

PASSION AND PRINCIPLE GROUND EFFECTIVE DATA USE

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ranklin CampbellJones, author and cultural proficiency expert, says, "Get ethical before you get technical" (personal com-

munication, 2005). School improvement without will and moral purpose — without a genuine commitment to all students — is an empty exercise in compliance that, in our experience, can do more harm than good. We have seen educators use data to "more accurately" track students, further widening the opportunity-to-learn gap. In response to achievement gaps, one school mandated lunchtime tutoring for all black students, regardless of whether or not they failed the state test (Confrey & Makar, 2005). Avoiding these and other data-based disasters is not a technical matter. It is an ethical matter that begins with will, passion, and determination.

As you look to move your schools away from unproductive data prac-

tices and toward high-capacity uses of data, be sure to include a strong foundation of data literacy and collaborative inquiry knowledge, skills, and dispositions as well as a spiritual and



moral commitment to serve each and every student.

While an effective and comprehensive process for using data is complex and requires extensive collaborative work, knowledge development, time, and support, we share here our foundational assumptions, the values

that guide our work in the Using Data Process. Please use these as a catalyst to clarify your thinking as well as for dialogue with the colleagues who will join you in using data to improve teaching and learning.

ASSUMPTION 1

Making significant progress in improving student learning and closing achievement gaps is a moral responsibility and a real possibility in a relatively short amount of time - two to five years. It is not children's poverty or race or ethnic background that stands in the way of achievement. It is school practices and policies and the beliefs that underlie them that pose the biggest obstacles.

Federal and state policies will come and go. But one moral imperative is abiding: educator's deep responsibility for the learning of every child. This assumption implies a shift from a compliance mentality — a sense of external accountability, something someone is making us do - to a sense of internal and collective responsibility. It also reflects our belief that it is impossible to use data as a lever for change without talking about race, class, and culture and our beliefs about the capabilities of children. It is the silence about these issues that has kept us from confronting problems and taking action.

The potential to dramatically improve the learning of traditionally underserved students has been

demonstrated time and again. The Using Data Project schools serving black, Hispanic, Native American, and poor students significantly improved student achievement within three years (Zuman, 2006). The Education Trust database Dispelling the Myth contains data on thousands of schools that are serving students living in poverty and from diverse racial and ethnic backgrounds, yet are achieving at high levels (Education Trust, 2003).

Improvement strategies such as aligning curriculum to rigorous standards, frequently monitoring student progress, organizing schools to engage in short cycles of collaborative

inquiry, providing professional development linked to student goals, and offering immediate extra help for students who need it were

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implemented in the Using Data fieldtest sites and paid off with increased student-learning gains.

ASSUMPTION 2

Data have no meaning. Meaning is imposed through interpretation. Frames of reference, the way we see the world, influence the meaning we derive from data. Effective data users become aware of and critically examine

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their frames of reference and assumptions (Wellman & Lipton, 2004, pp. ix-xi). Conversely, data can also be a catalyst to questioning assumptions and changing practices based on new ways of thinking.

This assumption is closely related to the first and is why we place so much emphasis on surfacing assumptions, particularly assumptions about children and their capabilities and beliefs about teaching and learning. If one holds the view that whether students learn is the student's responsibility and not that of the teacher, one might then look at a student's poor performance on assessments and conclude that it is entirely the student's fault. There is nothing to be done to improve teaching. If one believes that black students are not as capable as white students, then data that reveal

When one is open to critically examining assumptions, data can be a catalyst to discarding old frames of reference and embracing new ones. We have seen educators in our project look at disaggregated student learning data and become outraged by inequities that they had not been aware of before.

an achievement gap between these groups does nothing but confirm that belief. The reaction is complacency or resignation. Beliefs about teaching also profoundly influence data interpretation. For example, one teacher believes that students learn best when they are actively constructing their own meaning. Another believes that skill building and practice and teacher talk are how students learn. When examining student work that reveals a student's confusion. these two teachers will react very differently.

On the other hand, when one is open to critically examining assumptions, data can be a catalyst to discarding old

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USING DATA PROJECT

The Using Data Project, a collaboration between TERC and WestEd, set out to develop, field-test, and pilot a program to provide educators with the skills, knowledge, and dispositions to put school data to work to improve teaching and learning to close achievement gaps. The goal of the project was to prepare education professionals to serve as data coaches. The project worked with several schools around the country to implement the Using Data Process, a structured approach to collaborative inquiry that has contributed to significant gains in student achievement and narrowing of achievement gaps as well as increased collaboration, data use, and instructional improvement in schools nationally (Zuman, 2006).

dent learning data and become outraged by inequities that they had not been aware of before. Simply examining data about schools that were closing achievement gaps has caused others to question their belief that these gaps are inevitable. When teachers observed that teaching in a new way actually reached more students, they changed their assumptions about teaching and learning. Through their collaborative inquiry, many data team members threw out unproductive, blame-the-victim explanations of poor student performance and shifted the focus to instruction.

ASSUMPTION 3

Collaborative inquiry - a process where teachers construct their understanding of student learning problems and invent and test solutions together through rigorous and frequent use of data and reflective dialogue - unleashes the resourcefulness and creativity to continuously improve instruction and student learning.

Teachers possess tremendous knowledge, skill, and experience. Collaborative inquiry creates a structure for them to share that expertise with each other, discover what they are doing that is working and do more of it, and confront what isn't working and change it. When teachers generate their own questions, engage in dialogue, and make sense of data, they develop a much deeper understanding of what is going on relative to student learning. They develop ownership of the problems that surface, seek out research and information on best practices, and adopt or invent and implement the solutions they generate. When teachers engage in ongoing collaborative inquiry focused on teaching and learning and making effective use of data, they improve results for students.

ASSUMPTION 4

A school culture characterized by collective responsibility for student learning, commitment to equity, and trust is the foundation for collaborative inquiry. In the absence of such a culture, schools may be unable to respond effectively to the data they have.

This assumption is based on a dual meaning of the word responsibility. As in our first assumption, responsibility implies the moral imperative. But it also holds another meaning, which is, quite literally, the ability to respond: "response-ability" (Wellman & Lipton, 2004). Long before state tests, plenty of data were available to let us know some students were not learning: students slumping down in their seats; going through day after day of school without being

engaged; having poor grades, poor attendance, and high dropout rates. However, in the absence of a collaborative culture where everyone takes responsibility and is committed to improving student learning, educators could not respond to the data. Schools that have "response-ability" do not leave student learning to chance. Collaborative schools are organized in grade-level or course- or subject-based teams where this "response-ability" is enacted as part of the daily work of teachers.

A hallmark of such a high-performing culture is a commitment to equity. Singleton & Linton (2006) define education equity as "raising the achievement of all students while narrowing the gap between the highestand lowest-performing students and eliminating the racial predictability and disproportionality of which student groups occupy the highest and lowest achievement categories" (p. 46). Equity does not mean that all students receive an equal level of resources and support, but that those of the greatest need receive the level of support they need to succeed.

A collaborative community committed to equity requires a high level of trust. In high-functioning cultures, educators trust each other to discuss "undiscussables" such as race, reveal their own practice and mistakes, root for one another, and face together the brutal facts that data often reveal (Barth, 2006). For all of these reasons, districts that make the most of their investment into data management systems place an equal or greater priority in strengthening school cultures and the ability to respond to the data.

ASSUMPTION 5

Using data itself does not improve teaching. Improved teaching comes about when teachers implement sound teaching practices grounded in cultural proficiency — understanding and respect for their students' cultures — and a thorough understanding of the subject matter and how to teach it, including understanding student thinking and ways of making content accessible to all students.

It is easy to get swept away in the data-driven mania provoked by federal and state education accountability policies, where data can sometimes seem to be an end in themselves. But test results, lists of "failing" schools, bar graphs, tables, proficiency levels, even student work do nothing by themselves to improve teaching unless they spark powerful dialogue and changes in practice. For example, it doesn't take hours of data analysis to discover that students struggle with solving nonroutine mathematics problems or reading informational text. But talking about and learning more and more about what to do about those problems does take time and is where teams gain momentum for instructional improvement.

Questions like the following merit as much time in data team meetings as does the actual data analysis:

- Who among us is having success and what are they doing?
- What does research say about how students learn this content or what typical misconceptions they struggle with?
- What have other schools done to solve this problem?
- What would a culturally proficient approach to this content look like? What content knowledge and pedagogical content knowledge will strengthen our ability to teach this content? What does the research base on effective teaching tell us?
- What kind of professional development will help us learn these skills and knowledge?

The data are just the tip of the iceberg, alerting us to common areas and reminding us that what lies beneath is what counts — the curriculum, instruction, assessment, and professional development practices that will prove student learning. Data use is not a substitute for the hard work of improving instruction.

ASSUMPTION 6

Every member of a collaborative school community can act as a leader, dramatically impacting the quality of relationships, the school culture, and student learning.

The Using Data Process supports and promotes distributed leadership,

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where all staff members take full responsibility and do their parts to get the job — academic success for all students — done. Marzano, Waters, & McNulty (2005) identified 21 leadership behaviors correlated with student academic achievement. Virtually all of these 21 responsibilities, which include celebrating accomplishments, challenging the status quo, fostering shared beliefs and community, staying focused on goals, communicating ideas and beliefs, actively engaging others in decision making and instructional improvement, and fostering strong relationships, are functions of data coaches and data team members as well as of school and district administrators. In particular, data use is no longer a specialty of the assessment or central office or the principal. Everyone in the school understands and uses data in ways that contribute to instructional improvement.

Becoming a data coach and building data teams is all about developing the ability to think, speak, and act differently — to act as courageous leaders. Educators we work with often ask us, "How do we deal with resignation in our schools?" or "How do we get more people to believe that all students can learn?" One answer is to be full of possibility yourself, to frequently, succinctly, and clearly articulate what you believe, and to consistently act on those beliefs. We have seen data teams shift their direction completely when one team member took a clear stand against tracking students and provided evidence of its damaging effects.

Using school data well is not just a matter of skill — although that is essential. It is a matter of will — the appetite, passion, and determination to serve every child as if he or she were our own and the courage to respond to data by choosing assumptions and actions that produce the best possible result for our students. When we approach data with will and skill, we unleash their power to serve each and every child.

REFERENCES:

Barth, R. (2006). Improving relationships within the schoolhouse. *Educational Leadership*, 63(6), 8-13.

Confrey, J. & Makar, K.M. (2005). Critiquing and improving the use of data from high-stakes tests with the aid of dynamic statistics software. In C. Dede, J.P. Honan, & L.C. Peters (Eds.), *Scaling up success: Lessons from technology-based educational improvement* (pp.198-226). San Francisco: Jossey-Bass.

Education Trust. (2003). Dispelling the myth — online. Available at www2.edtrust.org/ edtrust/dtm/.

Marzano, R., Waters, T., & McNulty, B. (2005). School leadership that works. Alexandria, VA: ASCD & Aurora, CO: Mid-Continent Research for Education and Learning.

Singleton, G.E. & Linton, C. (2006). Courageous conversations about race: A field guide for achieving equity in schools. Thousand Oaks, CA: Corwin Press.

Wellman, B. & Lipton, L. (2004). Data-driven dialogue: A facilitator's guide to collaborative inquiry. Sherman, CT: MiraVia.

Zuman, J. (2006). Using Data Project: Final evaluation report. Arlington, MA: Intercultural Center for Research in Education. Unpublished report.