



SCHOOLS THAT LEAD
Advancing Powerful Student Learning

NC Joint Legislative Education Oversight Committee

February 6, 2018



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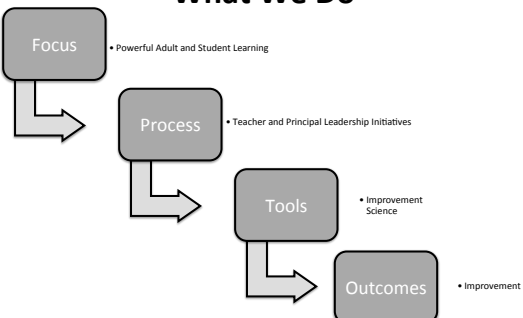
Why We Do What We Do

The research is clear. Teachers have the greatest in-school impact on student learning. And we know that **we have very effective teachers in every school**. These teacher leaders deserve the opportunity to learn how **to work with adults** and to teach colleagues how to improve their practice so that they can affect student achievement beyond their own classrooms to classrooms across their schools, districts and the state.



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What We Do



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    Focus[Focus  
• Powerful Adult and Student Learning] --> Process[Process  
• Teacher and Principal Leadership Initiatives]
    Process --> Tools[Tools  
• Improvement Science]
    Tools --> Outcomes[Outcomes  
• Improvement]
    
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SCHOOLS THAT LEAD
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Our Focus

Improving Student Learning and Student Achievement

- We develop cohorts of principals and teacher leaders within and across schools and school districts, bringing a deep focus on student learning and achievement.


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Our Process

- **Teacher and Principal Leadership Initiatives**
 Teachers learn how to look for evidence of active student learning in each other's classrooms and make instructional decisions based on that evidence. Principals grow their skills to understand the difference between teachers teaching and students learning, and how to support their teachers in making sound instructional decisions so that every student is learning at a high level.


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Our Tools

Improvement Science

- We teach principals and teachers to use improvement science to articulate their theories and assumptions, determine the effectiveness of change ideas and measure impact over time as they work to solve a common problem.


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Our Outcomes

Improvement in Student Achievement

- We establish networks so principals and teachers can share their positive and lasting impact on student learning within and across their schools based on the problems they identified to solve in their classrooms and schools.


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Evidence of Impact

Some Examples

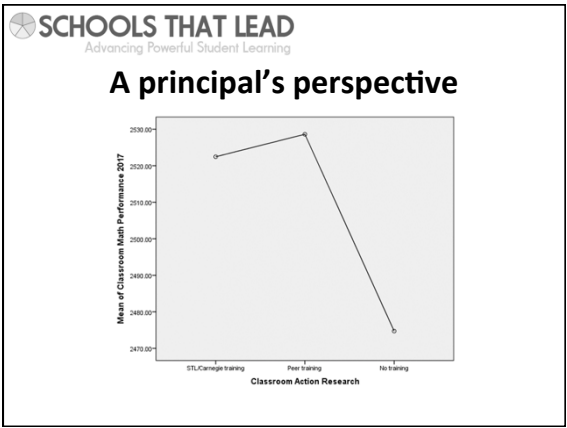
- Improved individual teacher's classroom performance, e.g., *more students passing a course*
- Improved on-grade-level performance within a school, e.g., *more students making it out of 9th grade*
- Improved selected students' performance on state assessments, e.g., *increased student scores on state math assessments*


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A teacher's perspective

"However, two years ago, everything changed. I began working with Schools that Lead, and for the first time in my career, I understood what it meant to advance powerful student learning. After joining the Teacher Leadership Initiative (TLI), I began to learn how to engage my colleagues in Student Learning Reflection cycles. We would go into each other's classrooms, collect meaningful student data for each other, and engage in reflective practice. We focused on what was meaningful to us, what we were curious about, and what we wanted to change in our classrooms. I also learned how to use improvement science in my classroom. After identifying a problem that I wanted to change, I went through the cycle of a Plan, Do, Study, Act (PDSA); this a structured format to test a new idea, analyze the data, and make an action plan based on my learning. For the first time, I realized that data is powerful. **For the first time, I realized that I was powerful.**"

Brandy Cooper
 6th grade math teacher
 Milford Central Academy
 TLI, Cohort 2



Who We Are

- Educators with North Carolina school and district experience in K-12 teaching and administration, dedicated to helping all students learn
- Leaders in the use of improvement science methods with teachers and principals in Delaware
- Entrepreneurs interested in growing networks of school leaders, administrators and teachers in North Carolina, committed to developing and sharing replicable processes for advancing powerful student learning
- Thirteen years of combined experience supporting North Carolina's Cooperative Innovative Schools
- Selected for a contract with Superintendent Mark Johnson's staff at NCDPI, but due to budget constraints, the contract was not awarded

What We Do

- **OUR FOCUS: Improving Student Learning and Student Achievement**
We develop cohorts of principals and teacher leaders within and across schools, bringing a deep focus on student learning and achievement.
- **OUR PROCESS: Teacher and Principal Leadership Initiatives**
We shift the focus of classroom observations from what teachers are doing to what and how students are learning. Teachers learn how to look for evidence of active student learning in each other's classrooms and make instructional decisions based on that evidence. Principals grow their skills to understand the difference between teachers teaching and students learning, and how to support their teachers in making sound instructional decisions so that every student is learning at a high level.
- **OUR TOOLS: Improvement Science¹**
We teach principals and teachers to use improvement science to articulate their theories and assumptions, determine the effectiveness of change ideas and measure impact over time as they work to solve a common problem.
- **OUR OUTCOMES: Improvement in Student Achievement**
We establish networks so principals and teachers can share their positive and lasting impact on student learning within and across their schools based on the problems they identified to solve in their classrooms and schools.

Evidence of Impact

- Improved individual teacher's classroom performance, e.g., students' grades and passing rates
- Improved on-grade-level performance within a school, e.g., ninth grade promotion rates
- Improved selected students' performance on state assessments, e.g., middle school math tests

¹ See Core Principles of Improvement Science on the next page.

Improvement Science

In our work, principals and teachers learn to use improvement science to articulate their theories and assumptions, select change ideas and measure impact over time as they work to solve a common problem.

The key elements of Improvement Science (as described by the Carnegie Foundation for the Advancement of Teaching) are represented in the core principles below.

1. Make the work problem-specific and user-centered.

It starts with a single question: “What specifically is the problem we are trying to solve?” It enlivens a co-development orientation: engage key participants early and often.

2. Variation in performance is the core problem to address.

The critical issue is not what works, but rather what works, for whom and under what set of conditions. Aim to advance efficacy reliably at scale.

3. See the system that produces the current outcomes.

It is hard to improve what you do not fully understand. Make your hypotheses for change public and clear.

4. We cannot improve at scale what we cannot measure.

Embed measures of key outcomes and processes to track if change is an improvement. We intervene in complex organizations. Anticipate unintended consequences and measure these too.

5. Anchor practice improvement in disciplined inquiry.

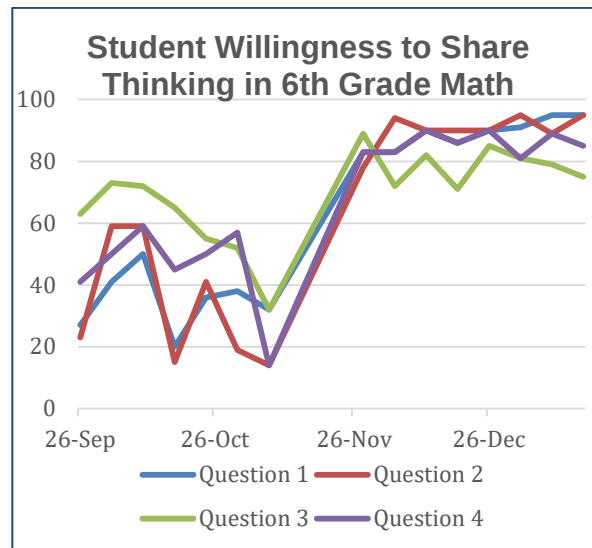
Engage rapid cycles of Plan, Do, Study, Act (PDSA) to learn fast, fail fast, and improve quickly. That failures may occur is not the problem; that we fail to learn from them is.

6. Accelerate improvements through networked communities.

Embrace the wisdom of crowds. We can accomplish more together than even the best of us can accomplish alone.

Evidence of Impact

- **Schools That Lead (STL) teacher leaders improve student learning in their own classrooms.**



Embracing data is a core principle of improvement science. Teachers identify a goal, collect data and test changes in their classrooms that lead to improved student learning. Key to the data collection is the ability to discern the difference between a change (something happened) and an improvement (there were better results that were sustained over time). Run charts help teachers identify those changes that result in sustained improvement.

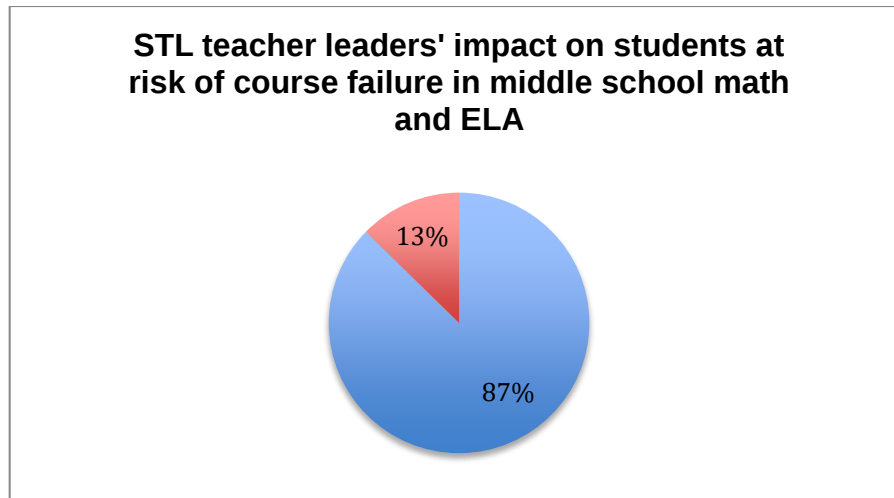
Above is an example of one middle school math teacher's change idea and its impact on students. This sixth-grade math teacher knew it was important to help her students share their thinking so that she could understand where they were making their mistakes.

She tracked the progress of her students using these four prompts:

- How willing are you to try a problem when rough draft talk first begins?
- How comfortable are you sharing your ideas with your small group?
- How comfortable are you going up to the whiteboard and sharing your ideas with the class?
- How successful are you at explaining your ideas and making your ideas visible to others?

The run chart above shows her students' dramatic increase in their willingness to share their thinking in her sixth grade math class. Once students were comfortable sharing their thinking, she could help correct their misunderstandings and improve student learning before students failed a test.

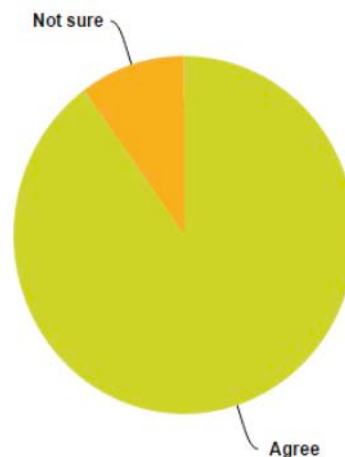
- **Schools That Lead (STL) teacher leaders improve student learning in peers' classrooms.**



The above pie chart shows the impact of STL teacher leaders on student pass rates in a middle school. Teachers tracked the number of students at risk of failing in ELA and math, tried an intervention created by one of the STL teacher leaders, and dramatically reduced course failure rates. 87% of the at-risk students ended up passing the courses for which they were at risk of failure.

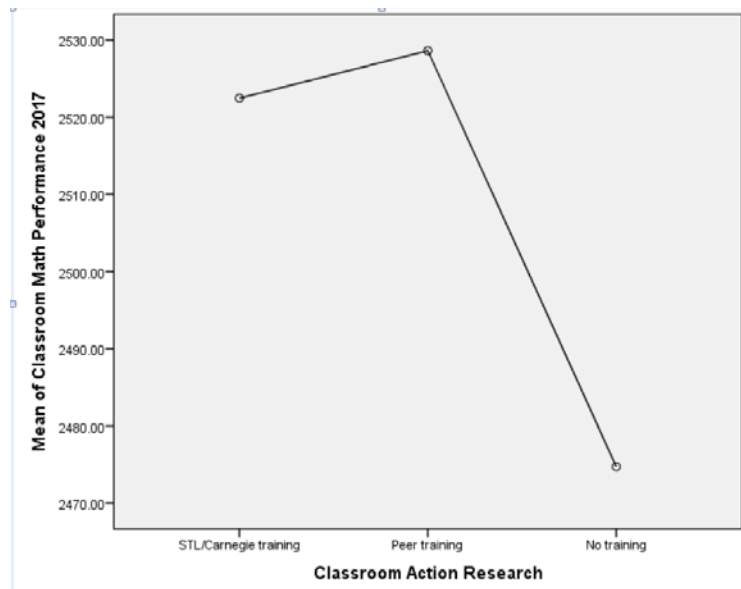
The Student Learning Reflection Cycle contributed to improved student learning in my classroom.

Answered: 60 Skipped: 0



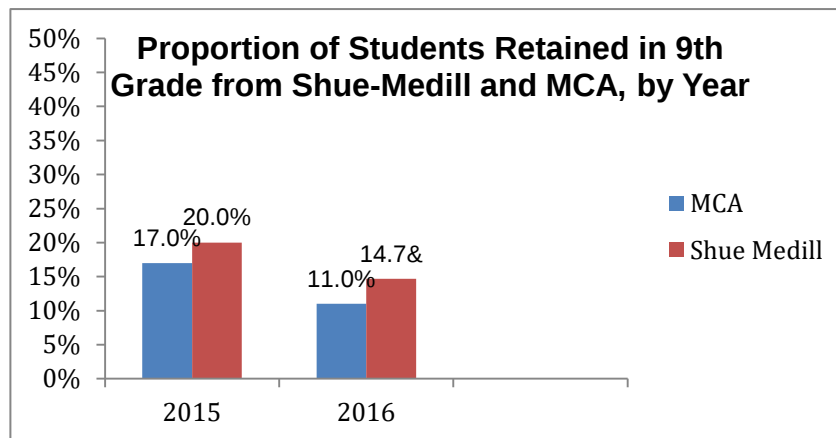
This pie chart shows the impact of STL teacher leaders on student learning in their peers' classrooms. That is, teachers who work with STL then go into other teachers' rooms (who never work with STL). 93% of those peers reported that just one time working with STL teacher leaders improved student learning in their classrooms.

- **Schools That Lead (STL) teacher leaders improve student performance on state assessments.**



Depicted here are three groups of teachers and their students' scores on state math assessments: 1) those who worked with Schools That Lead with improvement strategies (STL/Carnegie), 2) those who worked with those same STL trained teachers (Peer training), and, 3) those who had neither experience (No training). Students of teachers in the first two groups consistently outperform those in the third group.

- **Schools That Lead (STL) teacher leaders improve student 9th grade promotion rates.**



Two STL-partnered middle schools focused on improving their graduated students' ninth grade promotion rates. By identifying early warning indicators for students at risk of failure in middle school and closely following those students and providing important supports, each school reduced the number of students held back in ninth grade by more than 25% in two years.



How “Schools That Lead” Empowers Educators To Create Change For Generations To Come

Casey Montigney is a sixth grade English Language Arts (ELA) teacher at Shue-Medill Middle School in Newark, Del. She was troubled. Too many of her students who – despite having good attendance, homework and participation grades – were unable to pass the class because of failing test scores. Moreover, she was aware of the national statistics that students who don’t pass ELA in the sixth grade are not likely to graduate high school.

Many teachers, like Montigney, alongside their principals, get to the heart of questions like these that plague schools across the country through Schools That Lead, a nonprofit organization that focuses on **teacher leadership for improving student learning and achievement by shifting the focus of the classroom from what teachers are doing to how students are learning.**

Teachers and principals from 20 to 30 schools enter into a two-year long commitment when they work with Schools That Lead. Over the course of these two years, teachers spend 14 days learning together, while principals spend 10 days. During this time, they work to identify small, specific problems in their school – like Montigney’s failing ELA test scores – and use a process called improvement science to arrive at solutions.

Principals and teachers learn to use improvement science to articulate their theories and assumptions, test change ideas and measure impact over time as they work to solve a common problem.

Improvement science has been used with great success in the healthcare industry. The Institute for Healthcare Improvement did a study aimed at reducing the spread of staph infections using improvement science. They drilled down to identify a problem – healthcare providers inadvertently spreading the bacteria because of poor hand hygiene practices. After a series of trial-and-error by implementing various strategies and evaluating their effectiveness, the group found placing alcohol rub dispensers in convenient locations with signage encouraging their use drastically reduced the transmission of infections.

“Often times it’s very simple, but impactful, ideas that lead to big improvements,” says Dana Diesel Wallace, president and chief executive officer of Schools That Lead. “Solutions do not have to be extremely complex. Sometimes it requires working through the process of trial-and-error and not being afraid to

abandon solutions that aren't working. It's the same thing we're doing with teacher leaders in the classroom."

"We assume that there are excellent teachers in every school – right now. Our model leverages that in-house expertise," adds Sofi Frankowski, chief learning officer for Schools that Lead. "We aren't trying to go into schools and fix things. We know that any given teacher is in a unique situation any given day. That teacher has a greater understanding of the challenges than any outsider. Our job is to find out how to leverage that uniqueness and work with educators to figure out those specific problems and come up with ideas to produce better outcomes."

For instance, in Montigney's case, the first step was identifying the problem – the failing test scores. From there, Schools That Lead facilitators and participants in her cohort helped encourage her in finding ways to arrive at a new outcome. Montigney decided to give her students a chance to retake tests – but as part of the process of retesting, the students needed to request a retest personally and show her three ways they've worked to relearn the material they didn't understand the first time.

"It took some tweaking for her. She tried reminding students about retake options at the beginning of class versus the end of class, and evaluated which was more effective. She decided to create a notebook that shows different ways to study the materials, and let students look at that notebook for ideas to help them prepare for the retest. She took an entire semester trying out new ideas," explains Frankowski. "Now she's changed the trajectory of the rest of their academic career, simply by coming up with a simple solution to a specific problem."

As part of the process, teacher leaders in these cohorts are encouraged to share what they've learned with about a dozen other teachers in their school. Not only did Montigney solve the problem she identified in her class, but when she shared her idea with colleagues and they tried it, **87 percent of their students who were at risk of course failure passed their classes too.**

"What we see a lot of times is education consultants come in with a plan and force all teachers to embrace it, which leads to a lot of resistance," says Diesel Wallace. "Besides that, it's often not particularly effective because we know what works for one teacher might not work for another. Context matters. Using improvement science, teachers are learning together what works, for who, and under what circumstances."

And the process is making a lasting impact on school campuses, explains Nancy Carnevale, principal of Milford Central Academy in Milford, Del. Her school recently completed the Schools That Lead two-year commitment.

"Being involved with Schools That Lead has changed the way my school functions and runs," says Carnevale. "Mostly because for years, it was always about

the big roll out – what’s our initiative for the year and what are we going to make everybody do? Schools That Lead is totally different than that. It’s provided my teachers with many different onramps to get into improvement work. It’s also really cemented the idea of making these small changes on a small level, figuring out what works in this setting, and what didn’t work.”

“We realize that the education field suffers a bit from ‘solutionitis.’ Someone goes to a conference, comes back and then everyone is forced to do ‘the thing.’ We were educators and we’ve seen that happen in our own schools,” says Frankowski. “At the end of the day, what we’re seeing time and time again is that it takes one single teacher saying, ‘I have a problem and I’m going to work to figure out a solution,’ that ends up changing student outcomes across an entire school better than any huge initiative a school may try to force on its teachers. And we’re here to help them figure out those solutions.”

Schools That Lead is one of the pioneers in using improvement science in education and one of very few organizations across the country working with educators to implement these principles in schools.