

# continuous improvement

WALL

## Spartanburg, S.C.

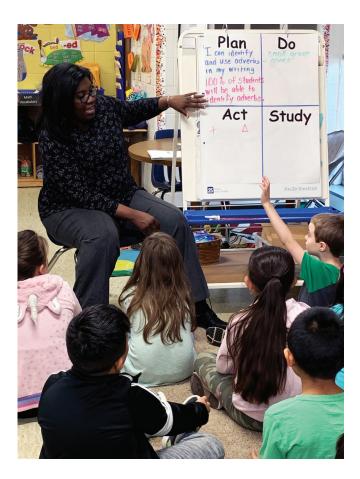
**Cover photo:** Spartanburg Clock Tower at Morgan Square on Main Street Mall

#### Introduction photo:

Starting a new PDSA cycle (Plan, Do, Study, Act cycle) engages students in the learning and goal setting process. Here students share what learning practices and strategies they feel will work.

## introduction

The StriveTogether Cradle to Career Network is a national network of 70 communities working to improve outcomes for kids by bringing together cross-sector partners around a shared community vision and accountability for results. One network member, the Spartanburg Academic Movement (SAM), has worked with StriveTogether to change systems in Spartanburg County, S.C. This case study shows how SAM helped implement continuous improvement practices to increase academic achievement and tackle inequity in Spartanburg's public school system.







# what divides Spartanburg County?

Spartanburg County sits in the northern part of the state, not far from the North Carolina border. The county of nearly 325,000 residents boasts the highest per capita investment of foreign capital of any county in the nation. European and Asian manufacturers have settled in the county, as well as textile companies — along with the county's most distinguished corporate resident, BMW, whose U.S. manufacturing plant is in Spartanburg.

Despite the economic investment in the county, Spartanburg remains divided. Geographically, it is split between rural land and a city center. The African American population, which accounts for about 30% of residents, is concentrated in Spartanburg City and faces stark income inequality. In 2016, white workers averaged around \$40,000 per year, while Black and Latinx workers earned a little less than \$30,000 on average. Ongoing inequity has led to a major economic mobility challenge among Spartanburg County's children and families.

The community across Spartanburg County remains committed to bridging these divides. The county is home to several large organizations prioritizing equity for children and families, including the United Way of the Piedmont, the Mary Black Foundation, the Spartanburg County Foundation and nonprofits like SAM. Alignment among these organizations has led to shared measurement of outcomes and shared ownership to develop solutions. Spartanburg County Schools serve nearly 50,000 children, spread out among seven school districts and public charter schools. Each district maintains its own identity, administration and school board.

"There are advantages to our system," said Dr. John Stockwell, executive director of SAM. "With seven school districts, each with its own school board and superintendent, administrators know the student population they're working with. They know the families, the churches they go to — it's a close relationship among the educators, the students and the families."

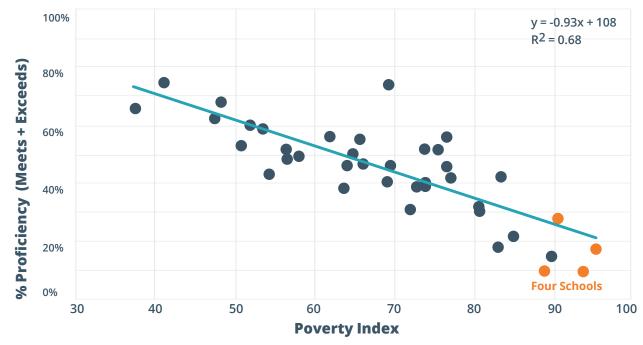
However, there are marked differences in student population, with some schools serving high populations of students of color — many of whom are experiencing high rates of poverty. These schools tend to be in Districts 6 and 7, within the City of Spartanburg, and have not been able to sustain improvement efforts.

#### segregation and schools

"Unfortunately, the reality is that our elementary schools are particularly segregated with regard to race and poverty," said Stockwell. "Each district is dealing with its own issues, which compels us to turn our attention to equity for every Spartanburg student."

Spartanburg's sense of community and desire to provide equitable opportunity serve as the foundation for systems change to eliminate disparities for every young person.

#### The correlation of third-grade reading proficiency and the poverty index across Spartanburg County Schools highlights the opportunity with the Four Schools Project (highlighted in orange).



South Carolina Ready Performance, 2017–2018 (before continuous improvement)

## sparking change in Spartanburg

Stockwell was introduced to StriveTogether in 2010 at a National Council of Foundations meeting. StriveTogether's focus on improving outcomes for kids through systems transformation and a cradle-to-career approach inspired Stockwell to see Spartanburg's challenges through a different lens. He brought his learnings back to Spartanburg and, not long after that, the Spartanburg Academic Movement (SAM) was formed.

SAM's vision is focused on economic mobility anchored in academic achievement. In particular, SAM focuses on data, equity and advancing academic achievement with a concentration on race and poverty. "Attention to equity issues, poverty and race is essential," said Stockwell. "The linkages among race, poverty and academic achievement are evident across all academic outcomes." SAM began working closely with the school districts in 2013, focusing first on kindergarten readiness, a gap that the schools weren't able to address on their own. Then came a meeting with two superintendents about strengthening their collaboration. Frustrated with years of disappointing outcomes for children, the superintendents from Districts 6 and 7 turned to SAM to discuss a targeted partnership.

"I remember the meeting so clearly. They said, 'No matter what we do, we can't sustain improvement from year to year.' And that's when they asked for SAM's help," said Stockwell. "It was a fascinating and frightening moment to be asked to support the schools with this difficult challenge."

SAM took a hard look at continuous improvement as a methodology for accomplishing this purpose.

#### getting the right people on board

Continuous improvement is a methodology that originated from manufacturing in the automotive industry in Japan. If you noticed that the reliability and performance improved in Japanese cars in the early 80s, that was because of the continuous improvement model. The health care industry caught on in the late 80s and early 90s. But it wasn't until recently that the methodology found its way to education and the social sector.

Given that continuous improvement was a relatively new practice in education, it was important to Stockwell to assemble the right team.

"We had BMW — the best practitioner in the world — in Spartanburg County. Of course, we tapped into them," said Stockwell.

Stockwell also encouraged two SAM staffers to receive training for Six Sigma certification — a type of continuous improvement — and brought on Mendy Mossbrook, a continuous improvement and project management expert from industry. Mossbrook was hired as SAM's director of continuous improvement, and then as the director of SAM's John T. Wardlaw Institute for Continuous Improvement.



All workshops and training offered through the Wardlaw Institute support the outcomes-focused work of SAM through the key learning stages.



The Wardlaw Institute for continuous improvement

The Wardlaw Institute for Continuous Improvement was established in March 2019 to honor the legacy of John T. Wardlaw, a successful businessman, curious entrepreneur and passionate advocate for improving academic achievement across Spartanburg County.

His use of data analysis to track the academic achievement of K-12 schools inspired both his family and the Spartanburg Academic Movement to form a continuous improvement training hub with programs for educators, nonprofits and community service providers.



We knew how to work with teachers to be successful. **Continuous improvement can** seem complex, but in the end, it's just a set of tools that *anyone* can pick up and use. Cheryl Broadnax

StriveTogether's architect of continuous improvement for education systems

"We didn't limit our search to education specifically. Instead, we focused our efforts on trying to find a leader in continuous improvement from the corporate sector or health care sector who could advise the shift into education," said Stockwell. "Mendy was not only doing rapid cycle continuous improvement in product development on a daily basis, but she had a keen interest in education."

Mossbrook went on to hire several other staffers with continuous improvement experience, each in the private sector. But the need for education sector expertise was clear — and that is what Mossbrook found in StriveTogether's senior director of district improvement, Cheryl Broadnax, a former teacher and assistant superintendent.

"Cheryl had a lot of experience in implementing continuous improvement in Cincinnati. So, combining her wealth of experience and Mendy's expertise, we had a wonderful dynamic," said Stockwell.

Mossbrook also found the professional diversity within the team beneficial. "I think there were some advantages because I didn't have a lot of preconceived notions or expectations. Because I wasn't education-centric, I asked a lot of questions that might not have been obvious to some people but allowed us, as a team, to probe and frame things in a different way," she said. "Sometimes coming from the industry that I came from, you do things in a certain way, just because it's always been done like that. This process allowed me to take a step back and learn from Cheryl's expertise."

Broadnax led a workshop for Spartanburg teachers in September 2018 and provided ongoing support through virtual and in-person meetings. She and her team visited Spartanburg once a month for six months, helping the teachers and coaches build a framework and, ultimately, guiding them through a softer approach.

"Continuous improvement in education is more delicate than in manufacturing and industry because we're dealing with human beings and not products. So continuous improvement is not a matter of adjusting a micrometer here or there," said Stockwell. "In education, it's about human behavior."

StriveTogether's approach also helped create the necessary will and buy-in among teachers. "We knew how to work with teachers to be successful," said Broadnax. "Continuous improvement can seem complex, but in the end, it's just a set of tools that anyone can pick up and use."

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Executive Director of the Spartanburg Academic Movement

# bringing continuous improvement to life in Spartanburg

"Continuous improvement is a science — a problem-solving method that is data-driven and uses tools to make improvement," said Mossbrook. "It's about taking big goals and breaking them down into small, actionable goals, evaluating frequently and course-correcting when necessary.

That means carrying out a continuous cycle:



## PLAN

- Identify a challenge and root cause
- Define a change and practical measure

### DO

- Conduct the change
- Collect practical measure

## **STUDY**

- Analyze measures / results
- Document insights

## ACT

- Decide to adopt, abandon, adjust or scale
- Share what you learned and plan next steps

PDSA cycles are completed every **five to 10 days** to allow for constant attention to what is working well for students and what should be reconsidered.



Particularly in education, the word failure carries stigma — no one wants to be seen as failing. But **continuous improvement encourages students, teachers and administrators to** *fail forward.* 

#### Mendy Mossbrook

Director of the Continuous Improvement Institute and the John T. Wardlaw Institute

"After an instructional strategy has been planned and implemented, we study the results fairly quickly. Then the action is either abandoned, adopted or adjusted — and the process repeats," said Mossbrook.

Whereas many school year plans begin at the start of the school year and are evaluated at the end of the year, PDSA cycles are shorter — much shorter. In fact, PDSA cycles are completed every five to 10 days to allow for constant attention to what is working well for students and what should be reconsidered. The result is supported teachers, empowered students and better outcomes.

"Even if we find that a new strategy works, the process doesn't end there. We have to monitor long-term improvement so that we are seeing progress across the board," said Mossbrook.

"It's about getting people comfortable with failing, but in a way that does no harm. Failing small reduces risk," said Mossbrook. "You don't want to implement something new and find out in six months that it's not working. You want to find out in a week. With continuous improvement, we implement and measure right away to see the results."

# the Four Schools Project

Following the approval of an accelerator grant from StriveTogether, SAM worked closely with Broadnax to create a plan to implement continuous improvement in select schools. A pilot program called the Four Schools Project began in the 2018 - 2019 school year and focused on schools with students experiencing poverty and disparate outcomes.

#### the Four Schools

The Four Schools Project focused originally on Lone Oak, Jesse Bobo, Mary H. Wright and The Cleveland Academy of Leadership, all elementary schools. Staying true to the overall continuous improvement approach, the idea was to start small, stay focused and strive toward scalability. The four chosen schools were representative of schools in Spartanburg with the majority of students experiencing poverty and schools that had trouble maintaining growth and achievement.

"In Spartanburg, high-achievement schools tend to have low poverty and high performance year after year, but that type of success is not what continuous improvement is about," said Stockwell. "The Four Schools Project was an opportunity to change the narrative about our struggling schools — supporting them to become the best at getting better."

One of the four schools, The Cleveland Academy of Leadership, has served the north side of the city since the late 1800s. One of the premiere elementary schools in its early days, external forces in the mid-20th century changed the school's demographic.

"In the 60s, things began to change in Spartanburg in terms of housing, school attendance lines and a significant population shift to suburban

The Four Schools	Poverty Index	Black	Hispanic	White
Mary H. Wright	95%	86%	6%	5%
Cleveland	95%	84%	10%	6%
Jesse Bobo	90%	62%	15%	16%
Lone Oak	89%	24%	53%	23%

Students explain the I-CANS posted for each subject. Gan... can IN E/LA, T Identify facts & opinion In Math, I car science Lican discuss weather in Spelling, I can Spell double consonant

areas," said Marquice Clark, Cleveland Academy's current principal. "Cleveland mirrored the changes in Spartanburg."

Today, Cleveland maintains a poverty index of 95% and a transiency index of 73%. Only 27% of the school's fifth graders have been enrolled at Cleveland since kindergarten, and 84% of students identify as African American while 10% are Hispanic and the remaining 6% identify as white or biracial.

Clark served as assistant principal when the Four Schools Project began. "In the early stages, we were frustrated. None of the schools could maintain any growth or achievement. Even if schools were able to grow or see a spike in achievement, the next year, it was back to how it was before," said Clark.

Cleveland last had a passing report card in 1999. Since then, the school has had eight principals, each of whom tried to improve achievement by focusing on one area. For example, one principal thought the key would be a better building and environment, while another thought the answer could be found in strengthening curriculum. Each principal saw gains, but improvements were rarely sustainable. Clark learned from his mentors that these facets were important, but that it was critical that they all be considered simultaneously in a holistic approach. And with continuous improvement, both the responsibility and the success are shared.

"Yes, we need to get curriculum and instruction down, get the parents on board and foster the best school environment that we can. But what we've learned is, we are really dealing with an issue where there's no one answer — no silver bullet," said Clark. "What that also means is that no one entity is at fault. Everyone has their share of the responsibility. The pilot project gave us all an opportunity to come to the table and play a role in getting better.

#### the approach

SAM began by partnering with the four schools, engaging teachers and providing coaching to help them use continuous improvement in the classroom. Three continuous improvement coaches were dedicated to the four schools, with two schools having their own coach and the other two sharing a coach.

Teachers were trained in delivering a full PDSA cycle of instruction. This process included planning with small goals in mind, using evidence-based methods for delivery and evaluating success every five to 10 days.

"A lot of teachers approach instruction as a checklist, but continuous improvement is a

student-centered method that ensures the lessons are learned," said Broadnax.

Continuous improvement significantly changes instructional strategies, and it gives power to students to take more ownership of their learning. Students track their own progress through "I CANS" statements, reflect on instructional strategies and identify which strategies are most successful in helping them learn. Goals are revised and intensified every week, meeting each student where they are and encouraging them to reach or exceed grade-level expectations.

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#### the response

Getting teachers on board with continuous improvement proved relatively effortless. Continuous improvement coach Emily Dean believes Spartanburg's teachers, long dedicated to finding solutions for their students, were particularly enthusiastic about the approach because it provided unprecedented support to both educators and students.

"Teachers have been thrown a lot of different instructional strategies over the years, but there has never been such a ripe opportunity to use data within their classroom. We've been missing that link between data and having it change the way we teach," said Dean, whose education background includes classroom teaching. "The best educators reflect, but as a classroom teacher, you don't always have time to do that. This process takes those things we know are best practice and links it to what we are doing in the classroom."

Mossbrook agrees, citing the success of starting with the "coalition of the willing." She found that teachers were passionate about serving their students but had no system to organize their efforts and gauge what was working — or not. Continuous improvement gives teachers, as well as students, a voice and choice over the learning environment in the classroom. The process offered the opportunity for ongoing learning, reflecting and adjusting as a community of learners.

"What we found in the target schools was that they've tried a lot of things. They've implemented a lot of things. Most things didn't work, maybe because the administrators didn't stick with it long enough, maybe the initiatives were not implemented with fidelity or maybe they only addressed one aspect of the problem," she said. "But this group of teachers is passionate about the students they serve, and they embraced the strategies and concept of failing forward. That's why we had a good response. It also had a lot to do with the support of the principals, coaches and administrators in the schools. They didn't just ask the teachers to do it, everyone was responsible and they had the continuous improvement coaches to lean on."

# a shift in culture



StriveTogether provides teachers and school administrators with tools to solve complex problems together.

Continuous improvement, though in its early stages in Spartanburg County, has resulted in measurable progress for teachers and students.

Following the Four Schools Project, third-grade reading proficiency increased more than 60% in 2019, significantly higher than earlier gains. In addition to an increase in academic achievement, a clear culture shift has led to improvement in other outcomes.

"At Cleveland, we are at a place where continuous improvement is systemic and embedded in everything we do," said Marquice Clark. "We use continuous improvement science to improve the quality of instruction, attendance rates and discipline."

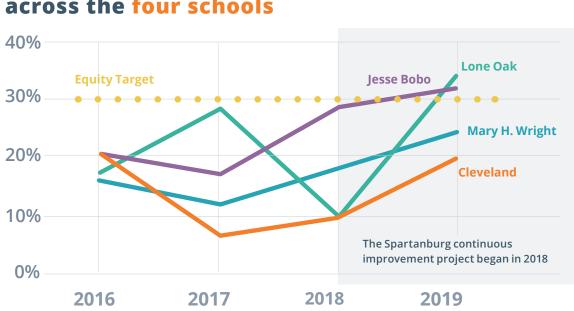
Cleveland historically has an attendance rate of 92 to 93%; after working with SAM to launch a PDSA cycle to improve student attendance, Cleveland saw an increase to over 94% in just one year. In terms of discipline, Cleveland generally makes 600 to 700 referrals per year. Continuous improvement practices have dropped that total to fewer than 450 referrals.

Since implementing continuous improvement approaches, we've let teachers take the lead on data discussions. They are confident analyzing their own data, sharing it with their colleagues and taking charge of their path to success. When we see high improvement in one or more classrooms, teachers are invited to dig into that and discuss what's working. **Continuous improvement requires** *sharing experiences — and learning from them.* 

#### Mendy Mossbrook

Director of the Continuous Improvement Institute and the John T. Wardlaw Institute

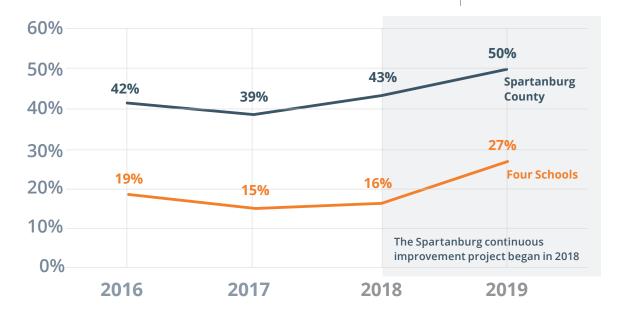
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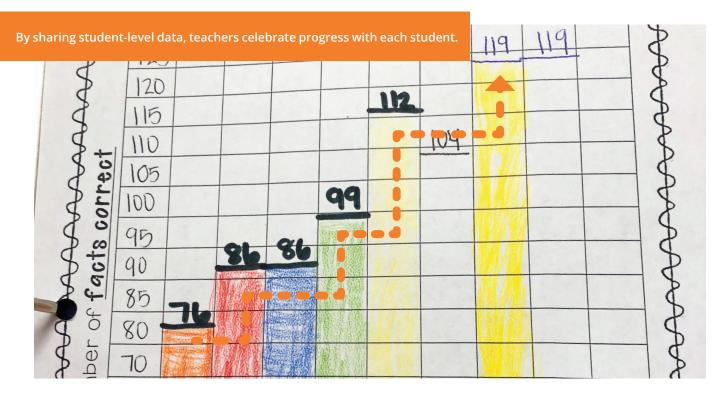


# third-grade reading proficiency across the four schools

third-grade reading proficiency – Spartanburg County vs. Four Schools

the Four Schools Project saw a more than 60% increase from 2018 - 2019





Spartanburg's schools have also seen a shift in culture among teachers. With the support of continuous improvement, teachers have embraced the use of data to understand progress and places for improvement. Now, comparison between classrooms is seen as constructive, not competitive.

"Our teachers are no longer seeing data as a 'gotcha' or a threat," said Emily Dean. "For a long time in education, data and scores made teachers feel defensive. Now, because we use data so frequently in our approach, teachers see it for what it really is — a tool to aid in instruction."

Michelle Kimbrell agrees. As principal at Boiling Springs Elementary School in District 2, she has worked hard to build a school culture that helps teachers feel supported. This way, when teachers and coaches discuss data and differences in classroom performance, the goal is collaboration — not competition. The result is empowered educators.

"Since implementing continuous improvement approaches, we've let teachers take the lead on data discussions. They are confident analyzing their own data, sharing it with their colleagues and taking charge of their path to success," said Kimbrell. "When we see high improvement in one or more classrooms, teachers are invited to dig into that and discuss what's working. Continuous improvement requires sharing experiences and learning from them."

Students also have powerful ownership over their own learning. Continuous improvement acknowledges that not every student learns the same way and provides teachers the tools they need to reach all students in the way that works best for them.

"First and second graders are able to talk about instructional strategies and specifically tell us what strategies helped them learn and change to grow," said Dean. "The students have input into what instructional strategies their teachers are using. The things teachers were doing weren't always working. Our students helped change that. And we began to see the difference."

# what to know before you begin

In a short period of time, the principals, teachers and coaches of Spartanburg County have learned that continuous improvement is a unique process that requires patience and a shift in mindset. Educators interested in employing the continuous improvement model must keep the following goals in mind before the work begins.

#### set expectations

Continuous improvement, by design, results in incremental change. It is deliberate, intentional and rarely follows a straight line.

"It's not fast. But neither do you find yourself going back and grinding it out all over again," said Stockwell. "There is sustained improvement and the teachers buy into this methodology as genuine. Even though progress is slow, it's progress — and it's measurable progress."

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## resist a fear of failure

Particularly in an academic setting, the idea of failure seems threatening. However, in continuous improvement implementation, it is an expected and welcome part of the process. Failure to meet goals is an opportunity to make changes to the approach.

"We have a saying that 'fail' stands for 'first attempts in learning," said Kimbrell. "That's how the teachers see it, and that's how we articulate it to the kids, too. We don't look at failure as a failure to succeed. It's an opportunity to try something else."

Fellow principal Marquice Clark has repositioned the way he and his teachers understand failure, as well.

"There is no way to fail in continuous improvement. The more you fail, the more robust the process is," said Clark. "With frequent assessments, we are encouraged to fail forward, fail fast and fail often so that we can adjust accordingly."

# 3

## build a supportive team

Continuous improvement requires collaboration — and everyone has a role to play. By including students, coaches, teachers and administrators, a district can build a supportive ecosystem focused on continuous improvement measures.

"As a principal, I've learned that you cannot delegate continuous improvement. It's not something you can let someone else do for you — it's a way of thinking, believing and discovering," said Clark. "And it has to be something that the leadership believes in."



## commit to the process

Continuous improvement requires commitment. Teachers must be committed to PDSA cycles — seeing them through and following up on the results. Data collection is slow and methodical, and week after week, teachers devote precious time to reviewing the data with their coach and colleagues.

*"Educators need to subscribe to transformation," said Broadnax. "And that means true commitment to the process."* 

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## understand the power of reflection

Another feature that makes continuous improvement so successful is its focus on reflection for both students and teachers.

*"We knew instructional strategies were not necessarily the problem. They were researchbased, but teachers didn't have the opportunity to reflect often — and students didn't have the chance to reflect," said Dean.* 

Setting aside time to reflect is crucial for identifying issues in instructional strategies. Only then can a solution be found. And, with the speed of continuous improvement, solutions can be implemented and evaluated swiftly.

"After one particular meeting of working through a specific issue the teachers were facing, we created a new model," said Dean. "The beauty of continuous improvement's flexibility was our ability to implement the new model quickly. We shared it in the morning and implemented it in the afternoon."



## looking toward an uncertain future

Today, the schools from the Four Schools Project are considered "continuous improvement schools" with embedded support from coaches. And the good news and clear results have spread throughout Spartanburg County Schools. Teachers from all districts are receiving training — and, in some cases, have brought the approach to their own schools. As continuous improvement is applicable to any segment of the student population, two schools are using the methodology with students in special education.

In the midst of the COVID-19 pandemic, it's difficult to tell what's in store for Spartanburg County's continuous improvement efforts. An expected expansion into middle schools has been put on hold as students, teachers and administrators face the effects of an unprecedented shutdown and the realities of virtual education. But for Broadnax, this situation demonstrates the power and scalability of continuous improvement. "Continuous improvement is a journey taken one step at a time," said Broadnax. "It's not a longterm plan — and that's exactly why a situation like COVID-19 doesn't throw us off our game. Imagine if we had stayed with our long-term plan from the beginning of the year, with no chance to evaluate it now. Continuous improvement allows us to write our own journey, and we can pivot and return when we are ready."

In the meantime, the flexibility of improvement science has allowed SAM to shift its strategy and provide ongoing support. SAM and the Wardlaw Institute have shifted from in-person training to virtual training and implemented virtual Huddle Meetings for coaches and administrators.

"Over time, SAM and the schools that we help support will pick up on our original strategies and the journey will continue," said Broadnax. "Together, we are always evolving and meeting the current needs of the community and the times."

#### **ABOUT STRIVETOGETHER**

StriveTogether partners with 70 communities across the country, providing coaching, resources and rigorous approaches to create opportunities and close gaps in education, housing and so much more. Together, the StriveTogether Cradle to Career Network impacts the lives of more than 12 million youth.



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