

Using Assessment to Accurately Diagnose Student Abilities



Patty Harrington, Associate Superintendent • Utah State Office of Education



How would you like to see a doctor who treated you without knowledge of your health history or of your current condition? How satisfied would you feel if you lost dozens of pounds but no one noticed and you didn't track the loss? How quickly would you want to be under the knife of a surgeon who was outstanding in his field, but not well-informed about your malady? Surely physicians of experience see the same symptoms in patients time and again and might reasonably be able to diagnose without assessment, but if the treatment were severe, would you want to be their patient?

Reputable doctors conduct multiple assessments and study data about your physical condition before they begin

treatment. They track physical health from appointment to appointment, from month to month, and from year to year. They pour over charts, study x-rays from various angles, and try to pinpoint exactly what causes illness.

Doctors prescribe treatment with precision. They operate only when drastic measures are needed. They give prescriptions, that, if used consistently over time, eradicate illness and lead the patient to health. Occasionally they send the patient back home or to work without treatment, indicating that time will heal and the health problem will pass. Oftentimes they prescribe greater exercise and increased rest to aid in prevention of disease.

Using data to make informed decisions, doctors pinpoint, often with laser like accuracy, the physical difficulties of patients. Teachers would borrow well from this practice, giving students regular learning checkups to monitor good learning health. Using varied and multiple assessments in an ongoing and diagnostic way, and analyzing results to make instructional decisions, teachers could better pinpoint with professional accuracy the learning difficulties of students. And while the tests included in the UPASS system of evaluation help in macro ways to understand student performance, the tests in the system are little more than autopsies as they relate to diagnostic information. Thoughtful educators need ongoing, during the year, informal yet reliable and valid assessments of student learning in order to accurately pinpoint student abilities.

The work of teachers who are making exceptional progress with students is documented in research from high-poverty, high-performing schools and schools where there is 90% ethnicity, 90% poverty, and 90% of the students are performing at or above expected standard (90/90/90 schools). In these schools, there is a clear pattern of behavior as it relates to assessment:

1. Assessment of student learning is measured in multiple ways, but primarily through performance assessment.
2. Assessment isn't an interruption of instruction; assessment is instruction.
3. Assessment provides diagnostic information to the teacher.
4. Assessment is ongoing and is given frequently so as to guide instruction.

These teachers conduct multiple assessments and study data about a child's educational condition before the school year begins in earnest. With pretests in the fall and post tests in the spring, they track learning health from week to week, month to month, and, if using a consistent assessment, from year to year. At the year's end, they know precisely how much a student has gained over the school year. More importantly, frequent and ongoing assessment gives

the teacher diagnostic information about children and their learning needs. Lessons can be tailored to fill in learning gaps experienced by the full classroom of students and/or small groups can be formed for students who might be ready to accelerate or who need additional instruction and/or individualized attention can be well prescribed for the student who has severe learning difficulties.

Victoria Bernhardt (2003), a national leader in the use of educational data, writes:

The use of data can make an enormous difference in school reform efforts by improving school processes and student learning. Data can help to:

- Replace hunches and hypotheses with facts concerning what changes are needed

- Facilitate a clear understanding of the gaps between where the school is and where the school wants to be.
- Identify the root causes of these gaps, so the school can solve the problem and not just treat the symptom.
- Understand the impact of processes on the student population.
- Assess needs to target services on important issues.
- Provide information to eliminate ineffective practices.
- Ensure the effective and efficient uses of dollars.
- Show if school goals and objectives are being accomplished.
- Ascertain if the school staffs are *walking the talk*.
- Promote understanding of the impact of efforts, processes, and progress.
- Generate answers for the community related to: *What are we getting for our children by investing in the school's methods, programs, and processes?*
- Continuously improve all aspects of the learning organization.
- Predict and prevent failures.
- Predict and ensure successes.

Special educators are generally well trained in assessing student performance, and are conversant about tests and assessments that provide solid achievement information. You would do well to share that expertise in your schools and districts. More importantly, educators throughout the system would do well to assess and evaluate their student achievement results and use that data with overlapping, correlated, or causal data to understand *what works* to assure student learning. For example, as Special Educators, you might ask questions such as these:

1. How much reading/writing/math gains have my students (individually and as a group) obtained this past year? (subtracting the fall pretest score from the spring posttest score)
2. What is the average gain per year, per student, per group, per class, per grade, per school?
3. Is there a difference in gain scores that might be correlated with different treatments (small group, tutoring, use of one or another program or text)?
4. What percentage of my students accomplished their IEP goals?
5. In what ways and to what degree is attendance related to achievement gains?

These are just a handful of many important questions that assessment and the analysis of data will answer. Holding oneself accountable for achievement gains is the call of today's teacher. And while you and I are not responsible for creating learning difficulties, just as the medical doctor is not responsible for creating poor health or poor health habits, you and I are accountable to do all we can to ensure student success and good learning health. Careful measuring of student abilities over time, in multiple ways, using primarily performance assessment types, will provide pinpoint accuracy in diagnosing student abilities. Using the data gleaned from such assessment in thoughtful analysis will not only improve your personal performance as a teacher, but most importantly, will improve the performance of your students. ■

Bernhardt, Victoria L. *Using Data to Improve Student Learning in Elementary Schools*, Eye on Education, Inc., Larchmont, NY, 2003.

