By Barbara Bergman

Teachers in the Federal Way (Wash.) Public Schools had no shortage of student data. Standardized test scores, unit tests, and report card grades were as familiar to educators as reading, writing, and arithmetic. With the onset of statewide testing in the 1990s, data analysis was expanded to cover a multitude of state learning goals in grades 4, 7, and 10. There were more than 90 of these learning goals for Washington’s 4th graders in reading alone, with the expectation that teachers would somehow track progress on all of them.

State testing was later expanded to include annual assessments for grades 3-8 and high school. And in Federal Way, district assessments, administered three times a year, were added for core subjects at each grade level. Data was plentiful. What the district lacked was a way for teachers to make sense of and make meaningful decisions around student data.

To remedy this, the district introduced “Data Days” in 2004. A waiver from the state granted three nonstudent days to allow time for teachers to review and respond to data analysis.
data. With a list of district outcomes, staff and principals at each of the 37 schools in Federal Way had the freedom to plan agendas that would better acquaint teachers with the achievement data for their school. A second objective was to develop instructional plans to address the trends and individual needs highlighted in the data.

**USING DATA TO SET GOALS**

Job one on the first Data Day was to present data in a meaningful and digestible format. The district’s assessment office created templates that showed comparative graphs of each school’s standardized tests and state test data over the past five years as well as summaries of results from recent district and classroom assessments.

Next steps for teachers included:

1. **Draw general trends from the data:** What are areas of strength and weakness for our school in reading? In math?

2. **Identify grade-level needs:** How does the grade-level data compare to school data and state data regarding strengths and weaknesses in reading? In math?

3. **Use classroom and individual data to complete the needs assessment:** What skills in reading and math need to be targeted this year for the students in my classroom?

Using this information, teachers set measurable goals in reading and math for their students, selected best-bet strategies to address the identified needs, and mapped out intervention plans for individual students who need additional support. An example of Sherwood Forest’s intervention plan appears on p. 48.

Disaggregated data used to determine Adequate Yearly Progress brought new information for teachers to work with:

- How did the progress of students in specific cultural and ethnic groups, of English language learners, of students from economically disadvantaged families, and those with Individualized Educational Plans compare with the achievement of all students in the school?
- What specific strengths and deficits were uncovered in the data for each group?

At first, many teachers were uncomfortable with these conversations. With time and practice, however, teachers were able to analyze trends and needs in disaggregated data with the same care and proficiency they applied to the rest of their data.

**SHERWOOD FOREST ELEMENTARY SCHOOL**

After the first Data Day, teachers at the district’s Sherwood Forest Elementary School were well on their way to moving data from PowerPoint presentation to lesson plans. They used assessment information to identify specific learning goals and took pride in student results. They shared instructional strategies that were working. At multiple staff meetings and two more Data Days that year, teachers itemized assessments, tracked student progress, differentiated their instruction, planned with support staff, and refined their goals.

Teachers tried various formats and meeting times, refining the protocols before arriving at a five-step collaboration cycle led by teacher facilitators and focused on student data (see box above).

**SHERWOOD FOREST ELEMENTARY SCHOOL 5-STEP COLLABORATION CYCLE**

1. Identify the priority area.
2. Create SMART goal for priority area. Between meetings, gather student data and information on priority area.
3. Correlate best practices to current practices.
4. Identify instructional strategy we want to use or try. Use it and bring results.
5. Analyze results and refocus efforts.

Professional development focused on collaboration models and purposes as teachers practiced together and shared feedback. Then they practiced some more and gave...
DATA WALK

Purpose: The data walk is used to give teachers time to study student data, discuss it with their colleagues, and consider implications for the school and classroom.

Materials: Charts posted around the room, displaying student data in reading and/or math for each grade level; sticky notes for teacher observations and questions; pens or pencils; timer.

Time: 60-75 minutes.

STEPS

1. Create charts displaying student data for each grade level in word-processing program, and enlarge to poster size at local copy store; or create chart by hand and fill in labels and data points. Display charts on walls around the meeting room.

2. Have group form teams of four to five people with broad representation (primary, intermediate, specialist, paraprofessionals).

3. Appoint a timekeeper. Have teams visit each data poster and discuss:
   • What aha do you notice?
   • What questions do you have about the data?

4. Have each group leave at least one sticky note with an aha and at least one sticky note with a question about the data.

5. After five to seven minutes, timekeeper gives signal to move to the next poster.

6. After teams have visited all of the posters, reassemble the whole group and ask group members to divide into grade-level teams and assign a recorder. Each team visits its own grade-level poster for 12 to 15 minutes, reads the comments on the sticky notes, and discusses implications for the school and for its grade level. Recorder writes these comments on a sheet of paper.

7. Reconvene the whole group and ask members to be seated. Each recorder reads comments and posts them in the front of the room.

8. Discuss: What did we learn as a school about the strengths and needs of our students from today’s data walk?

9. Facilitator copies comment sheets and returns them to each grade level for use in future collaboration and goal setting.

more feedback. A collaboration coach from the local educational service district was hired to provide professional development to professional learning communities during the first three years. She exchanged information with the whole staff on Data Days and met monthly with grade-level representatives to celebrate successes and problem solve any issues. Each year, the conversations deepened: How can we best structure our time to benefit teacher practice and student learning?

2. Teachers identified and implemented researched instructional practices over several years.

These practices include reciprocal teaching, Origo computational strategies, Guided Language Acquisition Design, and Marzano’s nine instructional strategies. Professional development continues to focus on these priorities. In addition, the school instituted minimum 90-minute instructional blocks for reading and math, and teachers and principal developed a standard lesson design. Every year, new staff members need training in these common practices. A full-time instructional coach works closely with both new and veteran staff to provide whole-group, small-group, and one-on-one professional development differentiated to the needs of each teacher. Student data is at the center of their conversations.

3. Each grade level identified specific assessments that could be administered on a regular basis to measure student progress.

Examples include letter and sound assessments, reading fluency assessments, cloze comprehension assessments, and computational fluency assessments.

In 2011-12, Federal Way Public Schools implemented a K-12 standards-based system with electronic record keeping.
This gave teachers the ability to monitor student and classroom progress on up to 15 standards identified for each subject and grade level. A parent portal allows secondary schools to share student progress on each of these standards with families, and this portal will be available to elementary parents this year. Clear learning standards, with regular feedback to students and families, help to provide a coordinated plan for each student’s success.

4. Grade-level teams identified and shared interventions for struggling students.

What strategies were most effective for increasing fluency, building vocabulary, or increasing problem-solving skills? While answering these questions, grade-level teams began to standardize interventions and develop a list of differentiated strategies for a variety of instructional needs. Classroom teachers, along with support staff and volunteers, select from a tool kit of specific strategies to address learning deficits or respond to accelerated learners.

CHANGES AT SHERWOOD FOREST

What have Sherwood Forest’s teachers and principal learned from eight years of data study and the 24 Data Days set aside to formalize those studies?


Data drives conversations when Sherwood Forest teachers gather. At the fall Data Day, teachers look at multiple sources of data to identify strengths and needs of this year’s students. A Data Walk (see p. 46) is one strategy they have used to dig deeper into assessment results.

In 2011-12, Sherwood Forest teachers looked at profiles of K-5 students who were receiving extra support in reading and math and discovered that the majority of those students were either active or former English language learners. They determined a need to focus on language-rich classrooms and vocabulary instruction across all grades to address this trend. In one response to this need, district and building ELL staff provided articles, training, modeling, and consultation for teachers. Teachers learned new strategies at staff meetings and reported back on what worked best.

2. Eight years of Data Day conversations have led to more communication across grade levels.

On Data Days, grade-level teams use protocols to share data with their adjoining grades, allowing them to start the year with a heads-up on the strengths and needs of their students. In addition, they share instructional practices that were most successful for the previous year’s class. One team developed practice strategies and parent communications that improved students’ computational fluency and shared them with other grade levels. In another example, grade levels developed step-by-step processes for math problem solving that were aligned from kindergarten through 5th grade. Intermediate teachers are joining forces next year on an integrated project called Salmon to Sound. As part of the study, students will hatch salmon eggs and release them into Puget Sound.

3. The attention to student data has moved collaborative conversations from a focus on teacher planning and professional development to a focus on student learning.

Yes, that focus can still include planning and professional development, but now the nine-day collaboration cycle is grounded in a specific, measurable goal, and teachers gather evidence to evaluate the outcome. They meet every nine days and follow the five-step collaboration cycle (see p. 45). For each of the steps, teams give themselves permission to consolidate or expand the timeline as needed.

NEW LEARNING, NEW PRACTICES

Becoming data wise is a core requirement for today’s educators, and it requires time for conversations and inquiry that lead to new learning, new practices, and new levels of collaboration. When instruction is data-driven and teachers are data-wise, a new belief system emerges in the school community. Teachers gain confidence that if they collect the right data for students and use it to create the right learning opportunities, they can change lives. Therese Pense, a 3rd-grade teacher, says, “It’s easy to collect data, but it’s another thing to actually use it. Our formative assessments and collaboration meetings have provided the time to use data to differentiate instruction, and it has changed my teaching.”

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## STUDENT INTERVENTION PLAN

At the fall Data Day, teachers develop intervention plans for students who are not meeting standard. A three-tier identification system is used. These plans are updated and monitored throughout the year.

**Tier I:** meeting or exceeding standard;  
**Tier II:** approaching standard, classroom interventions indicated; and  
**Tier III:** below standard; classroom interventions and support services indicated. (Examples: Title I/Learning Assistance Program, English language learners, special education services, after-school math or reading support.)

**DIRECTIONS:** After reviewing the data, write the name of each student in your class who may need Tier II/III support and check the appropriate box for reading and/or math. (Multiage teachers, indicate grade level.) In the space at right, indicate what supports you will provide in terms of structure and content, strategies, or resources.

<table>
<thead>
<tr>
<th>STUDENT NAME</th>
<th>GRADE LEVEL</th>
<th>READING TIER II/III</th>
<th>MATH TIER II/III</th>
<th>Classroom interventions for Tier II &amp; III students in reading</th>
<th>Classroom interventions for Tier II &amp; III students in math</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>What will look different in your classroom in terms of structure and content, strategies, or resources for reading instruction for these students?</td>
<td>What will look different in your classroom in terms of structure and content, strategies, or resources for math instruction for these students?</td>
</tr>
</tbody>
</table>