

ASSESSMENT BELIEFS WORKSHEET: DISCUSSION OF RESULTS

1. Data analysis for instructional decision making is mostly numbers crunching using sophisticated statistical formulas such as for standard deviation, regression, and measures of variance.

This is a myth that may be traced back to graduate level statistics courses, seen by some educators as too theoretical and disconnected to the real world of teaching.

The academic world of standard deviations, f scores, and ANOVAS is far from the data analysis needed by teachers in the today's classrooms. Instead, data analysis is, in the words of Boudette in *Data Wise*, "working together to analyze trends and solve problems."¹² The most advanced math that is usually needed is an understanding of percentiles.

Integral to an effective data analysis process are:

- Clarity and transparency of learning targets for teachers and students
- Instruction with a laser-like focus on the targets
- Assessments that are the "best fit" to the targets so that instructional teams can make valid inferences from the results
- Acting on the results of the assessments by putting in place needed enrichments, interventions, and instructional changes

Data analysis is therefore just as appropriate for the numbers phobic as for the numbers wonk. All teachers, with the proper guidance, can participate in data analysis.

2. We can't draw meaningful conclusions from different types of data, such as standardized tests on one hand and classroom tests and observations on the other, because they vary so much in validity and reliability.

Educators are often warned that it is not possible to mix data types, such as external assessments featuring high validity and reliability with classroom assessments that lack a similar rigor in their design and implementation.

However, data expert Stephen White has noted that "the problem of data in the public schools is the fact that the data available are seldom perfect. . . . The triangulation

¹² Boudett, K. et al., ed. (2005). *Data wise*. Cambridge, MA: Harvard Education Press.

process has been employed for centuries for the very purpose of gleaning meaning from imperfect and incomplete data, . . . data that are varied, unrelated, and collected at different times for different purposes."¹³

White continues that, "though there are certainly instances in which data should not be compared in the statistical sense, the complexity of education compels us to look for patterns and trends in the practical sense that lead us to decisions that improve student achievement, regardless of the type of data."¹⁴

He concludes that "triangulation is a messy process. It requires teams to make assumptions, draw inferences, and come to conclusions without total certainty. When data are triangulated, each point serves as a check on the other dimensions, with the desired outcome . . . always being the realization of new insights that are not available from examining only one type of data or one perspective."¹⁵

3. The School Improvement Team or Data Committee are the best groups to analyze data because they see the big picture and have the needed experience and expertise.

In many schools, data are analyzed by school improvement team (SIT) members, data committee members, or one or two people who are comfortable with numbers. The results are presented at faculty or department meetings, and staff members brainstorm ideas for what to do to increase student performance.

The SIT is usually the wrong team to do the data analysis because their membership is usually too diverse (often including parents), and it meets too infrequently (usually only once a month). Most importantly, because it looks at school-wide issues, the SIT's work cannot be responsive to individual classroom needs that can vary significantly. Initiatives placed in school improvement plans are usually too global to address the diverse needs of individual classes or students, are aimed at "average" performance increases to meet AYP, and are constantly looking for the "magic bullet" that will have school-wide impact.

¹³ White, S. (2006). *Beyond the numbers: Making data work for teachers and school leaders*. Englewood, CA: Advanced Learning Press, pp. 112-113.

¹⁴ *Ibid.*

¹⁵ *Ibid.*, p. 113.

Data analysis is far too important to be done by a few people on a sporadic basis in school improvement teams or faculty committees. This critical work must occur, instead, on a regular basis by classroom teachers in grade-level, vertical, and content teams and be embedded into their ongoing instructional planning efforts.

4. Periodic common assessment data and ongoing analyses of student work are better sources to use than MSA or HSA scores to impact instruction and increase achievement.

Data such as MSA and HSA scores are usually too general and, according to testing expert James Popham, are "instructionally insensitive."¹⁶ That is, they are not intended by the state to provide information to drive daily instruction. Their purpose is to produce an accountability score and to provide very general guidance about schoolwide priority areas. In addition, the timelines required of a statewide school accountability system mean that the state data are usually out of date well before they are returned to schools and are often from students who have moved on to a new grade and, perhaps, to a new school.

Improvement plans based on state test data alone do not consider the wide variations that usually exist within and between grade levels and subject areas. State test data are best used to identify very broad strategies designed to increase the *overall performance* of groups needed to meet adequate yearly progress (AYP). The needs of *individual students and teachers* may be lost in this search for comprehensive initiatives that will make the difference at the school level.

Ongoing assessment data collected by teachers, including the analysis of student work, are much better sources to use to impact daily instruction and increase achievement, but only if curriculum and instruction are aligned with state standards and if assessments reflect the levels of cognitive demand expected on state assessments.

5. Most school staffs have not had the training they need to conduct effective data analyses.

Assessment expert Richard Stiggins has noted, "Given the critically important roles of assessment, it is no surprise that Americans believe that teachers are thoroughly trained to assess accurately and use results effectively. In fact, teachers typically have not been given the opportunity to learn these things during pre-service preparation or

¹⁶ Popham, J. (2007, October). Instructional insensitivity of tests: Accountability's dire drawback. *Phi Delta Kappan*, 89 (2), 146-150.

while they are teaching. This has been the case for decades. And lest we believe that teachers can turn to their principals or other district leaders for help in learning about sound assessment practices, let it be known that relevant, helpful assessment training is rarely included in leadership-preparation programs either."¹⁷

He continues, "Over the decades, very few educational leaders have been trained to understand what standardized tests measure, how they relate to the local curriculum, what the scores mean, how to use them, or, indeed, whether better instruction can influence scores. Beyond this, we in the measurement community have narrowed our role to maximizing the efficiency and accuracy of high-stakes testing, paying little attention to the day-to-day impact of test scores on teachers and learners in the classroom."¹⁸

Stiggins concludes, "We must build a long-missing foundation of assessment literacy at all levels of the system, so that we all know how to assess accurately and use results productively. This will require an unprecedented investment in professional learning, both at the pre-service and in-service levels for teachers and administrators, and for policymakers as well."¹⁹

6. In general, left alone, teachers know enough about their students' progress that they don't need to analyze data.

"Just leave me alone and let me teach." According to keynoter Douglas Reeves, this is a guaranteed applause line at educational conferences.²⁰ Yet, as Reeves notes, education is a collaborative profession. We need each other.

DuFour, DuFour, and Eaker cite extensive research that has repeatedly concluded that teacher isolation has adverse consequences for teachers and for any effort to improve schools: "The research has been clear and consistent, professional organizations for teachers and administrators at all grade levels have advised us, and our direct observations in schools confirm it: Isolation is the enemy of school improvement. In fact, it is difficult to find either supporting research or advocates for

¹⁷ Stiggins, R. Five assessment myths and their consequences. *Education Week*, (27) 8, October 17, 2007, pp. 28-29.

¹⁸ *Ibid.*

¹⁹ *Ibid.*

²⁰ Reeves, D. (2004). Video series: From the bell curve to the mountain: A new vision for leadership and achievement. Center for Performance Assessment.

the position that educators best serve children, themselves, or the profession by working in isolation."²¹

On the other hand, the collaborative team (in which a group of people work together interdependently to achieve a common goal for which they are mutually accountable²²) has been described as "the basic building block of any intelligent organization."²³

Others have summarized research in a similar vein:

- "We have known for nearly a quarter of a century that self-managed teams are far more productive than any other form of organization. There is a clear correlation between participation and productivity."²⁴
- "Collaboration is a social imperative. Without it, people can't get extraordinary things done in an organization."²⁵
- "We are at a point in time when teams are recognized as a critical component of every enterprise -- the predominant unit for decision making and getting things done. Working in teams is the norm of a learning organization."²⁶

²¹ DuFour, R.; DuFour, R.; & Eaker, R. (2008). *Revisiting professional learning communities at work*. Bloomington, IN: Solution Tree.

²² *Ibid.*, pp. 179-180.

²³ Pinchot, G. & Pinchot, E. (1993). *The end of bureaucracy and the rise of the intelligent organization*. San Francisco: Berrett-Koehler.

²⁴ Wheatley, M. (1999). Goodbye command and control. In F. Hesselbein & P. Cohen. *Leader to leader*. San Francisco: Jossey-Bass.

²⁵ Kouzes, J. & Posner, B. (2003). Challenge is the opportunity for greatness. *Leader to leader*. (28): 16-23.

²⁶ Senge, P.; Klein, A.; Roberts, C.; Ross, R.; and Smith, B. (1994). *The fifth discipline fieldbook: Strategies for building a learning organization*. New York: Doubleday.