



EDUCATION POLICY
INITIATIVE *at* CAROLINA

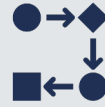


Schools That Lead Networked Improvement Communities

Summative Evaluation

Prepared for the Joint Legislative Oversight Committee
by the Education Policy Initiative at Carolina (EPIC)
11.29.22

Presentation Overview



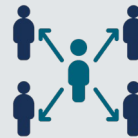
Program Model



Implementation Findings



Effectiveness Findings



Impact Findings



Administrative Findings

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

The Schools The Lead (STL) legislative mandate included a requirement that the North Carolina Department of Public Instruction engage an independent external evaluator and awarded a contract to the Education Policy Initiative at Carolina (EPIC) in spring of 2019.



Elementary schools: reduce the number of students with early warning indicators



Middle schools: prepare students to succeed in high school by reducing 9th grade retentions



High schools: increase on-time graduation

STL Professional Development Model

- The use of a “Watch List” of Early Warning Indicators (EWI)
- EWIs map empirical thresholds around attendance, behavior, and course performance to school-level goals
- STL guides schools through a systematic and evidence-based examination of
 - a) what can we improve?
 - b) where can we improve it?
 - c) how can it be done?
- Generates specific improvement ideas that will be implemented and tested on a small scale.
- Effective improvement ideas are tested across different settings, subject areas, and grade levels.

Focal Area	Measure	How often
Attendance	3 or more absences (excused or unexcused) per quarter	At least quarterly
Behavior	Unsatisfactory conduct on report card OR 2 or more mild or serious infractions	At least quarterly
Course Performance	Below grade level on report cards OR D/F grades (1/2)	Every grading period

Evidence-based Approach

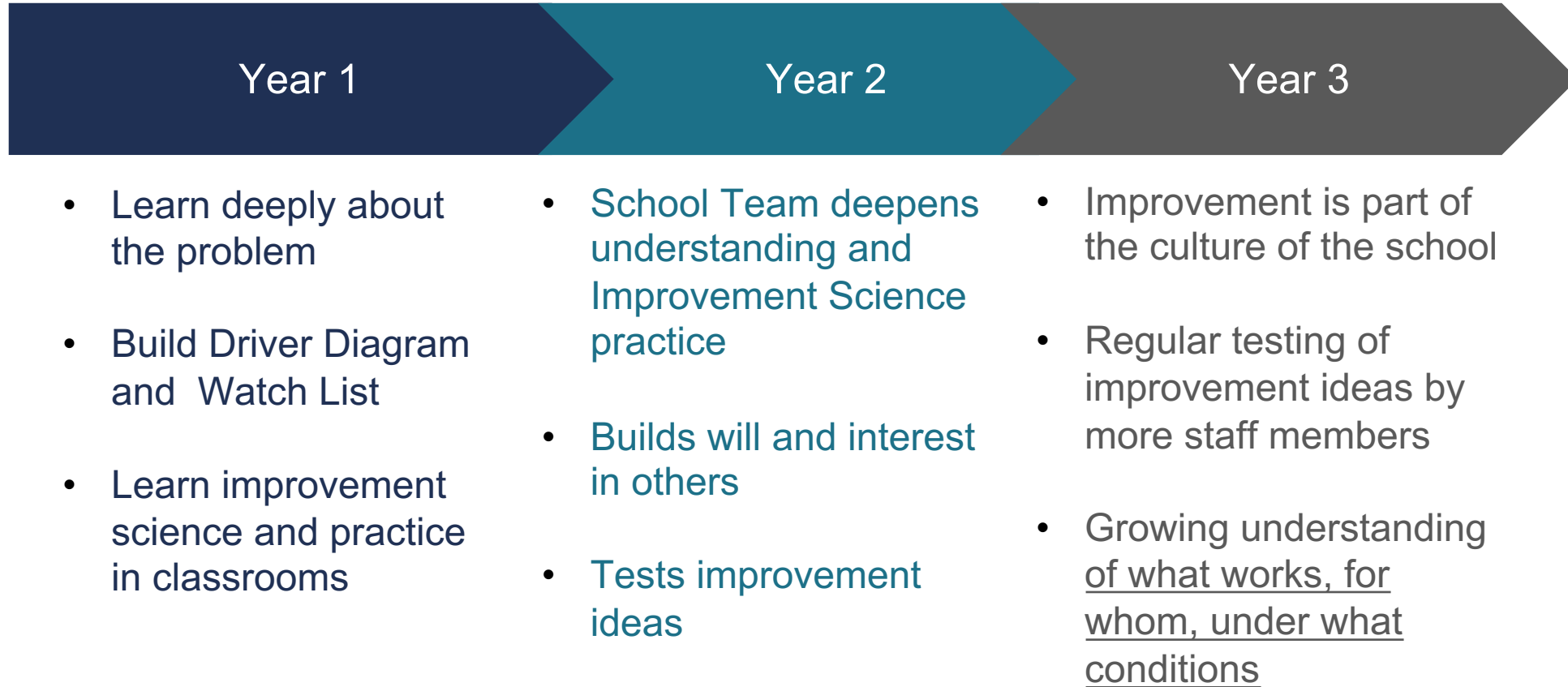
Early Warning Indicators

There is robust evidence correlating Early Warning Indicators with a number of student outcomes²; one of the most striking being that **as early as Kindergarten** there are markers for who will be off-track for on-time graduation.

Grade	Early Warning Indicator	Correlation with Dropping Out of School
1st grade, 3rd Marking Period	Absent 9 or more times	2x more likely to drop out
	Suspended	5x more likely to drop out
	Below grade-level in Math/ELA	2x more likely to drop out
	GPA below 1.2	2x more likely to drop out
3rd Grade, 1st Marking Period	Absent 3 or more times	2x more likely to drop out
	Suspended	9x more likely to drop out
	Below grade-level in Math/ELA	2x more likely to drop out
	GPA below 3.0	2x more likely to drop out

²See slide 29 for select Literature on EWIs

STL NIC Implementation Timeline



1. Implementation Findings

Program Reach

The STL North Carolina Networked Improvement Community is comprised of 52 NC K-12 schools in 15 districts and charter schools that serve nearly 30,000 students, 70% of whom live in poverty



School Level	NC NIC Schools	Principals	Improvement Facilitators	Teacher Leaders
Elementary	26	26	23	19
Middle	14	14	13	4
High	12	12	8	9
Total	52	52	70	84

STL Network Participants by School Level and Role – Cohort 1 & 2

Implementation Quality

Developed Professional Learning Quality (PLQ) rubric to assess the extent STL professional learning meets the ESSA-aligned Standards for Professional Learning adopted by the NC State Board of Education

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

Supported by **exceptionally positive feedback** from participants:

“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.”

-Teacher

Implementation Findings

Finding 1a. Approaching data with curiosity about a problem has revealed underlying causes that are catalysts for change.

Finding 1b. Giving teachers ownership and agency in solving problems can be transformative throughout a school.

Finding 1c. Principals and teachers value opportunities for collaboration within and between schools.

“...Without question, the greatest benefit has been the impact that Schools That Lead has had on teacher leadership. I've watched teachers take the reins with specific projects and truly demonstrate effective leadership throughout the school. They have also changed our perspective as to how we view school improvement and how we should approach problem areas within our school.”

- Principal

Implementation Finding 1a: Approaching data with curiosity about a problem has revealed underlying causes that are catalysts for change.

Middle School Case Study

- **Problem:** Many kids failing a course
- **Data:** Many zeros on assignments, students not turning in work
- **Improvement Idea:** Providing students with tool to track work completion
- **Finding:** 100% of students using assignment tracking tool improved overall grade, 70% previously failing improved to passing grades

Number of Missing Assignments Before	Number of Missing Assignments After	Grade Average Before	Grade Average After
15	13	32%	58%
8	2	62%	85%
14	8	45%	67%
10	7	56%	61%
6	1	45%	93%

Implementation Finding 1b: Giving teachers ownership and agency in solving problems can be transformative throughout a school

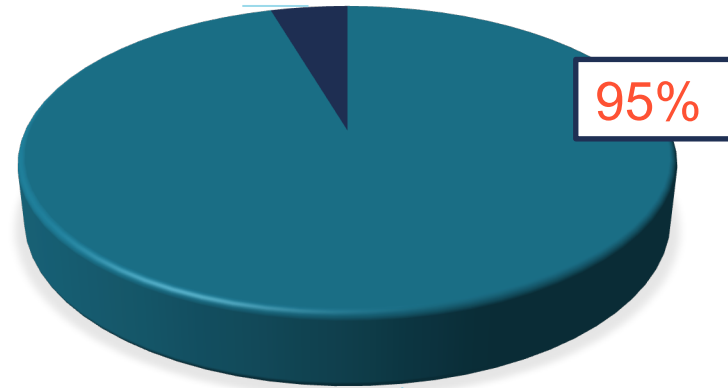
The hallmark of the third year of the STL Network was operationalizing the improvement science process through the creation of a **“Menu of Improvement Ideas”** – a 100+ page document that reflected promising practices tested within partner schools to address early warning indicators.

Elementary School Case Study

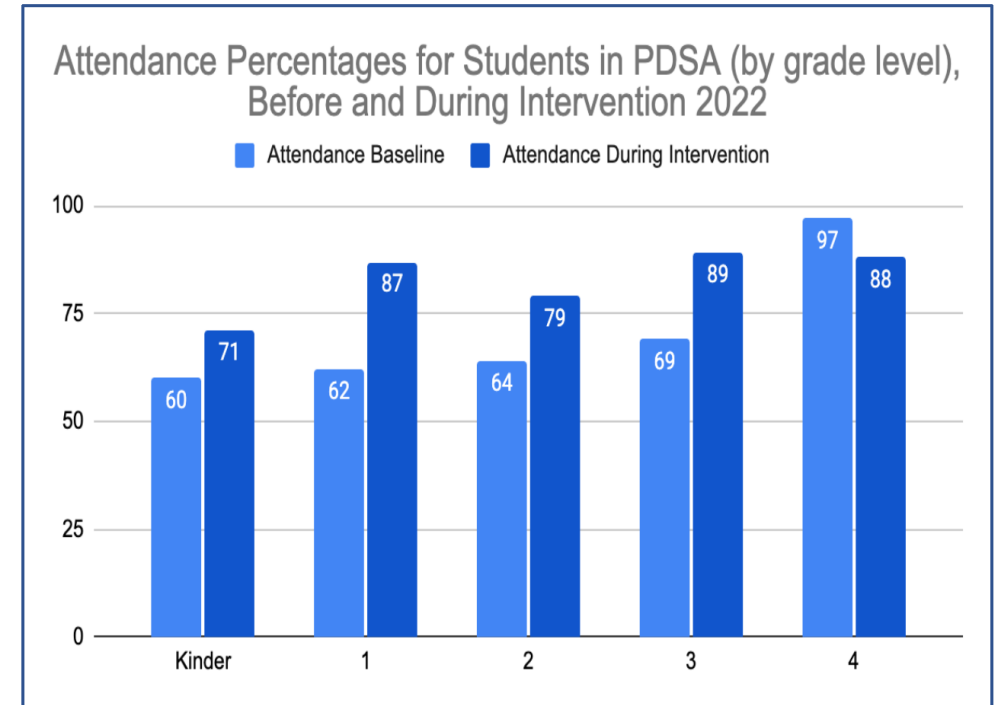
- **Process Measure:** Number of homeroom teachers trying an improvement idea focused on attendance

- **Outcome Measure:** Schoolwide improvements in attendance

Not Participating, 1



Participating, 21



* 5th grade did not have enough complete data for comparison

Implementation Finding 1c: Principals and teachers value opportunities for collaboration within and between schools.

- Common theme from open-ended items centered around the benefits of being able to meet and exchange ideas, having the time to share thoughts and concerns with other professionals, and to hear different perspectives.
- Principals cited this as a benefit three times more often than teachers and improvement facilitators.

“Time with the NIC teams feels like a safe space. I appreciate being able to hear the views of others and share my views without being worried if I will be judged. Normally I never share my thoughts in a room of people I don’t know, but every time I do I feel like someone says, ‘that’s exactly what I’m trying figure out’ or ‘here are some ideas to try’. That’s definitely a first for me.” - Teacher

“[The greatest benefit of STL is] the opportunity to exchange ideas with people from all over the state. To understand how things work in other schools” - Principal

2. Effectiveness Findings

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Finding 2a - Knowledge: Data across all three years demonstrated a consistent increase in knowledge of improvement science concepts, holding true for all school levels and all NIC team roles.

Finding 2b - Skills: Educators participating in the professional development reported growth in three categories of skills: 1) Instructional Design; 2) Use of data; and 3) Leadership Practices.

Finding 2c - Behavior: In year 3, almost all participants report engaging in stepwise improvement science activities to address barriers to student success.

“Part of looking at that data was pulling from improvement science... so the way we incorporate that was look at standards as we’re preparing for kids to get ready for those Benchmarks. Look and see are there trends that you’re seeing? 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!”

-Principal

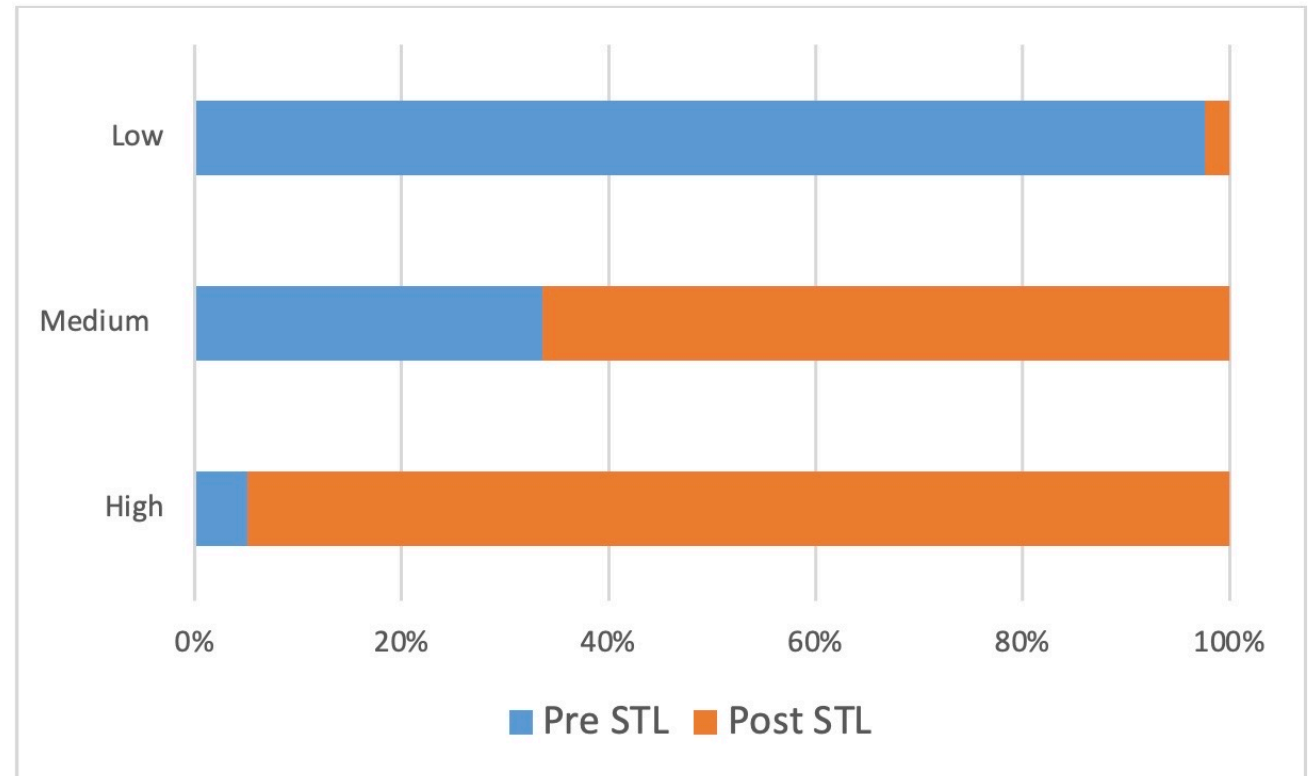
“...Actually observing and recording immediate positive academic, attendance, and/or behavioral results for the students that need it the most. This is very empowering to me because I don't have to wait for benchmarks, EOGs, or graduation to see that what I am doing for these students is moving them in the right direction!”

- Teacher

Effectiveness Finding 2a: Knowledge - Data across all three years demonstrated a consistent increase in knowledge of improvement science concepts, holding true for all school levels and all roles.

- 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 professional learning session.
- On average, there was a **seven-fold increase** in the number of participants who felt they have a high-level of knowledge around the professional learning topics at the conclusion of each session.

Change in Teacher Leader Self-efficacy in Improvement Science Knowledge and Practice



Effectiveness Finding 2b: Skill - Educators participating in the STL NC NIC professional development reported growth in three categories of skills: 1) Instructional Design; 2) Use of data; and 3) Leadership Practices

- Analysis of 174 open-ended assessments showed that 74% of STL participants reported changes in processes and practices as the greatest benefit to their work with STL.
- The processes and practices they cited could be organized under three overarching categories:
 - Instructional design
 - Use of data
 - Leadership practices

“STL has exceeded my expectations. I have grown as an instructional leader. I've watched my staff grow as instructional leaders as well as watched as their capacity to lead change has grown.” - Principal

*“I have learned a new way to harness the power I have as an instructor and the unique knowledge I have about my classroom and students to make small, impactful changes.”
-Teacher*

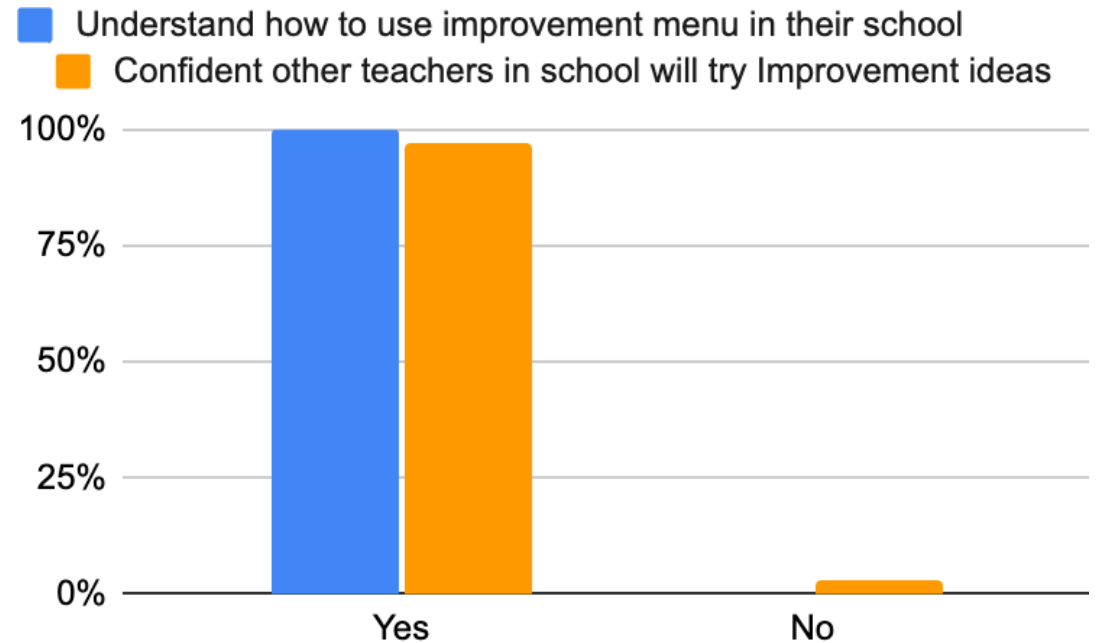
Effectiveness Finding 2c: Behavior - In year 3, almost all STL NC NIC participants report engaging in stepwise improvement science activities to address barriers to student success.

As of Fall 2020...

- 94% of participating educators had selected an early warning indicator to address
- 89% had identified the students/adults they would be working with.
- 89% had an improvement idea they would be trying.

As of Fall 2021...

- 100% of participants reported they understood how to use the improvement menu in their school.
- 97% were confident that other teachers in their school would be testing improvement ideas within the next 30 days.



3. Impact Findings

Perceptions of Program Impact

Almost three quarters of the survey respondents perceive the STL NC NIC approach to be more impactful than traditional district or state interventions

An overwhelming proportion of teachers/principals reported that they felt very likely or likely their work with STL NC NIC will impact legislated outcomes of increasing on-time graduation, reducing middle school grade retention, and reducing elementary school early warning indicators

	Count	Percent
STL is a more <i>impactful approach to school improvement</i> compared with district or state-level school improvement efforts	123	72%
STL is an <i>equally impactful approach to school improvement</i> compared with district or state-level school improvement efforts	44	26%
STL is a <i>less impactful approach to school improvement</i> compared with district or state-level school improvement efforts	4	2%

	Elementary	Middle	High
Likely / Very Likely	91%	88%	100%
Unlikely / Very Unlikely	9%	12%	0%

3. Impact Findings

Impact Finding 3a. A total of fifty-seven ideas were implemented within these schools, with the most prevalent focus being course performance.

Drivers/ Early warning indicators	Number of Improvement Ideas Tested	Percentage of Total ideas
Course performance	37	65%
Attendance	13	23%
Social Emotional Learning	7	12%

Impact Finding 3b. Although ideas from the Improvement Menu are still being tested, there were a number of improvement approaches that successfully impacted their target early warning indicator.

“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 waterspout analogy...they 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. After that school year, the middle school ended up 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!”

- Principal

Scaling effective improvement ideas

Some Cohort One schools report scaling successful improvement efforts within and across schools

“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.” - 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.” - Principal

4. Administrative Findings

4. Administrative Findings

High School Graduation Rates: The proportion of STL Network schools with graduation rates above the state average increased nine percentage points for Cohort 1 (from 25% to 34%) and ten percentage points for Cohort 2 schools (from 30% to 40%).

Chronic Absenteeism: Over half of STL Network schools had greater decreases in chronic absenteeism than the state average.

- Statewide, chronic absenteeism in elementary school decreased seven percentage points.
- Across Cohort 1 elementary schools, eight out of twelve schools (66%) reported a greater decrease in chronic absenteeism, ranging from an eight to eleven percentage point decrease.
- Across Cohort 2 schools, 43% reported a greater decrease in chronic absenteeism than the state average, ranging from an eleven to fifteen percentage point decrease.
- Taken together, 53% of STL Network schools had a greater decrease in chronic absenteeism than the state average.

Short-term Suspensions: No notable patterns in short-term suspensions over time, or in relation to the state average.

Closing thoughts from the field...

“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.”
- Teacher

For additional questions or comments,
please contact Dr. Julie Marks



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Evaluation Data Sources

Program Artifacts	Training materials including session evaluations, school testimonials, conference presentations, and press articles
Internal Session Evaluations	Anonymous survey administered after each session that included a pre-post assessment of knowledge change, current level of understanding, quality of the professional development, items on self-efficacy and readiness, and open-ended opportunities for feedback evaluations, school testimonials, conference presentations, and press articles
Internal Annual Evaluations	Training materials including session evaluations, school testimonials, conference presentations, and press articles
External Impact Assessment Survey	Anonymous survey administered after each session that included a pre-post assessment of knowledge change, current level of understanding, quality of the professional development, items on self-efficacy and readiness, and open-ended opportunities for feedback evaluations, school testimonials, conference presentations, and press articles
EPIC Teacher and Principal Semi-Structured Interviews	Anonymous survey administered after each session that included a pre-post assessment of knowledge change, current level of understanding, quality of the professional development, items on self-efficacy and readiness, and open-ended opportunities for feedback evaluations, school testimonials, conference presentations, and press articles
NCDPI Administrative Data	School-level sociodemographic variables and school performance data were calculated from North Carolina Department of Public Instruction

Select Literature on Early Warning Indicators

- Allensworth, E., & Easton, J. (2005). The on-track indicator as a predictor of high school graduation. Chicago, IL: Chicago Consortium on School Research.
- Allensworth, E., & Easton, J. (2007). What matters for staying on-track and graduating in Chicago public high schools. Chicago, IL: Consortium on Chicago School Research.
- Balfanz, R., & Boccanfuso, C. (2008a). Falling off the path to graduation: Middle grade indicators in Boston [Working paper]. Baltimore, MD: Center for Social Organization of Schools.
- Balfanz, R., & Byrnes, V. (2010). Dropout prevention through early warning indicators: A current distribution in West Virginia schools. Baltimore, MD: Everyone Graduates Center.
- Mac Iver, M.A. (2011). Destination graduation: Sixth grade early warning indicators for Baltimore City schools—Their prevalence and impact. Baltimore, MD: Baltimore Education Research Consortium.
- Neild, R. C., & Balfanz, R. (2006). Unfulfilled promise: The dimensions and characteristics of Philadelphia's dropout crisis, 2000–2005. Philadelphia, PA: Philadelphia Youth Transitions Collaborative.