COVER STORY

Using Assessment Data to Enhance Your Reading Program

The first time I heard the word *disaggregate* was in the summer of 1996 while in graduate school. A classmate, favoring a style of horn-rimmed glasses, pocket-protector, and polyester pants, seemed well-suited to the word as he gave a presentation on test results. I cringed when he enthusiastically placed transparency after transparency on the overhead projector showing graphs and spreadsheets of numbers representing the latest scores on statewide tests. This was the manifestation of my mother's admonition that "a girl better learn math or be passed over by those who do."

Evaluating Data

A decade later, *disaggregating data* remains an agenda item. Disaggregated data reveals standards missed, mastered, or retained, and highlights the individual and collective learning progress of students. Reading educators know that each data point on an axis reflects a student on their path of lifelong learning. They also know to look deeper. For example, did a student miss a concept due to an extended absence or a transfer from another school? Could a learning challenge impede concept retention? Did students retain a certain standard because of increased tutoring time? Did a staff development opportunity help teachers implement new strategies? Did concept mastery correlate to increased communication with, and response from, parents?

Evaluating assessment data moves past nuisance to necessary in light of the insights it affords. Harcourt Connected Learning's workshop called Teaching Phonics defines four key reasons for assessment:

- Align current understandings of how children learn to be successful readers with assessment materials and procedures.
- Inform instruction and help teachers provide timely intervention when needed.
- Provide a comprehensive picture of students' achievement as they progress through an instructional program.
- Support children at their current level, but work for change. This workshop shows that instead of a singular data unveiling,

assessments should follow this pattern: 1.) Diagnose; 2.) Interpret data; 3.) Inform instruction; and 4.) Monitor. The mnemonic PDCARRR: Plan, Do, Check, Act, Revise, Reteach, Recheck succinctly conveys a cyclical assessment pattern. "It helps me learn what my students need from me. If I don't know where they are in their development when they come to me, I can't help them move on," explains Robert Blinkhorn, a high school English teacher in Lugoff, South Carolina.

Formal and Informal Assessments

Winston Churchill admonished, "However beautiful the strategy, you should occasionally look at the results." Both formal and informal assessment data results help teachers

consider custom learning plans for students. Formal data includes results from screening instruments such as the **Yopp-Singer Test of Phonemic Segmentation** (teams.lacoe.edu/reading/assessments/yopp.html), which includes diagnostic and criterion-referenced assessments, state mandated tests, demographic information, and students' previous grades.

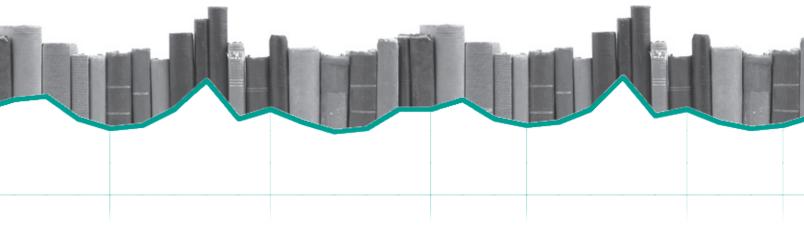
Informal sources of data include teacher-created tests and rubrics, portfolios, students' self-assessment, student reflections, student reading in running records, reading inventories, technology tools, and teacher observations. Home environment is also crucial. In a recent study by the nonpartisan Center on Education Policy, family income, parental discussion, expectations, involvement, and eighth-grade scores all positively affected 12th-grade reading scores. Creating authentic instruction necessitates data from a variety of sources. Gayla Kizzia, reading specialist in Fort Gibson, Oklahoma, says that using multiple sources of assessment data "allows the teacher to fit the curriculum to the kid, not the kid to the curriculum."

Online Resources

Technology streamlines data collection, management, and delivery, replacing the overhead transparencies I saw in class with real-time representations of concept retention. Internet resources help those more interested in the application of data rather than the wizardry of calculation. Southwest Educational Development Laboratory: Reading Assessment Database (www.sedl.org/reading/rad/) describes early reading assessment tools. BalancedReading (www.balancedreading.com/assessment.html) offers a free download of criterion-referenced reading assessments, such as the Abecedarian ("ABC-darian"). North Central Regional Educational Laboratory: Data Tools (www.ncrel.org/ datause/tools.php) features 15 assessment templates for curriculum, leadership, and technology integration. Launching K-3 Readers: Assessment Tools (teams.lacoe.edu/ reading/assessments/assessments.html) gives reading teachers access to helpful measurements. Using Data to Influence Classroom Decisions (www.ed.gov/teachers/nclbguide/ **datadriven.pdf**) is a beginning reference document explaining content measurement assessments. Using Classroom Data to Improve Student Achievement (www.classroomdata. org/index.cfm) shares downloadable handouts, QuickTime movies, and tips for when to review or reteach.

Teaching Strategies

A thorough reading teacher combines the best traditional and technical tools, and then reteaches essential learning standards. Vanessa Pate, English teacher at J. Larry Newton Middle School in Fairhope, Alabama, uses individual whiteboards to assess



student responses to assigned reading. After studying data to identify areas of weakness in reading patterns, Pate formed cooperative groups to "keep students working together toward a goal." Pate reasons that, "Struggling students are more likely to participate when they work with others. Many times other students can explain things better once than I can five times."

In Tim Cooney's sixth grade classroom, four posters emblazoned with a large "80%" encircle the classroom like sentinels guarding the progress of learning. The posters remind students of their shared class goal to reach 80 percent mastery on upcoming tests. Cooney's colleague Peter Schu uses a whiteboard to display a large graph of students' test results and the growth needed to reach the 80 percent mastery goal. Such learning strategies and ever-present visual reminders communicate a shared purpose and extend student progress, serving the same function as a business company's sales campaign or an athletic team's performance motto. They become the learning equivalent of a mascot for authentic instruction and student progress.

Technology Tools

Technology tools also help teachers by combining instant feedback with data collection. **Classroom Performance System** (www.mhhe.com/cps/whatiscps.shtml) promotes kinesthetic responses to objective questions. Teachers report how often students request to use the "clickers" as they call them. Using Smartboard's Capture component, teachers can freeze "aha" moments in instruction, project student practice on word attack skills, and transfer Elkonin boxes, once confined to worksheets, to a whole-group interactive. Promethean Board's **Activotes** (www.logicalchoicetech.com/classroom_solutions/ menu/view/12.html) use small assessment disks to relay students' objective question responses through a radio frequency. Students' answers using all these tools are accumulated, displayed, and available for export during a lesson so teachers can adjust content, pacing, and/or learning strategies.

Teachers also use specialized software that collects and consolidates data from several sources in one centralized location. This data is available earlier in the school year than information supplied by local districts. LaVerne Popelka, English and biology teacher in Abilene, Texas, uses TRIAND online data software to see the strengths and weaknesses of her students. Then she can make curriculum adjustments sooner in preparation for the TAKS statewide assessment retest in October and general test administration in January.

In an application of formative instruction, Popelka's students monitor their own learning progress. "I track what kind of multiple choice questions my students consistently miss by having them keep a chart of their errors," Popelka says. Utilizing an open-ended assessment strategy, Popelka tallies the depth of students' subjective responses on essay questions. Vanessa Pate reads online results from the DIBELS, ARMT, and the Stanford 9 state-mandated tests. "I use those test scores to identify areas of weakness that I taught the previous year so that I can rethink how I am teaching certain content," explains Pate. "My goal is to keep students engaged in learning, no matter where they are academically in relation to their peers."

Robert Blinkhorn uses TestView software to distill the standardized test scores of his students into one comprehensive report. From this information, he can create individualized educational plans for each student. Data from a previous class of students who have completed upcoming exit-level exams is a predictor of possible areas of high and low achievement. Blinkhorn uses this data to predict questions on the HSAP, South Carolina's norm-referenced exit exam for high school. "I know what is assessed through the HSAP," he said, "so I try to focus on that when I assign work for the students."

For example, to prepare students to master reading comprehension, Blinkhorn deliberately and repeatedly assigns newspaper and magazine articles in areas of limited interest to students. His assignment builds students' sustained reading skills and attention span as they read. (This approach would have helped me to stay more focused during my early introduction to disaggregating data.) After repeated practice, Blinkhorn's students develop the discipline needed to maintain nonfiction reading focus with material that they label "boring." Pinpointing areas of emphasis does not exclude other areas of curriculum. "We still go over fiction, drama, and poetry as well because there are questions on the test that deal with the terms used in those genres," says Blinkhorn.

Action Research Approach

Interest in regional fiction provided a student-centered solution to low reading test scores for one group of middle school students. As an incentive for her students to increase their reading speed and fluency, Vicki Gonzales, a middle school teacher in Portales, New Mexico, supplied her class with books reflecting a growing pride in their cultural heritage. Reading fluency and comprehension increased as students read books such as *Cuentos from My Childhood: Legends and Folktales of Northern New Mexico* and *The Day It Snowed Tortillas*.

Author Emily Calhoun created the Action Research approach to transform data from raw percentages to workable practices in her book *Using Data to Assess Your Reading Program*. In Calhoun's model, the principal selects a small group of teachers to form a School Leadership Team. The team begins by asking questions: *Who are our students? What programs are currently available in the school to support their development as readers? How well are our students performing in literacy, especially in reading? Are there changes we can make in curriculum,*

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instruction, assessment, or the organization of the learning environment to improve literacy learning?

Through a series of focused meetings, the team discusses each question and develops plans for concentrated effort in areas of greatest need. The group analyzes data, discusses research, references best teaching practices, finds resources, and formulates a specific goal statement for student improvement. They present this goal for the collective review and focus of the entire school along with timelines, resources, and activities.

A team may choose to accent a specific reading content standard with low student scores. For example, Portales Junior High School principal Steve Harris and assistant vice principal Glenda Meeks analyzed their students' test data and discovered a few pockets of missed concept application. This year, during homeroom period, the entire faculty and students listen to questions from this concept area read over the loudspeaker and complete one to three practice problems together. Initiatives for school-wide emphasis may concentrate on one of the Five Components of Reading Instruction: phonemic awareness, phonics, vocabulary, fluency, and comprehension. Or, the team may decide to reference one of Calhoun's Four Dimensions of Reading: emergent literacy skills, building reading vocabulary, comprehension of connected text, and reading habits and attitudes.

Applying Calhoun's Action Research Model, a school leadership team meets after the principal reviews data showing low reading summarization skills. They observe master teachers, correspond with teachers in districts of higher performance, preview new curriculum materials, collect effective lesson plans, and view demographic data. The team asks teachers to review their tests, especially those that are five or more years old, and make applicable revisions to emphasize summarization skills. They brainstorm methods to add summarization skills across content areas. From the team's work, a goal emerges for schoolwide vertical and horizontal alignments to increase reading summarization skills. The team presents the goal, timeline, and strategies to the entire faculty for their review and input.

Cross-Curricular Connections

Finally, teachers begin implementing summarization-boosting strategies across the curriculum. In the reading classroom, students learn guided practice strategies in summarization such as retelling or Think-Pair-Share. Students view a Channel One broadcast using the closed-caption feature and apply these strategies in written summary. Science students view digital pictures from a recent experiment and summarize the scientific method through written captions for the pictures. In math, students review computation methods from homework equations with peers and summarize these in math journals. During music, students summarize a song they hear or perform a 10-20 word ad jingle. Art students compile a video summary of the media used and messages evoked in their original artwork or in the work of a famous artist. Using graphic organizer software such as Inspiration, students create summary webs for a historical period, person, or event. This combination and connection among content areas reinforces the summarization concept and provides students with multiple opportunities for practice.

"I can't get my students from point A to point B if I don't know where point A is," reminds educator Blinkhorn. Educators have progressed in using data to help students from the Point A of graphs on overhead transparencies toward the Point B of authentically customized instructional plans. With dataanalysis, targeted strategies, parent/student partnerships, Webbased software, and school-wide emphasis, teachers become change agents for student success.



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