

Iowa School District Charts the Path for

Continuous Improvement Journey

by Janet Jacobsen

At a Glance . . .

- In 2006 the Cedar Rapids Community School District began a long-range initiative to engage every student through empowerment, ownership, and accountability by creating a student-centered environment via a continuous improvement classroom.
- The district is working to align all improvement activities and resources to its strategic plan. In turn, each school coordinates improvement plans with the district's plan, and classroom teachers align their work to the school's improvement plans—all to create a unified, systemic, and systematic approach to continuous improvement.
- Continuous improvement initiatives focus on student achievement, but quality tools are also extended to support services such as food and nutrition, community relations, and accounting, which play an integral role in creating a positive learning environment.
- Although it's early in the quality journey, the district has already garnered statewide recognition, earning a bronze award in the Iowa Recognition for Performance Excellence (IRPE) awards program.

Whether it appears on a business-card-sized laminated copy or a framed poster prominently displayed in a neighborhood school, the strategic “plan on a page” for the Cedar Rapids, Iowa, Community School District (CRCS) is an ever-present and guiding force for continuous improvement. As shown in Figure 1, the plan on a page includes succinctly written vision and mission statements, core values, goals, and a guiding philosophy. This plan is the bedrock of everything the district does and seeks to accomplish. “It’s from the strategic plan that everything flows—it governs how we spend our money, dictates our action plans, and aligns the work in the schools,” explains Dave Markward, district superintendent.

The CRCS continuous improvement initiative therefore takes its cue directly from the district’s concise one-page plan. Introduced in April 2006, the initiative uses the Malcolm Baldrige Criteria for Performance Excellence framework as it aligns all improvement activities to its strategic plan with a focus on creating a positive learning environment.

About the Cedar Rapids Community School District

With nearly 18,000 students, the CRCS boasts the second-largest enrollment in Iowa. This east central Iowa district includes 24 elementary, six middle, and four high schools, as well as various special services schools, all served by more than 2,800 employees. Thirty-eight percent of students qualify for free or reduced-priced meals, and English is frequently not the first language of many students, as more than 40 different languages are spoken in homes across the district. To instill a continuous improvement philosophy throughout such a large, diverse organization takes planning, communication, and an understanding that continuous improvement is an ongoing journey, not a sprint to a predetermined finish line.

Selecting the Baldrige Framework for Continuous Improvement

When Markward was named superintendent in 2004 he came to Cedar Rapids from Rock Island, Illinois, where he had gained experience using the Baldrige criteria as a framework for continuous improvement. A year later, Jay Marino joined him from Rock Island to take on the newly created role of associate superintendent for organizational effectiveness and accountability. Together the pair began working with the school board, administrators, teachers, and other stakeholders to launch a continuous improvement initiative throughout the district.

Markward says the Baldrige framework simply provides a series of important questions, and regardless of the initiative at hand, the criteria’s questions drive the process. He believes the questions hold leaders

accountable for defining what they are doing, measuring progress, and adopting systems of improvement. “If we couldn’t use the framework and questions to organize our work, then we would probably be doing what we’ve done before—unrelated planning

Food and Nutrition Department Serves the Right Mix for Continuous Improvement

Can the appearance and freshness of a school lunch really have an impact on student learning? “Yes!” says Suzy Ketelsen, manager of the food and nutrition department at the Cedar Rapids Community School District (CRCSd). Ketelsen and her 235 employees, who serve an average of 11,700 lunches and 2,700 breakfasts each day, are learning how their positions do indeed have a direct effect on the district’s goals and overall student achievement.

Jay Marino, associate superintendent for organizational effectiveness and accountability, says effective leaders like Ketelsen set and communicate direction for their department. For maximum effectiveness, however, this direction can’t be set alone, but instead requires input from stakeholders and department employees. When common direction is established with input and there is consensus, the next task is the process of alignment. Employees in the food and nutrition department and other support areas of the district are learning to:

- *Know what is most important in the department:* Often, the vision, mission, goals, and core values—known in the district as the “plan on a page”—capture department priorities.
- *Recognize how their work directly contributes to the department’s plan on a page:* Each department and subdepartment will have specific goals that directly align to the district’s plan. In turn, all employees within the department need to identify how their work is aligned to department goals.
- *Understand how progress will be measured toward the department’s plan on a page:* Each department needs to identify measures to show in-process progress toward department goals, and all employees must understand how their individual contributions can be measured to determine effectiveness.

In October 2006, Ketelsen and key staff members led a department-wide meeting to share how the food and nutrition department’s goals, shown in the department’s plan on a page in Figure 4, tie in with overall district goals and with the continuous improvement activities that were becoming evident in each school. This meeting also focused on aligning goals—the department goals to the district’s goals, and how kitchen and individual goals will eventually align to the department goals.

“We talked about how our individual tasks have an impact on student learning. Our first goal, advancing the nutritional integrity of meals, links to the district’s goal of improving student performance as there are direct links between proper nutrition and student achievement,” Ketelsen says. She takes it a step further by explaining how a kitchen goal of producing good-tasting food directly aligns with the department’s first goal, and that an individual’s goal might be to increase batch baking to ensure maximum flavor and freshness of food items, thus supporting the kitchen’s goal as well.

Ketelsen says it’s exciting to see all the district’s departments getting on board with the continuous improvement initiative. As her area has interactions with nearly every other support department, she notices participation and enthusiasm increasing as employees feel their input is important. “Although it’s a slow journey, employees are feeling a change already. They like being asked for their feedback and then receiving the results of that input. Employees in all departments appreciate knowing that a change is the result of their feedback,” she observes.

Figure 1 CRCSd’s Plan on a Page

Strategic Plan 2005–10
Vision Excellence for all
Mission To develop world-class learners and responsible citizens
Core Values Customer satisfaction Data-driven decisions Learning for all Teamwork Visionary leadership
Goals Improve all student performance in communication, mathematics, and science. Enhance student social, emotional, and behavioral development. Develop a diverse work force that utilizes exemplary professional practices. Operate with fiscal integrity, efficiency, and effectiveness. Increase family and community support for student learning and citizenship development.
Guiding Philosophy Continuous improvement

that is loosely connected and leads to little improvement over time,” explains Markward.

Early on Markward and Marino recognized that for continuous improvement to take hold in the district, they, along with other leaders, would need to model the Baldrige criteria and practices. To enhance their understanding of the criteria, Markward, Marino, and other district staff members volunteer as examiners for the Iowa Recognition for Performance Excellence (IRPE) awards program, the state’s version of the Baldrige Award. Volunteer examiners become district resources for the criteria as they have the opportunity to see firsthand, through application reviews and site visits, how other organizations use the Baldrige framework.

CRCSd’s Quality Journey—A Marathon, Not a Sprint

With the strategic plan as a compass, district continuous improvement efforts are now focused on a systematic alignment of all resources, including those in support departments, as detailed in the sidebar “Food and Nutrition Department Serves the Right Mix for Continuous Improvement.” Through ongoing continuous improvement training sessions, all staff members, regardless of position, learn how their work directly contributes to district goals. The district is working toward an aligned system that will include:

- The district’s strategic plan
- Department goals tied to the strategic plan
- School improvement goals (SIP) aligned to the district plan
- Classroom goals aligned to the SIP goals
- Individual student goals aligned to classroom goals

To support systematic alignment, leaders are working to build the internal capacity to drive improvement in every corner of the district. Leadership teams from all schools and support departments participate in action research deployment team trainings, conducted by Marino and Becky Martin, the continuous improvement facilitator. Here team members learn about continuous improvement processes

and tools and how to effectively manage the change process. In addition, a Quality Liaison Network of more than 80 teachers, administrators, and support staff was established to assist schools and departments in the use of action research as well as to facilitate sharing ideas and best practices. The district also offers a variety of staff development opportunities. To keep up with demand, the district is increasing the number of continuous improvement trainers, individuals certified to train others in the use of action research; the Plan, Do, Study, Act (PDSA) cycle; and quality processes.

“These individuals and groups serve as our leaders in the field and keep continuous improvement moving forward. They take

the training and decide how it can best fit in their school or department,” explains Marino. Deeply involved with education initiatives through the American Society for Quality (ASQ), Marino serves as chair of ASQ’s K-12 Educational Advisory Committee.

To provide specific direction for continuous improvement, the district created a series of documents called the Four Levels of Quality (separate documents for elementary, middle, and high schools, as well as support departments). Figure 2 shows the Four Quality Levels for the Elementary Classroom, a blueprint that serves as a benchmark for continuous improvement efforts at the elementary school level and a valuable tool for

Figure 2 Four Quality Levels for the Elementary Classroom

Cedar Rapids Community School District – Continuous Improvement Outcomes — Four Quality Levels		
Levels	#	Outcomes
Quality Level 1	1.a	Post the <i>district strategic plan</i> on a page in the classroom
	1.b	Post <i>school improvement plan</i> (SIP) goals in the classroom
	1.c	Align the <i>teacher individual career professional development plans</i> (ICDP) to school improvement plans (SIP) and the district strategic plan (if applicable)
	1.d	Serve on at least one school-level action research team
	1.e	Demonstrate the district core values through interactions with others (focus on customer satisfaction)
	1.f	Use at least three quality tools (brainstorming, affinity diagram, nominal group technique) with students
Quality Level 2	2.a	Complete all Quality Level 1 outcomes
	2.b	Facilitate the creation of a classroom mission statement that is aligned with school and district mission statements (displayed in the classroom)
	2.c	Involve students in the creation of classroom ground rules/expectations (displayed in the classroom)
	2.d	Establish classroom goals using the SMART format (displayed in the classroom)
	2.e	Collect data that measure progress toward classroom SMART goals (displayed in the classroom)
	2.f	Implement student data folders in the classroom
	2.g	Conduct celebrations of student achievement/progress on a systematic basis in the classroom (or department/team)
	2.h	Demonstrate the district core values through interactions with others (focus on data-driven decisions)
	2.i	Use at least six quality tools (brainstorming, affinity diagram, nominal group technique, run chart, flowchart, cause and effect diagram) with students
Quality Level 3	3.a	Complete all Quality Level 1 and Quality Level 2 outcomes
	3.b	Create a classroom data center (may include district strategic plan, SIP goals, classroom ground rules, classroom mission statement, SMART classroom goals, graphic displays of progress toward SMART goals)
	3.c	Facilitate the process of students setting individual goals that align with classroom SMART goals (kept in individual student data folders)
	3.d	Facilitate the process of students creating their own mission statements that align with the classroom mission statement (kept in individual student data folders)
	3.e	Implement classroom meetings on a regular basis. Students lead the meetings and facilitate discussion around the progress toward class goals, measures, and mission. Student feedback is used to drive the class meetings.
	3.f	Collect student and parent customer satisfaction data (displayed in the classroom data center)
	3.g	Utilize PDSA to improve a process in the classroom (displayed in the classroom)
	3.h	Demonstrate the district core values through interactions with others (focus on learning for all and teamwork)
	3.i	Use at least nine quality tools (brainstorming, affinity diagram, nominal group technique, run chart, flowchart, cause and effect diagram, force field analysis, Pareto diagram, relations diagram) with students
Quality Level 4	4.a	Complete all Quality Levels 1, 2, and 3 outcomes
	4.b	Monitor student and stakeholder satisfaction and use data to drive classroom improvements (displayed in the classroom)
	4.c	Implement student-led (or student-involved) conferences
	4.d	Standardize key processes in the classroom using flowcharts or other tools to communicate to stakeholders (displayed in the classroom)
	4.e	Use comparative data to evaluate classroom student achievement results to other classrooms in the school, district, state, and/or nation (displayed in the classroom if possible)
	4.f	Actively involve students in PDSA to improve a process in the classroom (displayed in the classroom)
	4.g	Demonstrate the district core values through interactions with others (focus on visionary leadership)
	4.h	Use at least 12 quality tools (brainstorming, affinity diagram, nominal group technique, run chart, flowchart, cause and effect diagram, force field analysis, Pareto diagram, relations diagram, systematic diagram, lotus diagram, gallery walk) with students

communicating expectations for implementing quality tools and processes in the classroom.

Reading, Writing, and Alignment in the Continuous Improvement Classroom

While the traditional subjects of reading, writing, and arithmetic remain the primary focus in the classroom, alignment is also crucial as teachers work to ensure that classroom goals are aligned with the school improvement plan. Greater student achievement becomes possible when teachers can facilitate the process of students taking responsibility for their learning. CRCSD teachers are beginning to implement the following components of a continuous improvement classroom:

- *Classroom ground rules:* Students create classroom expectations that all agree to follow in working to accomplish the mission of the classroom.
- *Classroom mission statements:* Students create a mission statement for the school year.
- *Classroom SMART goals:* Students participate in setting SMART (specific, measurable, attainable, results-oriented, and time-bound) goals that align with their school's improvement plan.
- *Classroom data centers:* Once goals are written in student-friendly language, students begin collecting data and monitoring progress.
- *Individual student data folders:* To connect every student to the classroom goals, each one maintains a data folder for tracking and measuring his or her progress toward those goals.
- *Classroom meetings:* Students use meetings as a forum to solve problems and modify the classroom system to improve results.
- *Student-led conferences:* Students are expected to be able to explain their progress by reviewing the contents of their data folders. The student, rather than the teacher, leads conferences with parents.
- *Quality tools and PDSA:* Students learn and apply quality tools and the PDSA cycle for improvement.

Obstacles Along the Journey

With any major change, obstacles are bound to arise. Marino says that he and others are uncovering old systems that may have been in place for years and still function as designed, but now don't fit with the new paradigm of continuous improvement. While teachers are excited about implementing the continuous improvement strategies and tools, they know it will take extra time to accomplish their goals in this new way. "What they are asking for and I've been advocating is a 'stop-doing' list of the things that were perhaps effective in an older model but no longer make sense today," Marino explains. He says the district needs to improve at identifying tactics or activities that don't fit with the new paradigm and that can, in some cases, be added to a "stop-doing" list.

Stakeholder Feedback

Marino reports very little formal resistance so far to the continuous improvement initiative. At the elementary school level the

initiative is quickly taking root, and at least half of the middle schools are taking steps to begin using the improvement plan, but at the high school level only random pockets of activity are evident. This lag is attributable, in part, to the high school structure itself, explains Markward. Communication in a diverse setting such as the high schools, with up to 120 staff members to reach, becomes more difficult.

On a formal level, feedback from staff is convincingly positive, as evidenced by an all-staff evaluation given in September 2006:

- 97% of staff members said they understand how their actions directly contribute to the accomplishment of school improvement plans and the district's strategic plan
- 90% strongly agreed that with proper support and training they could accomplish the Four Quality Levels in their classrooms in the next 3 to 5 years
- 99% strongly agreed that their school's improvement plans are well aligned to the district's strategic plan

Focusing on In-Process Results Rather Than High-Stakes Tests

Typically, school districts rely on annual high-stakes tests like the Iowa Tests of Basic Skills to assess student progress. Taking another approach, the Cedar Rapids district focuses on more frequent measures through in-process results to monitor student progress and to measure the effectiveness of strategies employed by staff members. "We're trying to broaden the concept of assessment beyond the once-a-year test to what we're doing daily and weekly—the tracking in our classroom data centers. You can walk into any classroom and see growth or lack of growth in a number of areas," Marino says.

According to Martin, in-process measures can include student results in writing, reading, math, and other subjects, as students chart and measure their progress against classroom goals. Using a measurement concept called a "dashboard" helps teachers and students see real-time results. A dashboard with in-process measures is one component of the classroom data center, explains Martin. The data center typically includes the district's one-page mission, the school's mission statement, the classroom mission, classroom ground rules, and selected student and classroom results. Figure 3 shows examples of two elementary classroom data centers.

Earning Statewide Recognition

Although its quality journey is in the beginning stages, the district finds value and now recognition by applying for the Iowa Recognition for Performance Excellence (IRPE) awards program. Sponsored by the Iowa Quality Center, the IRPE, which utilizes the Baldrige criteria, helps organizations assess and strengthen performance. In February 2007, the district received a bronze level award and became the first school district to win an IRPE award.

Markward says the detailed, written feedback report from the examiners' site visit is a tremendous learning tool. The report

came back with more than 50 recommendations for improvement and provides a focus for future efforts.

Continuing the Journey

One opportunity for improvement identified in the IRPE feedback report helped determine a future area of focus in the district’s quality journey—succession planning. Marino notes that many initiatives fail, both in education and industry, because of a revolving door of leaders. “We’ll work on a systematic process to groom and train the next level of leadership to help embed continuous improvement into our culture,” says Marino.

In addition to succession planning, the district will continue to focus on alignment, the deployment of quality tools, and the use of research-based strategies for student improvement. “We don’t want to be doing continuous improvement just for the sake of it—otherwise we’ll be measuring and using tools, but not

necessarily interjecting the improvement strategies for specific skills that students need to achieve,” Markward explains.

For More Information:

- To learn more about continuous improvement efforts at the CRCSD, visit <http://quality.cr.k12.ia.us/>. This Web site contains a wealth of information, such as classroom tutorials, templates, the district’s balanced scorecard, and presentations.
- Visit ASQ’s Quality in Education blog at <http://www4.asq.org/blogs/edu/>. Moderated by Jay Marino, this blog provides an interactive forum for sharing information on continuous improvement in education.
- To learn more about the Iowa Recognition for Performance Excellence program, visit <http://www.iowaqc.org/irpe.asp>, and for information on other state quality awards programs, visit <http://www.networkforexcellence.org/>.
- Continue to watch www.asq.org for updates on CRCSD progress.

Figure 3 Classroom Data Centers

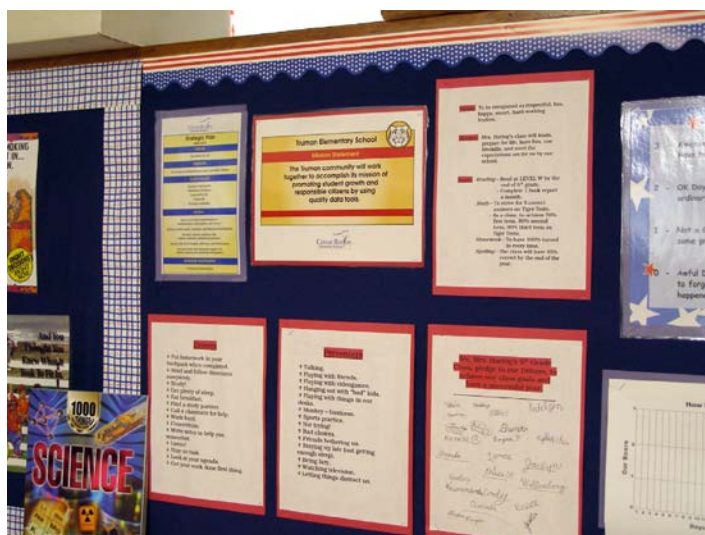


About the Author

Janet Jacobsen is a freelance writer specializing in quality and compliance topics. A graduate of Drake University, she resides in Cedar Rapids, Iowa.

Figure 4 Food and Nutrition Department Strategic Plan on a Page

Food and Nutrition Strategic Plan 2007–08
Vision Excellence for all
Food and Nutrition Mission To prepare all students for learning by offering nutritious meals and quality service at affordable prices
Core Values Customer satisfaction Data-driven decisions Learning for all Teamwork Visionary leadership
Food and Nutrition Departmental Goals Advance the nutritional integrity of meals offered. Interact in a positive and professional manner with all customers. Prepare top quality meals on a consistent basis. Maintain high standards of cleanliness and sanitation. Develop a position-specific training program for all employees.
Guiding Philosophy Continuous improvement



Classroom data centers utilize a dashboard to measure in-process results for student learning activities such as spelling and math. A typical data center also includes the district’s strategic plan and the school’s plan on a page, as well as classroom goals.

The department’s plan on a page is aligned to the district’s strategic plan.