Using Data To Think Differently

“What gets measured gets done.”
— Tom Peters

Does either of the following scenarios sound familiar?
- The lead headline on page one of the morning newspaper read “Mixed Results for Local Schools on State Tests.” Marion, an elementary school principal, put down the paper feeling discouraged. The test results indicated that her school had too many 4th-grade science students in the “failing” and “needs improvement” categories and the number of these students had increased over the previous year. Her school has three 4th-grade classrooms and she knows nearly 36 percent of the students at that grade level had not been in her school the year before. How would the superintendent, board of education and community respond?
- In another elementary school across town that received the highest science scores on the same test, the principal was asking different questions. “What do I say to those parents who have complained that we are taking too much time away from the curriculum to prepare students for the state test? If I don’t spend time preparing the students and the test scores go down, will I lose my job?”

Giving the public a better way to size up student performance

The way the principals answer these questions could have profound implications for public education. Political leaders and the news media have made test scores the sole criterion for deciding whether it’s “thumbs up” or “thumbs down” for public education. We educators have left them to other choice. Test scores are so firmly implanted in the public’s consciousness that they are not going away anytime soon, according to Public Agenda’s 2001 study, “Just Waiting to Be Asked: A Fresh Look at Attitudes About Public Engagement.”

The time has come for us to think differently about defining school effectiveness in a way that will give the public a better sense of how much value is added to a child’s development each year they spend in school.

Ask the average person on the street what the word “accountability” means and you are likely to get an answer that goes something like this: “Who messed up?” Is it any wonder why teachers, principals and superintendents are concerned about having students’ test scores printed in the local newspaper?

Last year faculty members at a suburban Connecticut high school where students scored first in their state on a subject test were asked to write the first thoughts that came to their minds when the term “accountability” was mentioned. Their answers, in order of frequency: testing, anxiety, fear, results, the percentage passing, proving your worth, it divides people.

A Lengthy Process

School leaders could undertake two initiatives to begin the long process of changing the way we assess public school effectiveness.

First, teachers and principals must look at individual student growth over the long term—multiple years, not just in 10-month segments. Second, school leaders need to engage the schools, families and community agencies in a dialogue to identify the community’s expectations for public schools given the resources that can be committed to meeting those expectations. It does take a village to raise a child and the sooner
we present this challenge to the community, the sooner a more constructive definition of accountability will emerge.

In a political climate where the norm seems to be “theBeatings will continue until morale improves,” energizing the staff to commit to these tasks will be no small challenge. If school leaders do not take this initiative, then public confidence in schools will continue to rise and fall with test scores and public support for vouchers and other radical reform schemes will continue to grow.

I learned a few lessons about pursuing these objectives during my last nine years as a superintendent.

Look Backwards

• Lesson No. 1: Learn from our history with school improvement.

  The processes leaders have used to meet past school improvement challenges offer opportunities to learn from previous false starts. Two examples are offered for reflection.

  First, leaders are unlikely to be able to meet this challenge alone. In his position paper “Building a New Structure for School Leadership,” Harvard Professor Richard Elmore says, “If... public schools and school systems... respond to standards-based reforms the way they have responded to other attempts at broad-scale reform... they will fail massively and visibly, with an attendant loss of public confidence and serious consequences for public education.”

  Elmore predicts that the standards movement will open to public scrutiny the historically private process of teaching and learning. He observes that setting performance standards for students and schools implies that schools are accountable for student learning. They are, in part, but the public largely doesn’t understand which part. Elmore advocates distributed leadership as a different response to the challenges of standards-based accountability. Get others to help you “work the problem,” he says.

  Second, don’t look to one response, such as data-driven decision making, as a “silver bullet” and don’t overstate its implementation. A recent doctoral study at Columbia University by Lisa Forbes about the role of data in driving decisions found that while school principals reported using data to make decisions about staff development, no evidence was presented to substantiate their claims.

  Real political pressure exists for a principal or superintendent to state publicly that progress has been made because an improvement initiative has been implemented. “Data-driven decision making” is now a buzzword. Avoid using it. We shouldn’t say we are doing something unless we are really doing it and preferably doing it well. Remember our experiences with the open classroom and whole language?

Public Posturing

• Lesson No. 2: Be honest and candid with the public.

  Considerable public support exists for public education, according to recent surveys by Public Agenda and Phi Delta Kappan. We need to acknowledge that schools alone cannot solve society’s problems all by themselves and dramatically improve academic achievement simultaneously.

  The public needs to be reminded that schools on average have a direct influence on children for about 35 hours in a 168-hour week, or 21 percent of the time. The other 79 percent of the child’s week is influenced by families and the community. Yes, schools do need to improve what they do during their 21 percent, but families and communities also need to examine their commitments as well.

  As long as principals and superintendents publicly posture that they will “turn things around,” they continue to lead...
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the public to hold unrealistic expectations for the heroic leader who will ride in to save the day. One person cannot meet these challenges without the help of the staff, families and the community. The sooner that public school leaders acknowledge that they and the schools alone cannot meet these simultaneous goals, the sooner that reasonable people will ask, "What can we do to help?" There are people and groups in the community that are open to finding new ways to work with schools, but they have other agendas that will take precedence unless they are approached to do so.

- Lesson No. 3: Carpe Diem! Engage the public in a dialogue to redefine accountability.

The New England town meeting offers a documented methodology for engaging the public in a dialogue about the purposes and challenges facing public education. School leaders need to present the challenges described above in a dialogue with the other partners in education. They need to ask the right questions and then listen. What challenges does each of these partners face in improving the quality of life and conditions for learning?

Town meetings need to be followed up with observable actions by each partner that lead to progress. Actions speak louder than words. Long-term progress, even the most minimal in any given year, can be understood and supported by the general public if annual, results-oriented and observable goals are published early in the process. These "milestones" become one form of data that the community will use to hold leaders and organizations accountable and assess the effectiveness of their efforts.

Public dialogue in a town meeting presents community leaders with an opportunity to move the public's definition of accountability from deficit model thinking ("Who messed up?"") to one that acknowledges that there ought to be individual (i.e., schools, families and community) and collective responsibility for results (improving development and performance of children over time). One has to believe that the public is tired of political finger pointing and that a critical mass of individuals and organizations is ready to work collaboratively with educators to improve the quality of life for all.

Gains Over Time

- Lesson No. 4: Define "results" as individual and cohort performance along a multi-year developmental trajectory.

Test scores are not going away. Test data need to be seen as our friends rather than as enemies. As a single accountability tool they are inadequate. Comparing the performance of last year's 4th graders to this year's 4th graders is called cross-sectional analysis. In plain English, it's like comparing apples to oranges. As any educator knows, one cohort of students varies from the next. Comparing one cohort to another has become the standard measure of school accountability—not by choice but by default because no other ways of measuring student performance have been used.

The time has come to look at school accountability and student performance in another way—to look at individual and collective (the same group of students) performance over multiple years in the context of a developmental trajectory. To understand what a developmental trajectory is, recall the days when we took our infants to the pediatrician. On any given office visit, the pediatrician assesses the child's development within the context of a growth chart, or trajectory, that predicts average growth and development.

These charts provide a context for the doctor and parents to gauge the child's continuing maturation in the context of what is known about how human infants develop. Information gained from comparing a child's present state of development to the trajectory provides vital perspective that informs conclusions about whether the child is growing at a normal rate (long and lanky, compact, etc.). Not all children mature at the same rate and trajectories help the parents place growth spurs or lags into a larger developmental perspective. Conclusions about parental effectiveness in dietary and related childcare decisions are based on this longer context for growth. If the child's growth plateaus for six months we don't lose patience and replace the parents.

Developmental trajectories have been around in literacy education for some years. Two frameworks in reading comprehension have been extensively tested in Australia: English Profiles (1991) and First Steps (1994). Both have described reading comprehension as a developmental process of stages that a child moves through over several years. English Profiles, Handbook, developed by the Australian Ministry of Education and Training, charts nine reading stages, or bands, beginning with Band A (the child knows how a book works, likes to look at books and likes to be read to) to Band I (skilled in analyzing and interpreting a wide range of written material). English Profiles is well suited to chart student growth from preschool through the upper elementary or middle school years. First Steps in Reading, published by Addison Wesley Longman, is best suited for preschool through the primary years. It charts comprehension across six phases (Phase 1 role play reading though Phase 6 advanced reading).

Developmental trajectories also exist in writing and lend themselves to even longer-range data collection. First Steps Writing (1994) works well through the middle school years. American College Testing's analytic writing scoring guide delineates stages of development reflective of the elementary grades through college-level competence.

Teachers, principals and district personnel ought to adopt a developmental trajectory for the school system and use it to collect data about

Resources

Robert Morson suggests the following Web-based resources related to public engagement.


individual and student growth over multiple years. Conclusions about a student's and a cohort's rate of growth are then referenced to movement across the developmental stages. Percentages of students at each stage lend themselves to calculating moving averages and statistical predictions for growth. Performance plateaus for individual students can be placed in larger developmental contexts for parents.

Performance by cohorts of students now can be assessed factoring in or out students who move frequently between schools and districts. The ability to watch a group of students move through a school system will provide a more comprehensive picture (when taken in the context of annual testing data) of school and district performance.

Looking at student performance over multiple years rather than a 10-month segment presents a challenge to the way we have historically organized schools and teachers’ work. This shift suggests that teachers become collectively responsible for a child’s education. A child’s education is not a production line process but perhaps the time has come to realize that many successful private-sector companies now associate a group of employees with seeing a task from its beginning phases through to completion.

Looking at individual student and cohort growth and performance against a trajectory over multiple years will be a significant conceptual, logistical, financial, and public education challenge. Do we really have a choice not to?

A Personal Start
- Lesson No. 5: Modeling is an effective teaching tool.
  - I am advocating a significant shift in thinking about what constitutes results about student and school performance. Change is incremental. Rather than mandate systemwide adoption of a developmental trajectory in reading comprehension next month, superintendents and principals will do well to think about their own growth and development first.
  - “What is my current level of performance and what does my next stage of development look like? How will I know it when I get there?”
  - In other words, begin the shift in thinking about performance in our daily work with staff members.
  - Put this year’s principal or teacher evaluation data into a longer-term perspective. What is this person’s current level of development in his or her practice, and what is the next higher level we hope the person will attain? Equally importantly, “What can I do to help that person reach that next higher level?”
  - Experience the concept of long-term development at the individual staff member level (and identify the implications of new perspective on performance) before deciding to roll it out in a new district initiative for teachers and students.
  - Lesson No. 6: When the district is ready, start in one curriculum area (reading comprehension or writing).

Using data to inform instructional decision making and school accountability is a huge conceptual shift and involves significant roles. It also pays proportional dividends. Start small, in one curriculum area, and structure the implementation for success.

As stated earlier, proven developmental trajectories already exist as off-the-shelf products or may be embedded in curriculum materials you already have purchased. Create a district-level committee of teachers, parents, and principals to work with a literacy expert to select or identify a developmental trajectory model, design staff development experiences to acquaint teachers with the developmental foundation of these tools and help teachers acquire a repertoire of strategies that can be used to assess student development.

The committee also should be charged with identifying organizational and resource barriers to promoting multiple-year assessment of student growth and performance as well as the student, parent, and community education necessary for people to understand this shift in practice.

**BLACK STUDENT ACHIEVEMENT**

*How Much Do Family and School Really Matter?*

William A. Sampson

2002. 248 pages
0-8108-4295-5. $25.95 paper
0-8108-4042-8. $35.95 cloth

Sampson’s study of 12 poor black families in a Chicago suburb focuses on the potential of families to do what generations of school reform could not. Should appeal to anyone involved with education, public policy, and racial or social issues.

**A Long Wait**

The curriculum standards and state testing movement is a rational approach to social improvement. In another 30 years we will know whether it was successful. The basic tenets of this wave of reform—hold all students to explicit high standards, test the results and use those data to inform further decisions, rewards or sanctions—do hold promise for significantly improving the quality of public education. Unfortunately, neither the federal government nor most state departments of education has the resource capacity to help 15,000 school districts make this shift successfully.