main Campus Drive Raleigh
Wed, Dec 5 PLI/IFI East
Centennial Middle School
1900 Main Campus Drive Raleigh</td><td>Tu-Wed, Feb 5-6
Bugg Elementary School
825 Cooper Road Raleigh</td><td>Th-Fri, Feb 7-8
Randolph Community College CEIC Bldg, Room 148
629 Industrial Park Asheboro</td></tr>
<tr><td>Tues, Feb 12 NCAE Headquarters 700 South Salisbury Raleigh</td><td>Wed, Feb 13 NCAE Headquarters 700 South Salisbury Raleigh</td><td>Th-Fri, May 9-10
NCAE Headquarters
700 South Salisbury Raleigh</td><td>Tues-Wed, May 7-8
Wilkes County Schools Board Room
613 N. Cherry St. North Wilkesboro</td></tr>
<tr><td>Wed, May 15 NCAE Headquarters 700 South Salisbury Raleigh</td><td>Th, May 16
NCAE Headquarters
700 South Salisbury Raleigh</td><td></td><td></td></tr>
<tr><td colspan="4">Summer Convening
June 18-19</td></tr>
</table>

APPENDIX C. IMPROVEMENT SCIENCE TOOLS

Driver Diagram

This is a visual tool for a group to accomplish an aim. It allows clarity on finding 'what works for whom under what conditions**.** It consists of primary drivers, secondary drivers and change ideas. Primary drivers are high leverage areas where improvements made will help in achieving the aim. Secondary drivers are places in the system where changes can occur. Change ideas are potential pathways of process/steps/events that may allow for a solution for identified primary driver



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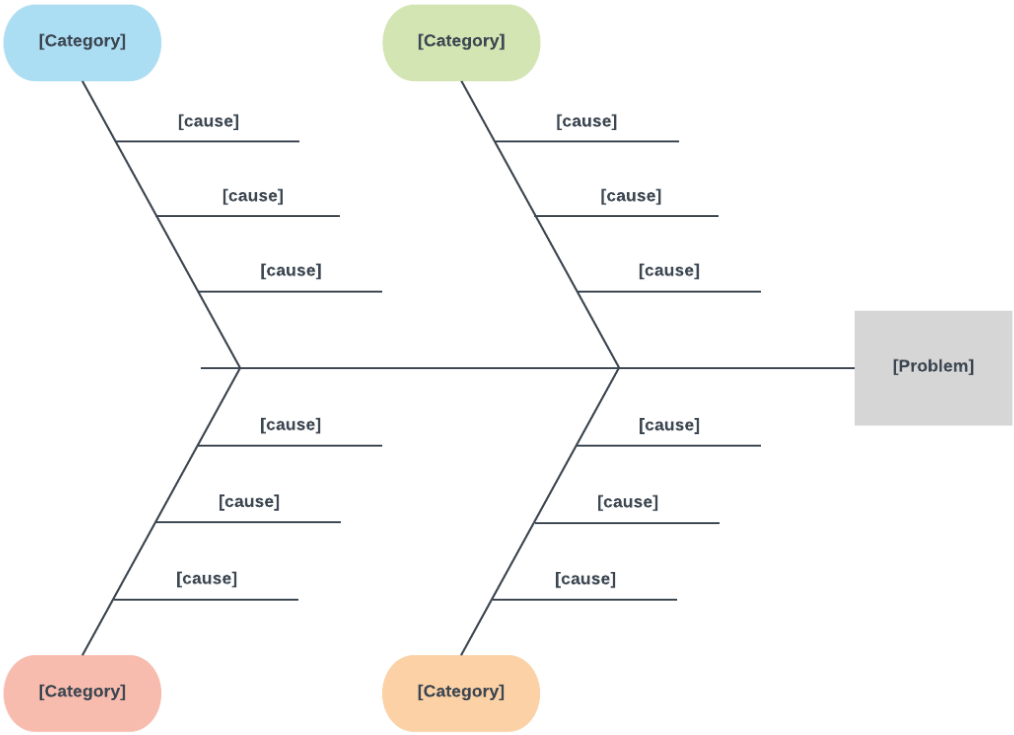
Fishbone Diagram

This is a tool for causal system analysis. It begins with identification of the problem by a participant. With the help of a group, the participant can then arrive at a list of potential facets of the issue and a way to address a select few of those issues by collecting data.



Plan Do Study Act (PDSA)

PDSA is a tool used to formulate strategy to address a student learning problem identified by the teacher leader. It involves planning a tweak in learning style, executing on it, collecting data, examining data, and accepting the tweak in strategy as a solution or abandoning it to try a different solution to the identified student learning problem

Before filling out the template, first save the file on your computer. Then open and use that version of the tool. Otherwise, your changes will not be saved.

Template: PDSA Worksheet

Objective:

1. Plan: Plan the test, including a plan for collecting data.

Questions and predictions:

Who, what, where, when:

Plan for collecting data:

2. Do: Run the test on a small scale.

Describe what happened. What data did you collect? What observations did you make?

APPENDIX D. SCHOOLS THAT LEAD SOCIODEMOGRAPHIC – COHORT 1

School Name	School Size	Caucasian	African American	Latino	Rural/Urban	% Free and Reduced Lunch	School Performance Grade	Teacher Turnover (%)
Aulander Elementary	167	37	122	3	Rural	59	C	55.6
West Bertie Elementary	257	11	226	12	Rural	68	C	17.7
Colerain Elementary	225	29	178	11	Rural	66	C	7.1
Windsor Elementary	435	73	329	5	Rural	68	C	13.8
Warsaw Elementary	885	104	416	318	Rural	54	D	16.9
Kenansville Elementary	596	221	192	155	Rural	48	C	6.3
Rose Hill Magnolia Elementary	1201	179	337	648	Rural	53	D	21.6
Royal Elementary	516	224	162	95	Rural	47	C	16.0
Liberty Elementary	446	222	134	68	Suburb	58	D	20.1
Grays Chapel Elementary	484	396	5	58	Rural	49	C	-
Spindale Elementary	434	223	49	27	Rural	64	C	7.9
E. M. Rollins Elementary	365	28	277	23	Rural	74	D	40.7
Bugg Elementary	437	13	318	89	Urban	68	F	18.8
East Garner Elementary	674	54	368	219	Urban	69	D	18.4
Millbrook Magnet Elementary	575	55	259	207	Urban	67	D	11.7
Kestrel Heights Elementary	555	122	279	90	Urban	9	C	-
Lincoln Charter Elementary	2028	1674	67	175	Rural	7	B	-
Bertie Middle	500	57	421	11	Rural	58	D	20.7
Butner-Stem Middle	485	151	147	158	Rural	61	D	9.6
W. A. Pattillo Middle	267	32	210	23	Rural	66	D	26.2
East McDowell Middle	579	448	15	93	Rural	45	D	11.9
Southern Middle	445	254	102	42	Town	45	C	26.2
Northeastern Randolph Middle	583	425	31	94	Rural	42	C	11.8

School Name	School Size	Caucasian	African American	Latino	Rural/Urban	% Free and Reduced Lunch	School Performance Grade	Teacher Turnover (%)
Albemarle Middle	365	127	142	50	Rural	74	D	20.8
Centennial Campus Middle	494	141	156	144	Urban	43	C	10.4
Charlotte Learning Academy	251	3	218	17	Urban	50	F	-
Bertie High	589	62	514	5	Rural	56	D	27.6
James Kenan High	675	104	247	310	Rural	37	C	26.8
New Hanover High	1569	714	544	234	Urban	39	C	10.7
Providence Grove High	781	601	37	102	Rural	35	B	12.5
Advance Academy	186	21	146	14	Rural	73	--	47.1
Vance County Early College High	198	73	78	39	Rural	25	A	63.6
Warren County High	419	39	321	25	Rural	49	C	40.4
Wilkes Central High	891	554	94	174	Rural	41	C	15.0

Note: Dash indicates data available.

APPENDIX E. SESSION EVALUATION QUESTIONS ANALYSIS METHODOLOGY

A total of 94 questions were answered by the participants over the **18** training workshops that were conducted by STL in year 1. The session evaluation questions were structured as a pre- and post- Likert style questions with values ranging from 1 to 5.

In this evaluation study, the list of session evaluation questions was categorized into four dimensions depending on the focus of STL training. The training curriculum stressed building and practicing of skill that was specific to STL [Dimension 1]. Secondly, there was a stress on the practice of skills in the classroom / school setting [Dimension 2]. The training curriculum also focused on clarifying the process of how STL intervention unfolds in a school and the next steps for upcoming year [Dimension 3]. Finally, the training focused on the understanding and practice of creating buy in from other teachers in the school. Recruitment of other teachers by the teachers who were trained in cohort 1 is important to the effectiveness of STL model [Dimension 4].

Session evaluation questions were reviewed and assessed on whether they fit into the articulated dimensions. Those that were not a good fit were excluded from the analysis. From a total of 94 questions, 62 questions were included in the analysis (65%).

Role	Training_day	S No	Session Questions	Include	Question No.	Dimension
1	1	1	Drafting, adapting or adopting a definition of leadership that you aspire to	0	111	
1	1	2	Having a clear definition of what powerful leadership looks like to you	0	112	
1	1	3	Having a clear definition of what powerful student learning means to you	0	113	
1	1	4	Knowing a key tenet of improvement science: Understand the problem	0	114	
1	1	5	Gaining a more nuanced understanding of your current school outcomes	1	115	Practice
1	2	1	Identifying strengths and challenges as an Improver	0	121	
1	2	2	Understanding lessons learned from schools using Improvement Science	0	122	

Role	Training_day	S No	Session Questions	Include	Question No.	Dimension
1	2	3	Recognizing learning from user interviews about attendance	0	123	
1	2	4	Drafting a three-year school aim for improvement	1	124	Practice
1	2	5	Drafting a Plan DO- Study-Act cycle about attendance	1	125	Skill
1	2	6	Understanding core processes and tools used in TLI	1	126	Practice
1	2	7	Understanding some of the challenges of teacher leadership	1	127	Practice
1	3	1	Creating a clear and measurable three-year aim statement for your school.	1	131	Practice
1	3	2	Building or revising a Driver Diagram	1	132	Skill
1	3	3	Using a fishbone diagram to understand two of the drivers more deeply	1	133	Skill
1	3	4	Planning a meeting of all four members of your improvement team (Principal, Improvement facilitator and teacher leaders) to clarify roles and responsibilities and to share learning	1	134	Process
1	3	5	Crafting a problem statement that communicates urgency and builds will	1	135	Buy in
1	3	6	Reflecting on an element of leadership for leading improvement	0	136	
1	3	7	Determining ways to support TLI participants (principals) OR Drafting a new plan do study about one of the Drivers (IFs)	1	137	Skill
1	4	1	Identifying and consolidating learning from NIC team meeting	1	141	Process
1	4	2	Drawing a through line from Drivers to current initiatives	1	142	Practice

Role	Training_day	S No	Session Questions	Include	Question No.	Dimension
1	4	3	Updating Driver Diagrams	1	143	Skill
1	4	4	Making a plan to collect data for the family of measures	1	144	Skill
1	4	5	Understanding the purpose and uses of the Networked Improvement learning and supports platform	1	145	Process
1	4	6	Tracking progress to date on this improvement project and	1	146	Skill
1	4	7	Understanding the work of teacher leaders and improvement facilitators as it relates to the work of the NIC team	1	147	Process
1	5	1	Understanding the underlying psychology of change and be able to leverage its power for improvement efforts	0	151	
1	5	2	Being able to use three tools to better understand others' perspectives on next year's improvement work	0	152	Process
1	5	3	Drafting a communication for staff about this improvement project	1	153	Buy in
1	5	4	Understanding general challenges of the work from the perspective of teacher leaders	0	154	Practice
1	5	5	Strengthening skills of listening and asking questions to deepen thinking	0	155	
1	5	6	Drafting process measures	1	156	Skill
1	5	7	Preparing for NIC Teamwork at Summer Convening	1	157	Process
2	1	1	Having a clear definition of what powerful student learning means to you	0	211	
2	1	2	Knowing a key tenet of improvement science: Understand the problem	0	212	

Role	Training_day	S No	Session Questions	Include	Question No.	Dimension
2	1	3	Gaining a more nuanced understanding of the current school outcomes	0	213	
2	1	4	Learning to use a toll of improvement by drafting a Plan-Do-Study-Act (PDSA) cycle	1	214	Skill
2	2	1	Identifying strengths and challenges as an Improver	0	221	
2	2	2	Understanding lessons learned from schools using Improvement Science	0	222	
2	2	3	Identifying key learning from the first PDSA cycle	1	223	Skill
2	2	4	Gaining confidence crafting a new PDSA about attendance	1	224	Skill
2	2	5	Understanding core processes and tools used in TLI	1	225	Skill
2	2	6	Understanding some of the challenges of teacher leadership	0	226	Practice
2	2	7	Understanding the purpose and elements of a Driver Diagram	1	227	Skill
2	3	1	Creating a clear and measurable three-year aim statement for your school	1	231	Practice
2	3	2	Building or revising a Driver Diagram	1	232	Skill
2	3	3	Using a fishbone diagram to understand two of the drivers more deeply	1	233	Skill
2	3	4	Planning a meeting of all four members of your Improvement Team (principal, Improvement Facilitator and teacher leaders) to clarify roles and responsibilities and to share learning	1	234	Process
2	3	5	Crafting a problem statement that communicates urgency and builds will	1	235	Buy in

Role	Training_day	S No	Session Questions	Include	Question No.	Dimension
2	3	6	Reflecting on an element of leadership for leading improvement	0	236	
2	3	7	Determining ways to support TLI participants (principals) OR Drafting a new Plan-Do-Study-Act cycle about one of the Drivers (IF)	1	237	Skill
2	4	1	Identifying and consolidating learning from NIC Team meeting	1	241	Process
2	4	2	Identifying key learning from the last two PDSA cycles	1	242	Practice
2	4	3	Drawing a through-line from Drivers to change ideas	1	243	Skill
2	4	4	Constructing a PDSA connected to one or more Drivers and specific students on the watch list	1	244	Skill
2	4	5	Determining a data collection plan for PDSA	1	245	Skill
2	4	6	Strengthening skills of listening and asking questions to deepen thinking	0	246	
2	4	7	Drafting a set of questions to ask colleagues when they start working on change ideas	1	247	Practice
2	4	8	Building a shared understanding of the work of PLI and TLI as it connects to the theory of practice improvement	1	248	Practice
2	4	9	Understanding the purpose and uses of the Network Improvement Learning and Supports (NILS) platform	0	249	Process
2	5	1	Identifying and consolidating learning from NIC Team meeting	1	251	Process
2	5	2	Identifying key learning from the last PDSA connected to one or more Drivers specific students on the watch list	1	252	Practice

Role	Training_day	S No	Session Questions	Include	Question No.	Dimension
2	5	3	Constructing the next PDSA with data collection plan	1	253	Skill
2	5	4	Drafting a set of questions to ask colleagues when they start testing change ideas connected to one or more Drivers	1	254	Practice
2	5	5	Being able to use three tools to better understand others' perspectives on next year's improvement work	0	255	Skill
2	5	6	Preparing for NIC Team work at Summer Convening	1	256	Process
3	1	1	Understand the construct and workings of STL Networked Improvement Communities (NIC) including an introduction to the Improvement science methodology	1	311	Process
3	1	2	Understanding different ways teacher leadership is conceptualized	0	312	
3	1	3	Gaining a more nuanced understanding of what powerful student learning means to you	0	313	
3	1	4	Collecting quality evidence of student learning	1	314	Skill
3	1	5	Understanding key tenets of adult learning	0	315	
3	1	6	Selecting a key problem of practice in your classroom for focused study	1	316	Skill
3	2	1	Engaging in shared examination and analysis of student learning using video case studies	0	321	Skill
3	2	2	Cultivating and deepening the practices of quality data collection and reflection	1	322	Practice
3	2	3	Distinguishing typical feedback practices in schools from data collection and reflection	0	323	Skill

Role	Training_day	S No	Session Questions	Include	Question No.	Dimension
3	2	4	Practicing a protocol for reflective dialogue with colleagues based on observation of student learning	1	324	Practice
3	2	5	Considering the meaning of a culture of learning for adults	0	325	
3	2	6	Strengthening skills of listening and asking questions that deepen thinking	0	326	
3	3	1	Consolidating learning from the school based NIC Team meeting	1	331	Process
3	3	2	Reflecting on Student Learning Reflection Cycles and identify an area for growth	1	332	Skill
3	3	3	Building confidence and refining the practice of the Student Learning Reflection Cycle	1	333	Skill
3	3	4	Identifying one target for growth based on feedback from the student surveys and identifying the next steps	1	334	Practice
3	3	5	Understanding and practicing using a protocol for looking at student work with colleagues with a stance of inquiry	1	335	Practice
3	3	6	Drafting a classroom improvement intended to advance powerful student learning	1	336	Skill
3	3	7	Considering potential partners to scale the Student Learning Reflection Cycle	1	337	Buy in
3	3	8	Understanding the micro-credential process and products	0	338	
3	4	1	Identifying key learning from the latest rounds of Student Learning Reflection Cycles	1	341	Skill
3	4	2	Sharing a classroom improvement intended to advance powerful student learning	1	342	Practice

Role	Training_day	S No	Session Questions	Include	Question No.	Dimension
3	4	3	Drafting a Plan-Do-Study-Act cycle for one or more students in need of help	1	343	Skill
3	4	4	Assessing confidence in skills used in the Student Learning Reflection Cycle	1	344	Practice
3	4	5	Reflecting on and sharing the most important pieces of learning from this year	0	345	
3	4	6	Using three frames to better understand others' perspectives on next year's scaling efforts	0	346	
3	4	7	Identifying knowledge and skills necessary to lead the snowflake next year	1	347	Buy in
3	4	8	Drafting an agenda for a Learning Team meeting	1	348	Process

APPENDIX F. SCHOOLS THAT LEAD QUALITATIVE ANALYSIS CODEBOOK

Name	Description	Files	References
Barrier	A node dedicated to the barriers articulated by participants.	0	0
Competing initiatives	Teachers have other things on their plate, and they fear they will have to let something else go in order to follow STL	1	8
Creating Buy In	Unwillingness to change. Or a school culture that resists change.	1	30
Lack of quick results	Participants point that the intervention is slow occurring, and that may be a barrier.	1	4
Lack of time	Participant expressed a lack of time to plan, to execute on the tools, strategies learnt in the intervention.	1	10
Personnel Turnover	Participant expressed concern over retention of teachers as a potential barrier to the success of STL intervention.	1	20
STL process related	STL related barriers identified by participants.	1	9
Benefits	Benefits articulated by the participants	0	0
Coherence with other initiatives	Participant mentioned how STL complements other initiatives currently ongoing in schools.	1	1
Credentialing	Participants mentioned the link with national boards.	1	1
Improvement Science Approach	Participants have mentioned how they were able to focus on one thing that they are currently working on changing in their class.	1	20
Interaction with other teachers	Participant mentioned helping other teachers to grow in their professional practice. Other mentioned that through STL intervention they have built better interaction routines with other teachers.	1	15
Changed Perspective	The participant mentioned a change in approach to teaching, leading the school etc due to STL training sessions.	1	10

Name	Description	Files	References
Design of STL intervention	Participant expressed opinions about the novelty, characteristics, design, approach of STL intervention.	1	13
Appreciation of the instructors	Participants expressed gratefulness for the training received through the facilitators or remarked about the assistance they received from the facilitators through the training sessions, and/ or through the year.	1	8
Concerns about the program experience	Participant expressed doubts over the length of time it is taking to affect change	1	3
Focus on Student	Participant expressed that there was a lack of evaluation and Judgement which freed them to participate and implement STL intervention approach.	2	9
Meaningful engagement with professional community	Participants expressed appreciation for the opportunity to interact and gain knowledge, discuss issues, and glean insights from others in the same profession.	1	5
More useful for teacher than other participants	Expressed an opinion that STL intervention is more geared towards improving teaching than other roles.	1	1
Enhanced Self Value	Participant referred to feeling more valued	2	6
Evidence of Change	Participants reporting that they are observing changes or intended outcomes.	2	3
Gains in practice	Participant expressing ideas that they have gained knowledge on how to teach and/or grown as a professional educator by experiencing training by STL	2	33
Suggestions	Suggestions offered by the participants related to training structure, timing, and mode.	2	6
Support and Sustainability of STL	Support and Sustainability of STL	1	8
Value the Experience	This node contains all references to STL training being a great experience, professional development, and opportunity for the participants.	1	19
Positive Learning	All references to STL intervention being a positive learning, and empowering experience.	1	6

For additional information contact:

Dr. Julie Marks
jtmarks@email.unc.edu

SCHOOLS THAT LEAD
Advancing Powerful Student Learning

School Selection Process: NCDPI Report 2.1.1
Schools That Lead North Carolina Networked Learning Communities

In consultation with the NC Department of Instruction, in a meeting on July 19 with members of the NC DPI leadership team and Schools That Lead (STL) staff, it was determined that Schools That Lead was solely responsible for the school recruitment process and it could begin once a contract between the parties was fully executed. In conversations prior to the July 19th meeting, NC DPI and STL staff discussed a shared goal to ensure that schools with lower student performance metrics be included.

On Saturday, August 4, NC DPI signed back the contract. Beginning on Monday, August 6, and concluding on Tuesday, August 7, STL issued a Request for Proposal (RFP) to every public district and charter school in North Carolina via email to district and school leadership. In addition the RFP was made available through notices by NCPAPA, The Public School Forum of NC, and in an article in EdNC. Telephone calls and follow-up emails were made to over 60 CAOs, Assistant Superintendents and principals in which the RFP was shared. The RFP was shared via email with each RESA director on August 13.

Prior to the RFP being released,

- STL staff was invited by the State Superintendent to share an overview of the work with schools superintendents at their quarterly meeting on June 25th and did so
- STL staff presented to The Innovation Project's (TIP) restart schools on July 16
- STL staff sent a press release including a notice that an RFP would be released to every public district and charter school in North Carolina via email to district and school leadership on June 15.

The RFP was structured to allow for selection process by lottery if the number of responses exceeded 60 schools – the limit set by the enabling legislation. The RFP asked for the following information (see responses in attached spreadsheet):

- Name of school
- Name and email of school principal
- If the principal was applying as a singular school or as one school in a feeder pattern. If the latter, to list the other schools.
- School report card grades and growth for the last two years
- Whether the school is located in a rural, suburban or urban setting
- The state education region in which the school is located
- To commit to payment of the annual network membership fee

SCHOOLS THAT LEAD
Advancing Powerful Student Learning

The RFP closed on Wednesday, September 5th. Forty schools responded to the RFP; 35 district schools and five charter schools (see attached spreadsheet). On September 12th schools were notified by phone and email that they were selected. Ultimately 36 of the 40 schools opted to participate in the first cohort (see list attached).

A similar RFP process will be offered in the first quarter of 2019 to enlist additional interested schools up to a total of 60.

SCHOOLS THAT LEAD
Advancing Powerful Student Learning

Networked Improvement Communities Member List
Cohort 1, 2018-19

Elementary School Networked Improvement Community

- Aulander Elementary, Bertie County Schools
- West Bertie Elementary, Bertie County Schools
- Shining Rock Classical Academy
- Rose Hill Magnolia Elementary, Duplin Country Schools
- Warsaw Elementary, Duplin County Schools
- Kenansville Elementary, Duplin County Schools
- Royal Elementary School, Franklin County Schools
- Kestrel Heights Charter School
- Lakeside Charter Academy
- Lincoln Charter School
- Liberty Elementary, Randolph County Schools
- Grays Chapel Elementary School, Randolph County Schools
- Spindale Elementary School, Rutherford County Schools
- The STEAM Academy at EM Rollins Elementary School, Vance County Schools
- Bugg Elementary School, Wake County Public School System
- Millbrook Environmental Connections Magnet Elementary, Wake County Public School System
- East Garner Elementary School, Wake County Public School System

Middle School Networked Improvement Community

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

High School Networked Improvement Community

- Bertie High School, Bertie County Schools
- James Kenan High School, Duplin County Schools
- New Hanover High School, New Hanover County Schools
- Providence Grove High School, Randolph County Schools
- Advance Academy, Vance County Schools
- Vance County Early College High School, Vance County Schools
- Warren County High School, Warren County Schools
- Wilkes Central High School, Wilkes County Schools

Timestamp	School name	District name	Principal name	Email address	I have read ar	If you are applying as a si	If you are applying as part	In the 20	In the 2(	Did your school make gro	Did your school make gro	Which description best fit	To which state education district does your LEA belong?
8/15/2018 16:09:39	Aulander Elementary	Bertie County	Clara Lee	chlee@bertie.k12.nc.us	Check here.	Elementary Schools: Reducing the number of childre		C	C	Met growth	Exceeded growth	Rural	Northeast Region/ District 1
8/20/2018 12:54:59	Bertie High School	Bertie County Schools	Martha Ann Debreaux-D	mdavis@bertie.k12.nc.us	Check here.	We are applying as part o	Bertie High School, Bertie	D	D	Did not meet growth	Did not meet growth	Rural	Northeast Region/ District 1
9/1/2018 23:29:16	Bertie Middle School	Bertie County Schools	William Peele	wpeele@bertie.k12.nc.us	Check here.	We are applying as part o	Bertie High School and W	D	D	Met growth	Exceeded growth	Rural	Northeast Region/ District 1
9/1/2018 23:32:57	West Bertie Elementary	Bertie County Schools	Tawanda Smallwood	tsmallwood@bertie.k12.n	Check here.	We are applying as part o	Bertie High School and Bo	C	C	Exceeded growth	Exceeded growth	Rural	Northeast Region/ District 1
9/4/2018 11:10:09	Charlotte Learning Acade	Charlotte Learning Academy	Stacey Rose	stacey.rose@charlottelea	Check here.	Middle Schools: Reducing	9th grade retention rates	F	F	Did not meet growth	Did not meet growth	Urban	Southwest Region/District 6
8/30/2018 11:28:19	Shining Rock Classical Ac	Charter (LEA 44A)	Nathan Duncan - Head	nduncan@shiningrock.org	Check here.	Elementary Schools: Red	N/A	C	C	Did not meet growth	Met growth	Rural	Western Region/District 8
8/31/2018 14:41:50	Rose Hill Magnolia Eleme	Duplin	Janice P. Wynn	jwynn@duplinschools.net	Check here.	Elementary Schools: Reducing the number of childre		D	D	Exceeded growth	Met growth	Rural	Southeast Region/District 2
8/29/2018 10:44:28	Warsaw Elementary	Duplin County	Pamela Murray	pmurray@duplinschools.r	Check here.	Elementary Schools: Reducing the number of childre		D	D	Exceeded growth	Met growth	Rural	Southeast Region/District 2
9/5/2018 12:34:30	James Kenan High Schoc	Duplin County Schools	Michael Holton	mholton@duplinschools.n	Check here.	We are applying as part o	Rose-Hill Magnolia Eleme	C	C	Exceeded growth	Exceeded growth	Rural	Southeast Region/District 2
9/4/2018 12:15:29	Kenansville Elementary	Duplin County Schools / James Ke	Debra Hunter	dehunter@duplinschools.	Check here.	Middle Schools: Reducing	James Kenan District	C	C	Met growth	Exceeded growth	Urban	Southeast Region/District 2
8/31/2018 10:48:45	Pattillo Middle School	Edgecombe County Public Schools	Lauren Lampron	llampron@ecps.us	Check here.	Middle Schools: Reducing	9th grade retention rates	New sch	D	New school/no prior grow	Exceeded growth	Rural	North Central Region/District 3
8/10/2018 11:11:14	Royal Elementary School	Franklin County Schools	Dominique Teasley	dominiqueteasley@fcsch	Check here.	Elementary Schools: Red	N/A	C	C	New school/no prior grow	Met growth	Rural	North Central Region/District 3
8/20/2018 13:34:02	Butner-Stem Middle Scho	Granville	Lauren Curtis	curtisl@gcs.k12.nc.us	Check here.	Middle Schools: Reducing	9th grade retention rates	D	D	Met growth	Met growth	Rural	North Central Region/District 3
8/6/2018 15:41:29	Erwin Montessori @ Alam	Guilford County Schools	Dr. Deborah Parker	parkerd@gcsnc.com	Check here.	Elementary Schools: Reducing the number of childre		C	C	Met growth	Met growth	Rural	Piedmont Triad Region/District 5
8/9/2018 9:17:03	Kestrel Heights Charter S	Kestrel Heights Charter School	April Goff	goff@kestrelheights.org	Check here.	Elementary Schools: Reducing the number of childre		C	C	Did not meet growth	Did not meet growth	Urban	North Central Region/District 3
8/6/2018 10:30:36	Lakeside Charter Acaden	Lakeside Charter Academy	Jim Montague	j.montague@lakesidecha	Check here.	Elementary Schools: Reducing the number of childre		D	C	Did not meet growth	Met growth	Suburban	Southeast Region/District 2
9/4/2018 12:34:05	Lincoln Charter School	Lincoln Charter School	Jonathan Bryant	jonathan.bryant@lincolnc	Check here.	Elementary Schools: Reducing the number of childre		B	B	Met growth	Did not meet growth	Rural	Southwest Region/District 6
8/29/2018 10:52:55	East McDowell Middle Sc	McDowell County Schools	Jennifer Croymans	jennifer.croymans@mcdo	Check here.	Middle Schools: Reducing	9th grade retention rates	D	C	Did not meet growth	Met growth	Rural	Northwest Region/District 7
8/29/2018 10:54:22	West McDowell Middle Sc	McDowell County Schools	Donna Gardner	donna.gardner@mcdowe	Check here.	Middle Schools: Reducing	9th grade retention rates	C	C	Met growth	Exceeded growth	Rural	Northwest Region/District 7
8/29/2018 10:55:35	Foothills Community Sch	McDowell County Schools	Melanie Shaver	melanie.shaver@mcdowe	Check here.	Middle Schools: Reducing	9th grade retention rates	New sch	New sch	New school/no prior grow	New school/no prior grow	Rural	Northwest Region/District 7
8/15/2018 11:51:15	New Hanover High Schoo	New Hanover County Schools	Rob Morgan	rob.morgan@nhcs.net	Check here.	High Schools: Increasing	on-time graduation rates	C	C	Did not meet growth	Did not meet growth	Urban	Southeast Region/District 2
8/11/2018 15:47:20	Southern Middle School	Person County School	Melody Wilson	wilsonm@person.k12.nc.u	Check here.	Middle Schools: Reducing	N/A	C	C	Did not meet growth	Met growth	Rural	North Central Region/District 3
8/31/2018 11:32:56	Liberty Elementary	Randolph	Kelli Harrell	kharrell@randolph.k12.nc	Check here.	We are applying as part o	Liberty Elementary, Grays	D	C	Met growth	Met growth	Rural	Piedmont Triad Region/District 5
8/30/2018 9:19:04	Grays Chapel Elementary	Randolph County	Ross Reaves	rreaves@randolph.k12.nc	Check here.	We are applying as part o	Liberty Elementary, North	C	B	Did not meet growth	Met growth	Rural	Piedmont Triad Region/District 5
8/29/2018 19:00:59	Northeastern Randolph M	Randolph County School System	Dana Albright-Johnson	dalbrightjohnson@randol	Check here.	We are applying as part o	Grays Chapel Elementary	C	C	Met growth	Met growth	Rural	Piedmont Triad Region/District 5
8/31/2018 18:14:36	Providence Grove High S	Randolph County Schools System	April Thompson	a1thompson@randolph.k	Check here.	We are applying as part o	Northeastern Randolph M	C	C	Met growth	Met growth	Rural	Piedmont Triad Region/District 5
9/4/2018 13:02:55	Spindale Elementary Sch	Rutherford County Schools	Brandon Hill	bhill@rcsnc.org	Check here.	Elementary Schools: Reducing the number of childre		C	C	Met growth	Exceeded growth	Rural	Western Region/District 8
8/24/2018 9:44:41	East Albemarle	Stanly County Schools	Jonathan Brooks	jonathan.brooks@stanlyc	Check here.	Elementary Schools: Reducing the number of childre		D	D	Did not meet growth	Did not meet growth	Rural	Southwest Region/District 6
8/13/2018 14:35:59	Albemarle Middle School	Stanly County Schools	Devron Furr	devron.furr@stanlycounty	Check here.	Middle Schools: Reducing	9th grade retention rates	D	C	Did not meet growth	Exceeded growth	Rural	Southwest Region/District 6
8/17/2018 12:37:43	Monroe High School	Union County Public Schools	Chistopher Kelly	jessica.rivas@ucps.k12.n	Check here.	High Schools: Increasing	on-time graduation rates	D	C	Did not meet growth	Did not meet growth	Rural	Southwest Region/District 6
9/4/2018 8:09:47	Advance Academy	Vance County	Stephanie Ayscue	sayscue@vcs.k12.nc.us	Check here.	High Schools: Increasing	on-time graduation rates	C	New sch	Did not meet growth	Did not meet growth	Rural	North Central Region/District 3
9/5/2018 15:49:50	The STEAM Academy at	Vance County	Stephanie Alston	salston@vcs.k12.nc.us	Check here.	Elementary Schools: Reducing the number of childre		F	D	Exceeded growth	Did not meet growth	Rural	Northeast Region/ District 1
9/4/2018 8:34:10	Vance County Early Colle	Vance County Schools	Travis Taylor	trtaylor@vcs.k12.nc.us	Check here.	High Schools: Increasing	Vance County STEM MS	A	A	Exceeded growth	Exceeded growth	Urban	Northeast Region/ District 1
8/12/2018 10:00:54	Millbrook Environmental C	Wake County Public School Syster	Dr. Jamee Lynch	jlynch2@wcpss.net	Check here.	Elementary Schools: Reducing the number of childre		F	D	Met growth	Did not meet growth	Urban	North Central Region/District 3
8/6/2018 11:50:32	East Garner Elementary S	Wake County Public Schools	Carmen Montero Graf	cgraf1@wcpss.net	Check here.	Elementary Schools: Reducing the number of childre		D	D	Met growth	Met growth	Suburban	North Central Region/District 3
8/28/2018 10:25:10	Centennial Campus Magr	Wake County Public Schools	Kathryn Hutchinson	khutchinson@wcpss.net	Check here.	Middle Schools: Reducing	9th grade retention rates	C	C	Met growth	Met growth	Urban	North Central Region/District 3
8/16/2018 18:01:33	Warren County High Scho	Warren County Schools	LaAlice Hopkins	lhopkins@warrenk12nc.o	Check here.	High Schools: Increasing	on-time graduation rates	D	D	Did not meet growth	Did not meet growth	Rural	North Central Region/District 3
8/6/2018 14:06:44	Pines Elementary	Washington County	Jacqueline M Maloney	jmaloney@wcsnc.org	Check here.	Elementary Schools: Reducing the number of childre		D	D	Did not meet growth	Did not meet growth	Rural	Northeast Region/ District 1
8/24/2018 14:10:24	Bugg Elementary School	*WCPSS*	Rebecca Foote	rfoote@wcpss.net	Check here.	Elementary Schools: Reducing the number of childre		F	F	Did not meet growth	Did not meet growth	Urban	North Central Region/District 3
8/6/2018 10:06:24	Wilkes Central HS	Wilkes County	Dr. Dion Stocks	stocksd@wilkes.k12.nc.u	Check here.	High Schools: Increasing	on-time graduation rates	C	C	Did not meet growth	Did not meet growth	Rural	Northwest Region/District 7

SCHOOLS THAT LEAD
Advancing Powerful Student Learning

NCDPI Report 2.1.2

CROSSWALK WITH NC PROFESSIONAL TEACHING STANDARDS

NC Professional Teaching Standard	Element	Schools That Lead Teacher Leadership Micro credential
STANDARD 1 Teachers Demonstrate Leadership	1a: Teachers lead in their classrooms	**Understanding Improvement**: Teachers practice using a Plan-Do-Study-Act cycle to improve student learning in their classrooms.
	1b: Teachers demonstrate leadership in the school	**Establishing a Common Aim:** Teachers work with peers to craft a relevant and meaningful Student Learning Question and related data collection tool to help them study student learning. **Facilitating Peer Reflection**: Teachers use a structured protocol to help peers assess where students are relative to the aim and consider next steps to advance powerful student learning. **Soliciting Feedback from Peers**: Teachers survey peers to gauge impact of the Student Learning Reflection Cycle on their students' learning. **Building Will:** Teachers collaborate with twelve colleagues at their school to scale the Student Learning Reflection Cycle **Measuring Impact on Student Learning**: Teachers gather evidence of what happened with student learning in their peers' classrooms. **Considering Impact on Culture:** Teachers use a research-based survey to measure levels of trust and learning among their group of peers participating in the Student Learning Reflection Cycle.

		Building skills in others: Teachers teach peers the structured process of the Student Learning Reflection Cycle and facilitate their learning group.
	1c: Teachers lead the teaching profession	**Sharing Improvement Strategies to Advance Professional Knowledge**: Teachers post the PDSA and related classroom artifacts to a shared site so that other teachers may learn from their results. **Sharing learning:** Teachers present the learning of their group of peers to external audiences through conferences, district meetings, Board meetings or other settings to advance understanding.
STANDARD 4 Teachers Facilitate Learning for Their Students	4a: Teachers know the ways in which learning takes place, and they know the appropriate levels of intellectual, physical, social, and emotional development of their students.	**Collecting Data:** Teachers work together to gather evidence of student learning based on selected Student Learning Questions.
	4b: Teachers plan instruction appropriate for their students.	**Listening to Student Voice:** Students provide teachers feedback through a classroom experience survey and teachers analyze data to determine appropriate next steps.
STANDARD 5 Teachers Reflect on Their Practice	5a: Teachers analyze student learning.	**Focusing on Student Learning:** Teachers identify an area of interest to help them look carefully at student learning, analyze results and determine next steps. **Looking at Student Work:** Groups of teachers work together to study and understand the work that students produce and consider implications. **Using Improvement Methods to improve student learning**: Teachers use a Plan-Do- Study-Act cycle to identify a goal, collect data and test changes in their classrooms that lead to improved student learning.

	5c: Teachers function effectively in a complex, dynamic environment.	**Using Improvement Methods to improve student learning:** Teachers use a Plan-Do- Study-Act cycle to identify a goal, collect data and test changes in their classrooms that lead to improved student learning.

SCHOOLS THAT LEAD
Advancing Powerful Student Learning

NC DPI Report: 2.1.3
Plan to Complement NC Star

Schools That Lead (STL) uses a school improvement process that complements the improvement processes of NC Star.

STL uses **improvement science** as the model for continuous improvement. A key tenet is to start with small changes and to determine efficacy of small moves, such as a classroom strategy being tested by one or two teachers, before slowing scaling the idea for testing to additional classrooms, where again efficacy is assessed. Once an idea builds warrant or proof of improvement in multiple contexts it is ready to be scaled more broadly, and only then. NC Star advises much the same, to "begin making small steps towards your goals."

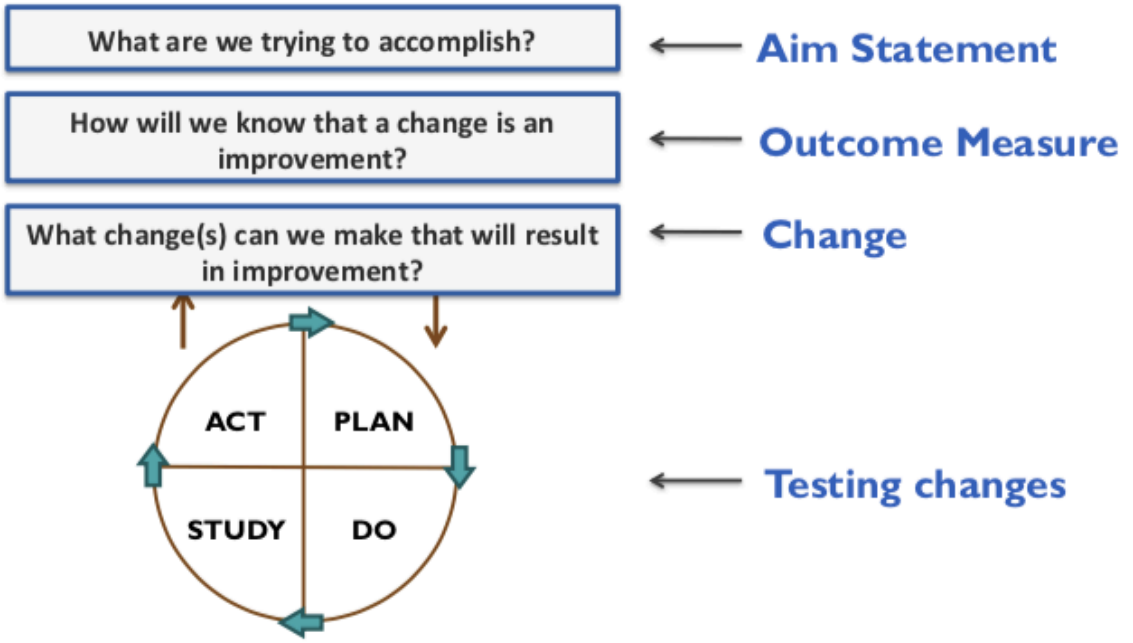
STL uses an improvement science model with schools to set a measurable goal for improvement and to plan back from the goal all the way to testing ideas as described in the previous paragraph (The Model for Improvement, below). A specific improvement science tool, called a driver diagram, sets a goal, called an aim statement and organizes work toward the aim through primary and secondary drivers, that in turn are linked to the change ideas (see attached example of a driver diagram). NC Star advises a similar strategy; to set a vision with complementary goals, linked to effective practices, indicators and actions (see attached example).

Because these two models for improvement are complementary, STL can support and advise teachers and principals using NC Star to incorporate the data sets they are using to define areas for improvement and the specific actions (change ideas with STL) into their NC Star plans. STL uses the work of Robert Balfanz at Johns Hopkins to lay a foundation for schools' examination of what is getting in the way of students' success. Balfanz's research has shown that as early as elementary schools students who are not progress in in math or ELA, or have discipline or attendance problems, become off track for on-time graduation from high school. Certainly there are problems for which schools using NC Star have set goals and our work with these schools can complement and strengthen their efforts.

SCHOOLS THAT LEAD

Advancing Powerful Student Learning

The Model for Improvement



SCHOOLS THAT LEAD

Advancing Powerful Student Learning

Milford Central Middle School
DRIVER DIAGRAM

Updated September 2016

Change concepts and ideas inspired by student agency

AIM:
By May 2017, halve the number (from 1 in 6 to 1 in 12) of students who get held back in 9th grade from Milford Central Academy

MEASURES
Outcome:
- Completion rates

Primary Drivers:
- SAIC survey
- Math & ELA class grades
- Attendance
- Discipline

Student Lens
- Lesson plans for substitutes
- Growth mindset wall mural
- Growth mindset lesson/booster
- Stress reappraisal
- Student videos
- Daily Mindfulness

Adult Instructional Practices and Mindsets
- Student Learning Reflection Cycles
- New Normal (Math)
- Argumentative Writing

Behavioral Supports
- Mental health supports
- CST Intervention

Attendance
- Attendance meetings
- Group noticing routine
- Attendance reports
- Absent student emails

Explicit Learning Strategies
- Class Progress Monitoring
- Challenge problems
- Exploratory talk
- Request to Retest
- Math instructional models
- Wise Framing for Feedback
- Essential Knowledge

SCHOOLS THAT LEAD
Advancing Powerful Student Learning

NC Star model of improvement

SCHOOLS THAT LEAD
Advancing Powerful Student Learning

NCDPI Report 2.1.4

Cohort 1 Calendar of Service
2018-2019

Principal Leadership Initiative (PLI)	Improvement Facilitator Initiative (IFI)	Teacher Leadership Initiative (TLI) – East	Teacher Leadership Initiative (TLI) – West
Tues, Oct 16 NCAE Headquarters *700 South Salisbury* *Raleigh*	**Wed, Oct 17** NCAE Headquarters *700 South Salisbury* *Raleigh*	**Th-Fri, Oct 25-26** East Garner Elementary School Media Center *5545 Jones Sausage Road* *Garner*	**Tu-Wed, Oct 23-24** Rutherford County Schools Central Office *382 West Main St.* *Forest City*
Wed, Nov 7 East Garner Elementary School Media Center *5545 Jones Sausage Road* *Garner*	**Th, Nov 8** East Garner Elementary School Media Center *5545 Jones Sausage Road* *Garner*	**Tu-Wed, Nov 27-28** NCAE Headquarters *700 South Salisbury* *Raleigh*	**Th-Fri, Nov 29-30** Wilkes County Schools Board Room *613 N. Cherry St.* *North Wilkesboro*
Tues, Dec 4 **TBD**	**Wed, Dec 5** **TBD**	**Tu-Wed, Feb 5-6** **TBD** Bugg Elementary School *825 Cooper Road* *Raleigh*	**Th-Fri, Feb 7-8** Foundations Center at Randolph Community College *629 Industrial Park* *Asheboro*
Tues, Feb 12 NCAE Headquarters *700 South Salisbury* *Raleigh*	**Wed, Feb 13** NCAE Headquarters *700 South Salisbury* *Raleigh*	**Th-Fri, May 9-10** NCAE Headquarters *700 South Salisbury* *Raleigh*	**Tues-Wed, May 7-8** Wilkes County Schools Board Room *613 N. Cherry St.* *North Wilkesboro*
Wed, May 15 NCAE Headquarters *700 South Salisbury* *Raleigh*	**Th, May 16** NCAE Headquarters *700 South Salisbury* *Raleigh*		
Summer Convening ***TBD***			

SCHOOLS THAT LEAD
Advancing Powerful Student Learning

NC DPI Report: 2.1.5
Budget Plan

The contract between Schools That Lead (STL) and NC DPI funds STL for $316,667.67 for 2018-19.

Projected expenditures are:

Salary and Benefits	$259,000
Accounting	$7,500
Liability Insurance	$1,500
Travel	$13,000
Meetings (rented space and food)	$15,000
Contracted Services (data repository)	$20,000