



Problems Down, Solutions Up

The implementation of a continuous improvement approach with school operations

By Natalie A. Kelly, assistant principal, South Iredell High School

Currently, Iredell-Statesville Schools (ISS) is enjoying its highest performance on state tests in the history of the school system. In addition to the district's overall academic performance, ISS earned a 2008 Malcolm Baldrige National Quality Award.

ISS started its Baldrige journey in 2002 with the district's newly hired superintendent, Terry Holliday. He led the way in implementing a high-performing systems approach to continuous improvement in academics and school operations. The district's strategic plan includes academic and school operations goals for facility maintenance and cleanliness, finance and transportation. The superintendent expects every school to create a strategic plan that aligns with and contributes to the district's progress toward its short and long-term goals.

My Baldrige journey began in spring 2004 when I attended a continuous classroom improvement workshop organized by Marty Moore, a trainer for Jim Shipley and Associates. Because the Baldrige systems approach to improvement made perfect sense to me, I implemented a weekly improvement classroom-level plan-do-study-act (PDSA) cycle to support what had been successful for me and my students. I empowered my students by frequently asking for their input on how to improve the classroom system.

Eventually, I became a district-level trainer in the ISS quality department. After I earned my master's degree in school administration, my next step, per the superintendent's instructions, was to become an assistant principal to learn about school operations and implement quality improvement. In January 2008, I was assigned to Brawley Middle School as an assistant principal responsible for facilities, custodial staff, bus transportation, textbooks, keys, lockers, fire drills and inspections, and I shared the supervision responsibilities of office staff.

Establishing relationships

Drawing from my experience teaching students and adult learners, my starting point was to establish relationships with the classified staff members—which included the receptionist, custodial team members, bookkeeper, data manager, attendance person and cafeteria manager—because they obviously knew more about their jobs than I did. I needed to know and understand their work so I could support them.

Because modeling can be a powerful teaching strategy, I decided to demonstrate what the continuous improvement approach looked like, rather than use the technical Baldrige language and train on the Baldrige system approach to improvement.

Each school improvement group met monthly for approximately 30 minutes to review data and to discuss what was working, what wasn't working, what needed to be tweaked, and they then developed an improvement plan. Not only did these brief meetings show the classified employees that their jobs are incredibly important for the school to function smoothly, but these meetings also empowered the classified staff. Everyone understood they are responsible for identifying problems and suggesting possible solutions.



For example, the school's bookkeeper is now equipped with skills she needs to recognize when a bookkeeping or teacher health insurance issue can be solved easily by writing process steps or creating a flowchart. The school receptionist frequently problem solves on ways she can help the principal and assistant principals work more efficiently. Gradually, she took over most of the school bus transportation responsibilities, leaving me with student bus discipline.

Rather than going into details of each of these operational areas, I will share the custodial team story, because the school trend and comparative data proves implementing a continuous improvement approach works.

Off to a good start

On my first day working at Brawley, the district-level lead custodian told me I had to conduct the surprise inspection of our custodial team. He explained the district's quarterly inspection process: the first and fourth-quarter inspections were conducted by a district-level person. An outside vendor completed the third-quarter inspection. The assistant principal responsible for the school's custodial team was expected to perform the second-quarter inspection—my first day on the job was my lucky day. As I reviewed the cleanliness score sheet, I realized I really had no idea what I was supposed to do. For each of the 33 items to be inspected for cleanliness, I was supposed to give the custodial team 1 to 4 points. I learned more about custodial work in that two-hour inspection period than I ever thought I would need to know.

Next, I met with the school's head custodian, Geneva Redfear, to decide on a team meeting date, time and the agenda items. Redfear thought I was crazy when I suggested meeting with the custodial team to look at the team's inspection data. The meeting included: introductions, explaining the inspection process, review of data and plus/delta of the meeting. The meeting flowed smoothly with no wasted time.

The explanation of the plus/delta quality tool and actually capturing the plus/delta was the last agenda item. The team shared a few items for the plus. But then I asked the loaded question: "What suggestions do you have to improve our meetings?" This part of the meeting took 30 minutes. They did not really suggest changes for the next meeting. Instead, they made suggestions and complained about what needed to change to support their work. Rather than rushing this part of the meeting, I patiently captured their suggestions and concerns. Their biggest concern was students creating extra work for custodial team by intentionally messing up floors, walls and the ceilings of boys' restrooms. They shared how students intentionally threw food on the floor of the cafeteria and extra trash and gum on floors in hallways and classrooms. We came up with a possible solution to the restroom, cafeteria, classroom and hallway issues, and we needed to involve teachers and students in the process improvement.

Redfear and I met with a group of 50 students. We asked them to list cleanliness problems in each of the following four areas: restrooms, cafeteria, classrooms and hallways. While students created the list of problems, Redfear slipped away from the meeting to gather her entire custodial team to witness what was unfolding. After reporting out the cleanliness issues, the students moved into small groups to brainstorm one possible solution for each area. During this brainstorming activity, Redfear returned with her custodial team. The team was amazed by the students' mature and serious participation in this activity. This was the first step



to get the entire school involved in the cleanliness issues at Brawley. The next step was to share the students' possible solutions at the full-faculty meeting. Taking into consideration the students' suggestions for improvement, teachers decided to conduct a schoolwide training session during first block to clearly communicate cleanliness expectations in the cafeteria, classrooms, hallways and restrooms.

By the end of the 2007-2008 school year, the custodial team's overall ranking improved from, basically, last place to fifth place out of 12 schools at the secondary level. The team decided to set a goal of becoming one of the top three schools in the district at the secondary level for 2008-2009.

Step by step

The following detailed deployment steps are the results of multiple meetings during the summer and fall of 2008. You will find included in these steps some time savers for me. In addition to the team doing its own maintenance and cleanliness-issue trouble shooting without involving me, the team supports me by taking over the daily, time-consuming work-order process, and the state law-required twice-monthly building fire inspections. Each team member is responsible for inspecting and reporting areas of concerns and safety issues in the section of the building he or she is assigned to clean. Additionally, if you look closely, you will also find PDSA cycles within the deployment steps.

1. Establish a common lunch time to support the assistant principal's daily work-order process. During this lunch time, team members communicate maintenance or plumbing issues to be recorded and given to the head custodian who reviews the issues and gives them to the assistant principal. The assistant principal submits work orders to the district's maintenance department.
2. Hold custodial team meetings at least once a month. The agenda items will include:
 - Review the fire drill inspections process to support and save time for the assistant principal by having each custodian inspect his or her area and complete a report to be turned in to the assistant principal.
 - Review and study data.
 - Adjust or create new steps to address a new problem or issue.
 - Use a plus/delta.
3. Create a chain of communication and chain of command for the team. Rather than immediately going to the assistant principal with issues or problems, team members take their concerns to the head custodian. The team will come up with steps to resolve the issue. The head custodian will keep the assistant principal informed.
4. Involve faculty and students by sending e-mails based on data and possible solutions the team has brainstormed during meetings.
5. When the team is ready, have the head custodian implement weekly inspections using the district's inspection sheet.
6. After two inspections, hold a meeting. Review the data and process, and make plans for improvement. Repeat.

Here are the results of implementation of the deployment steps:



District stakeholder satisfaction survey item (December 2008): *“This school is neat and clean.”*

2005-2006	2006-2007	2007-2008	2008-2009
93.5%	94.6%	73.2%	97.1% <i>in agreement</i>

Quarterly custodial inspection scores (2008-2009)

Q1 October 2008: **99.2%** ...1st t middle school (MS)/high school (HS) (tied with South Iredell High).

Q2 January 2009: **99.2%** ...1st t MS/HS (tied with South Iredell High).

Q3 March 2009: **99.4%** ...1st MS/HS.

Q4 May 2009: **97.4%** ...1st MS/HS.

Year overall average for 2008-2009: **98.88%** ...1st MS/HS.

Because of No Child Left Behind legislation, schools are required to focus on curriculum, instruction and closing the academic achievement gaps in all sub-groups. On the flip side, ISS expects all 35 schools to address operational issues by creating and implementing plans to meet district operations goals. Implementing a continuous improvement approach with school operations can save school leaders valuable time they need to focus on supporting students' academic performance.

When working with teachers and staff, I repeat this mantra to myself: “Problems down, solutions up.” What does this mean? As a leader, I may know how to fix the problem, but to take the time to train employees to learn to identify problems and come up with possible solutions will be a huge time saver for future potentially time-consuming problems.

Natalie A. Kelly is assistant principal at South Iredell High School in Statesville, NC. She earned a master's degree in school administration from Appalachian State University in Boone, NC.