

## **Staying Small to Make a Big Difference: A Successful Strategy for Large High School Improvement<sup>1</sup>**

Some take the stand that focusing on our most needy students means not serving those who are more successful. We disagree. We are writing to share our experience with “staying small to get big”—the key strategy at the heart of SAM, a model of school improvement through leadership development currently in place in New York City, Boston and Oakland and that has been adapted in its most streamlined version to the “inquiry team process” now mandated in every NYC school as part of the current wave of Children First reform<sup>2</sup>.

SAM’s goal is for schools to continually expand their “sphere of success”—the number of students for whom current practices are working. SAM’s strategy is to engage a team or teams of teachers first in identifying and closing specific skill gaps for a small group of previously unsuccessful students, and second, based on what was learned from that experience, in changing the school-wide learning conditions that allowed these gaps to persist. This change should benefit all students.

Preliminary research supports SAM’s theory of change—namely, the power of staying small (studying and moving a target group of students in one small skill) as a lever for systemic improvement. One finding is the effectiveness of this strategy for large high schools, a sector historically unchanged by reform. A second is that it works best when there is strong collaboration between a principal and an external facilitator with a deep understanding of getting small not as an end in itself, but as a strategy for larger change.

In this article, we (a principal, SAM facilitator and SAM researcher) illustrate what “staying small to get big” looks like in practice with an example drawn from New Dorp High School, a site which over three years’ participation in SAM has shown dramatic, steady improvement in student outcomes within and beyond the targeted groups and skills and in developing a culture of continual, evidence-based improvement (Talbert & Scharff, 2008).

### **The Model: What’s at the core?**

The core of SAM is an action research cycle in which a team of practitioners identifies a high-leverage learning gap for 15-30 struggling students at their school—something specific that these students need to learn that they have not learned; studies the current learning conditions that have resulted in those outcomes (they may find, for instance, that current curriculum assumes prior mastery); designs and implements instructional strategies to close the identified gaps for target students; and then implements and

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<sup>1</sup> Scharff, N., DeAngelis, D., & Talbert, J. Accepted for upcoming publication in *Principal Leadership*.

<sup>2</sup> The Scaffolded Apprenticeship Model (SAM) was jointly developed between the School of Public Affairs at Baruch College, CUNY and New Visions for Public Schools and funded generously by the Carnegie Foundation. For a detailed description of the inquiry team process, see <http://www.childrenfirstintensive.com/handbook>

monitors one systemic change to learning conditions so future students will not get stuck in the same places.

The idea, as with other programs promoting evidence-based inquiry, is that the cycle described above will become embedded in standard practice, so that the school will continue to learn and the sphere of success will continue to grow. What's different in SAM, however, is the study of a small group of students not primarily to close skill gaps or to test and spread effective practices for doing so—both of which are important. Instead, the study of a specific group outside the sphere of success is most important because it illuminates how the school works as a system not just for those who are successful, but also for those who are not.

Specifically, studying the system through the lens of students for whom it is not working makes it clear how decision-making leads to patterns in curriculum and instruction that consistently fail to meet specific students' needs. The tight focus (staying small) makes facing and addressing these conditions manageable; shifts the conversation from generalities and assumptions about why struggling students can't learn to what specifically they don't know and how teachers can help them learn it; and illuminates places where a small, strategic system-change can make a big difference.

What follows is one example of how a team used the SAM process of getting small to close skill gaps for specific students and leverage what they learned about how their school worked as a system to benefit all students.

### **New Dorp High School**

In 2006, New Dorp High School launched a complete structural overhaul, transforming itself in one year from a traditional comprehensive high school into eight, theme-based Smaller Learning Communities (SLC's). Each new leadership team, one per SLC, became a team in SAM—initially because the restructuring grant required an external partner, but in the end because SAM's process was aligned with the administration's goal—to hold the focus on instructional improvement during the immediate transition.

This meant that at the very same time that the eight leadership teams (each comprised of an assistant principal, two teacher leaders and a guidance counselor) were developing the structural components of their SLC's from scratch, they were also being asked to become data-savvy and to study and move a group of students with whom the school had not previously succeeded.

At first, there was a collective outcry of “not enough time.” After one year, the eight leadership teams became advocates for making time for SAM. In year 2 they decided to turn-key SAM during the daily SLC common-time periods. Now, three years into the re-design, every New Dorp teacher is part of an ongoing, SLC-based inquiry team studying and closing skill gaps for the school's most challenging students. A “central” inquiry team aggregates findings across SLC's and recommends small, strategic system-changes to be implemented and monitored school-wide.

## **An Example: Staying small to get big results in Mathematics**

### *Identifying a small skill*

Team ACMA (from the Academy of Communication and Media Arts) was one of two teams in the original SAM cohort to identify Mathematics as the subject area in which students in their SLC struggled most. After identifying Mathematics, they selected a 25 9<sup>th</sup>-grade students in one team member's class, all of whom had entered high school with below-level scores on the standardized 8<sup>th</sup>-grade NYS Mathematics Exam, as their target group. Then, they set out to identify a specific, high-leverage skill that the students lacked.

First, they analyzed past Regents Exams to find out where students with similar profiles got stuck (what kinds of problems they typically missed), and they isolated word problems involving Algebra. Second, they analyzed their target students' class-work, which confirmed that target students struggled with word problems involving Algebra but did not tell them how or why. Third, they developed their own, more scaffolded assessment to provide more granular information about where exactly each student was getting stuck. They discovered that 17 of these students (their new target group) lacked a basic understanding of what they termed "verbal translation." The students could do basic math computation when not in a word problem. However, they could not translate key "signal" words from the written version into a mathematical form.

### *Analyzing the conditions of learning*

According to SAM, the conditions in which target population students are expected to learn the identified skill are determined largely by decisions in the following four areas:

- What to teach (curriculum)
- Who teaches (teacher assignment)
- How teaching occurs (lesson design and pedagogy)
- How well it is taught (assessment for learning tools, supervisory focus and professional learning opportunities)

To understand these system-wide learning conditions, Team ACMA looked first at curriculum, and discovered what almost every high school team in SAM has discovered—that what their target students did not know (and needed to learn next) was not in the current curriculum and was not taught. (Word problems were in the curriculum, but "verbal translation" was not.) This misalignment makes sense, since struggling students tend to lack one or more foundational skills, while teachers are under pressure to teach to a pacing calendar mapped to a high-stakes exam that may not address foundational skills directly.

ACMA also explored patterns in teacher assignment, and they discovered something else that is typical across high schools—the most experienced teachers tend to teach the oldest and highest achieving kids. Team ACMA hadn't thought until now about the cumulative effect of this pattern on target population students. They realized that what had seemed like individual teaching decisions based on personal preference cumulatively maintained the status quo.

### *Moving forward by staying small and getting big*

Team ACMA moved forward with a two-pronged approach. First, they would study what it took to close the identified skill gap for target students and keep them on track (prepared to pass a high-stakes exam the following year). The 9<sup>th</sup> grade Mathematics teacher would teach verbal translation (and other foundational skills, as needs surfaced) explicitly in her class, and her team members would visit and create low-inference (verbatim) transcripts<sup>3</sup> of what took place, so that afterwards, they could analyze these transcripts in light of student performance data to understand what worked. Once they better understood what worked, they would spread effective strategies more broadly.

At the same time, they pursued two deeper changes based on “flaws” in the system they had already unearthed. First, they had identified a lack of alignment between what students outside the sphere of success need to learn and the current Mathematics curriculum, so, they partnered with the Mathematics Assistant Principal to alter what would happen at regular department meetings. Now, they would look at the results of common unit assessments and collectively adjust the pacing calendar in response to students’ needs.

Second, they decided to experiment with teacher “looping.” Utilizing what they had learned about the impact of current teacher assignment practices on target students, they encouraged teachers of all subject areas who taught the current 9<sup>th</sup>-grade to keep the same students the following year. This yielded dramatic improvement for struggling students. Team ACMA’s Mathematics teacher kept her class a second year, and every single student in this class passed the related NYS Mathematics Regents Exam one semester earlier than originally scheduled.

### **Some Lessons Learned**

Problems facing schools are big, layered and resistant to change. But these very complexities can become a distraction from an unfaltering focus on improving the core of teaching and learning—namely, improving the information that teachers have available to them to inform their daily and moment-to-moment decision-making about what and how to teach next.

We believe that holding a team’s focus on moving a small group of previously unsuccessful students in one essential skill helps these students get the instruction that they need AND illuminates for teachers how they collectively participate in and can therefore change the patterns of behavior and practice that produce current patterns in student performance.

We know that “getting small” is a counterintuitive strategy for addressing big problems—that at first people wonder how getting so small can get target students where they need to go or help a school improve enough to meet current accountability mandates.

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<sup>3</sup> Low-inference transcripts are a key SAM tool. Participants report that conducting and analyzing these transcripts helps them shift their focus from teaching to learning, see instruction through the lens of target students and understand patterns in instructional practices school-wide (Talbert & Scharff, 2008). For a more detailed description of this tool, see <http://www.childrenfirstintensive.com/handbook>

However, we believe (and research suggests) that it is precisely because it is focused and manageable that SAM's core strategy works. The strategy can work in a school of any size, structure, and with varying levels of administrative involvement and investment. However, the following conditions best support SAM's success:

1. A principal who is focused on closing achievement gaps as a core strategy for school improvement
2. Partnership with a well-trained external facilitator with a deep understanding of program principles and strategies
3. Strong collaboration between the principal (and/or administrators) and the external facilitator in deciding how best to move between staying small and getting big. (A principal's job is to keep an eye on the big picture. A SAM facilitator can keep the focus small. The partnership allows for strengths in both and strategic moves between these perspectives.)
4. A new conception of the principal's role. The principal's job in this framework becomes lead learner—supporting the ongoing leadership development and collective learning of teachers across the school.

## **References**

Talbert, J. & Scharff, N. (2008). *Leading school improvement with data: A theory of action to extend the sphere of student success*. Paper presentation at the Annual Education Research Association, March 25, 2008. New York City.