

# DATA ANALYSIS

is a courageous look in the mirror

BY VALERIE VON FRANK

auren Campsen is
never satisfied.
The principal of Ocean
View Elementary School in Norfolk,
Va., says she won't rest
until she achieves "universal
proficiency," having every one
of her 600 or so students reach acceptable levels
on the state achievement test.

She's getting closer. In 2008, 96% of students were proficient in reading and math, 97% in science. The school has virtually eliminated the achievement gap with a student population that includes immigrants arriving from Central America not speaking English, those with a family legacy of poverty, and many children Campsen says have been overlooked in the past because of the color of their skin. Having students achieve has required teachers to dig down into data and change their instruction based on what they find. And it has meant being open about what the data show.

Campsen says a move to data-driven decision making has changed her school. Outside her office hangs a large board. One side graphs grade-level achievement on the state standard test, and the other side shows data broken down by subgroups. Next to each classroom door are charts showing how many students in that class achieved proficiency in each subject on school assessments — and how many were proficient on a reassessment after the teacher addressed individual students' areas of weakness. Students begin in 1st grade to carry notebooks where they have graphed their own progress on the assessments and noted which *Continued on p. 6* 

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# SCHOOL LEADERSHIP



#### **DEBRA BERGMAN**

Principal, Gallego Basic Elementary School

Tucson, Ariz.

**Grades:** K-5

**Enrollment:** 561

students

Staff: 24 teachers

This southside Tucson school is 82% Hispanic, with many children from the nearby reservation and some white students. A magnet school, children choose to be bused here. although some new, nearby housing developments are beginning to change the socioeconomic mix in the school.



# Opening doors, opening minds

BY VALERIE VON FRANK

# Q. How do your teachers improve their instruction?

My staff has gotten to the point where data are not a scary thing, and observing each other to learn from one another is not a scary thing. Discussing strategies that are effective in building quality-first instruction is something they are all seeking out because they see that kids are becoming more successful

academically.

We have art, music, physical education, and a computer lab that allow teachers to have a common planning time four days a week for 40 minutes. We also have early release on Wednesdays. Children leave at 12:30. Teachers meet in gradelevel teams from 1 to 3 p.m. to look at data, collaborate, plan, figure out where their kids are and whether to reteach, enrich.

move forward. We also use that time for other groupings, such as multiple grade levels working together on differentiated instruction once a month. We're really moving into peer coaching now.

# Q. Were teachers comfortable with open doors?

It doesn't happen overnight. I've been working on this for 10 years in baby steps. Every year I've introduced a small piece. It's been hard for some. Some decided to retire, and then when I hire, I'm upfront about what I want, what you're going to be responsible for. Everybody here is learning, not just the children.

Most of my teachers are very comfortable now with me coming in two or three times a week and just watching them teach. I leave them notes with questions or to praise them for the good things they do.

# Q. How do you support teachers?

I had to look at ways in my budget to fund time to bring in substitutes to pull a grade level together to look at data and talk about it: Why did 98% of your students do well on this benchmark? What did your lesson look like? What

strategies did you use?

I have a reading coach and a math coach. My coaches and I go in and model. I'm a principal, but I go in and teach. That develops respect in time, with dialogue. It also helps me find out how the classroom is running.

I work hard at building relationships with my teachers, getting them to understand that I understand how hard teaching can be and that I

want to support them.

"Teachers have to be open

to learning and changing

and accommodating the

needs of any kid who walks

have to be able to say, 'If this

into their classroom. They

child is not learning, what

do I need to do? Who can

help me figure this out?" "

Finally, I find ways to honor my teachers, such as nominating someone each year for teacher of the year.

# Q. Why is it important to make these changes?

In today's world, people have to get to that level of comfort. The days of closing the door and doing what you want are over. Teachers have to be open to learning and changing and accommodating the needs of any kid who walks into their classroom. They have to be able to say, "If this child is not learning, what do I need to do? Who can help me figure this out?"

I want all kids to have a fair shake, to have choices in their lives, and the foundation of those choices begins right here.

# FOCUS ON NSDC'S STANDARDS



Pat Roy is co-author of Moving NSDC's Staff Development Standards Into Practice: Innovation Configurations (NSDC, 2003).

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# A mandate for data

ne of the most difficult tasks we ask school teams to do as a component of a three-year development program in Arizona, is to involve their faculty in the analysis of data to determine school improvement goals and aligned professional development objectives. Some school teams relish the task and dig deeply into an array of data,

while others begrudgingly complete the task without enthusiasm Those team members sometimes comment, "Just tell us what to do. We'll do it!"

Federal and state accountability systems require educators to accomplish more than schools have ever been asked to achieve. These expectations have spawned an unintended consequence—namely, the overpowering mandate. Involving a range of stakeholders in decisions about how to improve student learning seems, in some districts and schools, to be shoved aside in favor of directives and demands for

change (Reeves, 2009). While mandates seem like a more efficient process, teachers' understanding of the rationale or need for new curriculum or instructional practices evaporates in this context. Without a solid understanding of the rationale, their commitment to new practices also wanes, especially when change inevitably becomes chaotic. However, when teachers have the opportunity, intentional analyses of their students' data lead them to recognize the need for changes as well as to pledge to implement improvements.

The principal needs to engage teachers, parents, and community members in data-driven decisionmaking (Roy & Hord, 2003, p. 75). The principal works with parents, community members, and whole faculty to make decisions about the focus of schoolwide work.

Stakeholders need to learn some new skills. First, stakeholders need to come to agreement concerning what the data reveal. Analysis first involves developing declarative statements, which describe patterns or trends within the data. For example, "The data indicate that over a three-year period, reading scores have dropped

NSDC STANDARD

Data-Driven: Staff

development that

of all students uses

data to determine

priorities, monitor

progress, and help

sustain continuous

improvement.

adult learning

improves the learning

disaggregated student

learners." Frequently, stakeholders move quickly to conclusions and offer solutions before truly understanding the data. For example, they might say, "Look at the reading scores—we need a new reading program." Once needs have been established, stakeholders can move more easily to establishing meaningful goals (Richardson, 2000).

10 points for English language

Second, data analysis should include discussion of root causes. Probing for causes "pushes participants to go deeper in their understanding and often chal-

lenges some of their underlying beliefs and attitudes about student learning" (Richardson, 2008). Change research indicates that improvement efforts sometimes only focus on alleviating "symptoms" rather than eliminate the root causes of our issues. One useful tool for identifying root causes, available online to members, is "Probing for causes" (Richardson, 2008).

Thoughtful and skillful analysis of data by stakeholders can transform random acts of school improvement into purposeful, resultsbased improvement efforts that will make a difference to both teachers and students.

Learn more about NSDC's standards: www.nsdc.org/standards/index.cfm

# DATA USE REFLECTION GUIDE

Consider these questions as prompts to guide reflection about how you or your team use



# BECOMING A LEARNING SCHOOL

This tool is reprinted from Becoming a Learning School (NSDC, 2009). Written by Joellen Killion and Pat Roy, this resource is a massive tool kit for implementing more effective professional learning. An accompanying CD includes nearly 500 pages of tools, including an Innovation Configuration map for teams to use in assessing where they stand in reaching critical objectives for effective learning.

Order at **www. nsdcstore.org** or by calling 800-727-7288.

Item # B423 \$48 members \$60 nonmembers

1.	What data about student learning do you use most often?
2.	What new types of data have you used in the last year or two?
3.	What types of data do you no longer use?
4.	Identify which student performance data you use for each category:  To plan daily instruction/lessons  To plan units  To cluster students for group work or cooperative teams  To select instructional materials to supplement texts  To differentiate assignments or tasks  How often do you refer to or review data about student performance?
_	
6.	How often do you collect data?
7.	How do you analyze data?
8.	What do you do with the data once the data are analyzed?
9.	What challenges do you have with data?
10.	What data do you wish you had?

# TYPES OF DATA AVAILABLE

Use the framework below to identify the types of data available in your school.

PERCEPTION DATA	DEMOGRAPHIC DATA
STUDENT LEARNING DATA	SCHOOL PROCESS DATA

# 4 CATEGORIES OF DATA

Victoria Bernhardt (2004, pp. 16-17) identifies four categories of data:

### 1. Perception data

help teachers develop an understanding of "what students, parents, teachers, and others think about the learning environment."

### 2. Demographic data

"provide descriptive information about the school community — enrollment, attendance, grade level, ethnicity, gender, native language."

# 3. Student learning

data "describe the results of our educational system in terms of standardized test results, grade point averages, standards assessments, and authentic assessments."

### 4. School process

data "define what teachers are doing to get the results they are getting."

# REFERENCE Bernhardt, V. (2004).

Data analysis for continuous school improvement. Larchmont, NY: Eye on Education.

# OCEAN VIEW ELEMENTARY Norfolk, Va.

**Grades:** Pre-K-5 **Enrollment:** 559 **Race/ethnicity:** 

- 47% Black
- 45% White
- 5% Hispanic
- 3% Other

Free or reducedprice lunch: 63% English language learners: 6% Special education: 9%

# Data analysis is a courageous

Continued from p. 1 skills they need to work on.

Campsen says those who might be reluctant to display their data so openly are part of a problem in the education system.

"If you're embarrassed by your data, you need to change it," she says frankly. "Data should never be a secret. A lot of times we as educators haven't looked at data and have just continued on our way without paying attention to the end result. Now we focus on our result. We

use data to guide, plan, and deliver instruction. We're not just moving along. We're backing up when we need to and identifying students who need help, providing intervention, and reassessing."

Beginning in 2002-03, the school formed data teams that include teachers from each grade level to focus on subject areas. An instructional specialist leads each core subject team.

Teachers meet weekly during 45 minutes of released time in grade-level teams to discuss student data, and twice a month in vertical subject area teams to search for patterns in the numbers. Each month, the leadership team gathers around the table with Campsen for a schoolwide review of which students need intervention and how best to direct resources. The team is able to respond to needs based on the review of data. For example, the team decided to change the master schedule in February of one year to have math taught at different times in 3rd and 5th grades to allow the math specialist to work more closely with teachers in those grades. In another instance, the team decided to buy write-on, wipe-off state maps for every 4th grader when data showed a dip in scores on state history.

Bookcases in Campsen's office hold binder after binder of student data. Ask how 2nd-grade Josiah is doing this year after a difficult start in 1st grade, and Campsen can take three steps from her desk to tell the person inquiring which skills the child still needs to master in each subject.

"Our process puts names to the data," she says. "We know who those 30% are who aren't proficient on a strand. It stops the child from being just numbers. Before, the high-achieving kids disguised all the weak kids (in combined test results), until we started being brave enough to put names to the results."

Educators at Ocean View delve into data that include the state standardized test results, quarterly districtwide assessments, and common assessments teachers at the school have devel-

oped. The school-level assessments may be just 10 to 12 multiple choice questions that support a standard. The assessments offer real-time results that teachers use to then reteach specific skills to individual children. That "circling back," as Campsen terms it, has made the difference for the children at Ocean View.

Campsen remembers the moment in 2003 when she felt the tingle of change made real in her school.

She and the 5th-grade teachers huddled around her computer as raw data from the state arrived. In the next office, they could hear the assistant principal and the 3rd-grade teachers poring over the test data for that grade. As the groups scrolled through each student and noted who achieved proficiency — and how many hadn't — they tallied pass rates and realized grade-level scores had jumped as much as 10 to 20 points in some subjects after just one year of really using data to make a difference in instruction. As the reality set in, a veteran 5th-grade teacher turned to Campsen and told her, "All those things you made us do? They really did work!"

"It was a pivotal moment," Campsen said.
"That doesn't mean everyone even now agrees with me on everything, but as a group, they embraced the concept of data-driven decision making.

"I won't lie," Campsen said. "It was hard. There were a lot of people who were upset when those charts went up. I met a lot of resistance. It Continued on p. 7

## **NSDC'S BELIEF**

Remarkable professional learning begins with ambitious goals for students.

"The first thing

# look in the mirror

#### Continued from p. 6

was a whole different way of looking at things. Looking back, I would have been better off bringing someone in. I had to monitor, monitor, monitor what I expected to happen. We were a needs improvement school (the lowest category in the state rating system). It might have seemed cold and dictatorial, but it had to be done."

Campsen undertook her own professional development to learn to analyze data, and then went through the process again with the vertical team leaders. Those leaders worked with teachers on their teams on the professional learning. But Campsen said the change needed to begin with her.

"The first thing I needed was to be brave enough to be a risk-taker, to stand up to resistance, to reorganize my building. I had to be willing to do that. I needed to know how to use data. I had to learn that. I had to learn strategies that were research-based. I did a lot of reading to make myself familiar with current research. And

I had to know my own children."

Flexibility was another requirement as the population changed. "I had to be willing to keep pushing the envelope, to try things, to not ever be satisfied," she said. "We're constantly looking for ways to improve."

The school's improvement in the last several years has not gone unnoticed. Ocean View Elementary was named a National Distinguished Title 1 School in 2009 and received a U.S. Department of Education Blue Ribbon award in 2008.

The difference between being nonaccredited in 2002 to today is marked.

"Now, teachers can't imagine teaching without knowing where the kids are in their learning," Campsen says. "They don't want to wait until the end of the month. They want to know at the end of the week how well students learned.

"If the children don't make it," Campsen says, "the only place you can look is in the mirror ... there are no excuses."

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— Principal Lauren Campsen

children."

# Explore these web sites to learn more about using data

### **Data Quality Campaign: Using Data to Improve Student Achievement**

This initiative is a national collaborative effort to improve the collection, availability, and use of high-quality education data and to implement state longitudinal data systems to improve student achievement. Of particular interest to principals is a recent report, "Tapping into the power of longitudinal data," which demonstrates how using state-level data can be beneficial at the district and building level.

## www.dataqualitycampaign.org

### **The Education Trust**

While this organization works on many fronts to raise expectations and opportunities for students, a critical piece of their work is the dissemination of data. Browse or search through the Dispelling the Myth or Education Watch databases and read a variety of reports that reveal those districts that are closing achievement gaps across the country.

## www2.edtrust.org/

# **National Center for Education Statistics**

As a part of the U.S. Department of Education, NCES collects and analyzes education data. Information from the National Assessment of Educational Progress (NAEP) is available here, as are data from the Schools and Staffing Survey and many other federal data analysis projects.

http://nces.ed.gov/

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# Walk your talk with NSDC's latest book

ow do teachers and coaches start a conversation that will lead to improved practice? Michael Murphy's *Tools & Talk* provides structures and suggestions to answer

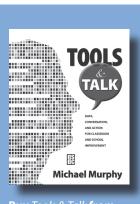
that question for anyone who works with classroom teachers to find new ways to improve student learning.

Ready-to-use tools kick start discussions around how to build responsive, brain-based classrooms, create engaging student tasks, and form a classroom community of respect and learning. Datagathering tools help teachers and coaches examine student engagement, how lesson and classroom design work together to support optimal learning, whether the school and classroom environment welcomes all students, and how well teachers are managing instructional processes.

Murphy provides a framework for conversations around the data, as well as prompts that allow coaches to discuss the findings in a collaborative way that encourages teachers to think critically about their own practices.

With an emphasis on strengthening supportive relationships, Murphy shows principals, assistant principals,

instructional specialists, and anyone in a position to affect instruction how to gather and use data to improve teaching and contribute to schoolwide change.



Buy Tools & Talk from the NSDC bookstore at www.nsdcstore.org or call 800-727-7288. Item #B425 Member price: \$33.60 Nonmember price:

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