Educators are inundated by data — Terra Novas, SATs, CATs, Iowas, Accelerated Reader test results, state assessments, graduation rates, grade point averages. The list could go on. Teachers work hard and put in long days to set up labs, grade papers, contact parents, and fulfill their other professional responsibilities. Looking at all the data collected often is not part of teachers’ daily work.

The Glens Falls City School District in upstate New York changed that. The district began in-depth analyses of state assessment data and Terra Nova scores over the last three years. Teachers and administrators worked together in a new way to highlight strengths and weaknesses in student performance and to come up with strategies to address the weaknesses. District leaders began to understand that reflecting on data requires time — and they restructured professional development days to give teachers time for analysis. Teachers have responded by using data analysis to make changes in the classroom.

After three years of sustained initiatives, the district has seen improvement at some grade levels and dramatic increases in other areas. Fourth graders across the district have improved their English Language Arts (ELA) scores in each of the past three years (see chart on p. 26), and the 2003 results put the school near the top among more than 20 regional school districts. Student mastery on the 8th-grade state assessments is less dramatic, with some stagnation (something nearly all New York schools are experiencing). However, the number of students failing two or more classes has decreased significantly (see chart on p. 27). Students are achieving more, which has led to fewer disciplinary problems and fewer retentions. In high school, 11th graders are performing better on the New York State ELA comprehensive assessment. Other core areas at all levels and throughout the district have shown similar trends.

**HOW WE BEGAN**

When the state Department of Education began issuing school report cards, many districts felt the pressure of increased accountability. The Glens Falls school board set a goal of raising student performance on state assessments to more than 80% demonstrating mastery, with ongoing incremental growth.

District leaders determined that the best solution to the challenge would be a different approach to
using student data that was already being collected. Analyzing and understanding the data requires time, and so leaders developed a three-year plan for professional development, then dedicated the time, resources, and money needed to meet the goal for improved student achievement. The plan included specific actions, a timeline, and the desired outcomes for staff professional learning.

Key administrators outlined an initial plan. The assistant superintendent gave the framework to the district's professional development committee of teachers and administrators from all buildings for feedback and revision. The committee agreed on steps and defined needed resources. Planners built in three full days during each school year for teachers at every secondary-level department and each elementary grade level to work together in small groups in their buildings to review data. Substitute teachers allowed teachers time to learn to analyze the

### Top 10 ways to use data as a lever for change

1. Uncover problems that might otherwise remain invisible.
2. Convince people of the need for change.
3. Confirm or discredit assumptions about students and school practices.
4. Get to the root cause of problems, pinpoint areas where change is most needed, and guide resource allocation.
5. Help schools evaluate program effectiveness and keep the focus on student learning results.
6. Provide the feedback teachers and administrators need to keep going and stay on course.
7. Prevent an overreliance on standardized test scores.
9. Give schools the ability to respond to accountability questions.
10. Help build a culture of inquiry and continuous improvement.

data, map curricula, review each other’s teaching, and pursue the objectives outlined in the professional development plan. The team budgeted about $60,000 for materials and 600 substitute days per year.

GETTING COMMITMENT

Teachers reacted with predictable skepticism. They saw additional work to fulfill yet more directives from above. Others felt their past concerns had fallen on deaf ears when administrators were carrying out district initiatives, and so felt little buy-in for new changes. They were skeptical of the board’s 80% mastery target, and they questioned whether the majority of students could perform at high levels. Many believed their time was better spent in the classroom than in professional development.

The district leadership began by talking with building administrators in cabinet sessions, allowing them to share concerns and make recommendations to strengthen the professional development plan. The buy-in from building principals and their assistants communicated to grade-level and department leaders that the school-level leaders supported the plan and board goals. School leaders had to take an approach of “We’re all in this together.”

The next step was to let teachers experience the benefits of having time to work in small groups with colleagues and focus specifically on making meaning of student data.

THE PROCESS

The plan opened with full-day sessions in the fall. Teachers had released time to meet by department at the middle and high school and in grade-level teams at the elementary schools. Grouping staff by grade and departments limited the sessions to about 10 teachers, allowing for more discussion and productivity.

Teachers worked in pairs with the secondary curriculum coordinator or assistant superintendent, asking questions, giving feedback, and recording notes. After a preliminary discussion on state assessment data and board goals, staff reviewed data from state assessments and Terra Nova reports. They looked at test results item by item and considered student work to determine the frequency of errors in extended response questions in math and science, and studied English language arts and social studies student writing passages. They identified their school’s strengths and weaknesses by standard and key idea. They looked at how the standards were addressed in the curricula. For each weakness, teachers brainstormed reasons for the deficiency and instructional strategies that could correct the problem.

After the analysis sessions, the staff seemed energized and more aware of each program’s strengths and weaknesses. The assistant superintendent or secondary curriculum coordinator took notes and wrote data analysis reports for each session. Each teacher and building principal got copies of the reports and the teachers’ recommendations for change. Yet when district leaders were talking informally with a building administrator early in the plan, they realized nothing was changing. The building administrator hadn’t seen the data analysis reports. Checks with other buildings showed the reports were being filed — out of sight and out of mind. Except for a few isolated teachers, the instruction and assessment were status quo.

CHANGES IN THE CLASSROOM

We had overlooked two important ingredients for change — follow-through and accountability. Making real, sustainable changes in instruction based on data analyses requires building-level goals and evidence of successes that speak to identified concerns and strategies.
Administrators strengthened the process with greater accountability and follow-through time for teachers. Principals used the analyses and needs assessments to write building goals, which then shaped the goals the grade-level and subject-area teams developed. With goals in place, administrators asked staff for data to demonstrate that they were pursuing the goals.

At the middle and high school levels, administrators dropped in on teachers for frequent, informal assessments of how they applied the strategies outlined in data analysis sessions in the classroom. To raise the level of awareness and accountability, middle school teams met every other week with the secondary curriculum coordinator to discuss how the strategies teachers had outlined in the professional development sessions were working with students. The groups kept minutes and sent them to district leaders and the school board.

School leaders began regularly to use faculty meetings for data-based discussions. Many staff meetings focused on curriculum maps and data analysis reports.

After a year of stamping out weaknesses, the professional development focus shifted to looking at student work. Elementary staff focused on writing and mathematics. Teachers developed rubrics and shared samples of student work and instructional strategies with one another. Middle and high school teachers addressed specific items identified through the test analysis one at a time. The regular group meetings have helped teachers see the interconnection of their work. In one case, middle school teachers reviewing one person's unit on catastrophic events decided to create an interdisciplinary unit from it, culminating in a fair showcasing student work for the community.

Looking at student work has had the greatest impact on teacher analysis and reflection, allowing teachers to see what is — and is not — working. Student work samples have given teachers insight about what their students are doing in other teachers’ classrooms and have helped focus dialogue on the true effectiveness of strategies brainstormed in data analysis sessions.

Across the district, the culture has changed from the status quo to one of analysis and reflection. Administrators dropping in on classes today find essential questions posted on classroom walls and students engaged in rigorous and relevant class work. In a recent high school social studies class, students were evaluating each other’s introductory paragraphs and giving each other feedback on how well they had used the teacher’s four-step model that addressed a weakness in essay writing skills. Middle school math teachers are rewriting their curricula to incorporate more standards-based materials from Connected Math and MathThematics and are using more investigative math instruction. Elementary science teachers now use hands-on science kits for a more inquiry-based approach to learning.

CONCLUSION

Evaluating data and making changes is an arduous process, but the successes teachers have experienced in helping students learn have energized them as never before. Evidence of success includes the incremental improvements in student performance, increased teacher dialogue, regular use of student work, and a culture of analysis and reflection. Teachers are routinely scrutinizing data and sharing student work to develop effective instruction that leads to higher student achievement. Teachers now are committed to an ongoing process of improvement.

After attending professional learning team meetings, one building principal wrote, “The meetings this morning ... were the very best I have seen. The teachers clearly respect [the] analysis and efforts to research problems and potential strategies. This is an excellent springboard for improvement and eliminating weaknesses one at a time. ... Teachers have a sense of empowerment.”

REFERENCE: