III. DATA-INFORMED DECISION MAKING: A SHORT PRIMER

User's Guide and Toolkit for the Surveys of Student Engagement: The High School Survey of Student Engagement (HSSSE) and the Middle Grades Survey of Student Engagement (MGSSE)

By Jonathan Martin and Amada Torres

As suggested in the subtitle of the book by Anthony Bryk and his colleagues, *Learning to Improve*, schools need to "get better at getting better."[1] Leaders in both well-performing and above-average schools need to continue pressing educators to improve school performance on the subjects that matter most to them. This includes math, reading, critical thinking, and problem solving, in addition to a range of other areas, such as student wellness, social skills, responsibility, and motivation.

Schools also need to improve learning for *all* students, not just "median" students. Achievement gaps exist in nearly every school setting, and they deserve close attention. Many data-use experts place the greatest attention on equity, explaining that data can be "most powerfully employed for addressing those deeply problematic and long-lingering challenges of differing levels of success for students of different backgrounds."[2]

Data use, when done well with discipline,

- reveals gaps;
- identifies improvement opportunities;
- suggests remedies and interventions;
- monitors progress (and the lack thereof); and
- confirms effectiveness.

But at the same time, it is essential that data alone not drive decisions or answer questions. Instead, data must inform leadership and illuminate issues. Data-driven decision making is a poor way of describing best practice. Instead, thoughtful, judicious, initiative-taking leadership is more, not less, essential in data-immersed environments.

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1 Anthony Bryk et al., *Learning to Improve: How America's Schools Can Get Better at Getting Better* (Cambridge, MA: Harvard Education Press, 2015).

2 Amanda Datnow and Vicki Park, *Data-Driven Leadership* (San Francisco: Jossey-Bass, 2014).

Using data is no longer optional. The only question remaining is *how well* you'll use it at your school. If school leaders are asked about their data strategies, the response is often apologetic, embarrassed, or uncertain.

Like many other school improvement efforts, data-informed decision making begins at the top. The board must ask the head to make it a priority and then hold the head accountable for measurably effective progress. The head must speak to the importance of data use, and he or she must allocate resources of time, money, and training/professional development for it. It is incumbent on the head to become personally involved and to "show the flag" at assessment activities.

Using data for improvement is not the same as testing for accountability. It requires a mindset shift. In *Learning to Improve*, a brilliant book about the challenging work of making schools better, one chapter is titled "We Cannot Improve at Scale What We Cannot Measure." In this chapter, the authors distinguish between the all-too-familiar "measurement for accountability" and, what is much more important, "measurement for improvement." Measurement for improvement entails

- more frequent measurement;
- determining whether an educational change is working, in real time or close to it;
- being easily embedded in day-to-day work;
- signaling actionable change;
- having educators as the primary users; and
- data-sharing in a low-stakes, low-risk safe environment conducive to change.[3]

Another mindset shift is to recognize that the real work is not just collecting the evidence but using it to show results. This has been a big

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3 Bryk et al., *Learning to Improve.*

push among accrediting associations and other assessment experts. A report from the Western Association of Schools and Colleges explains that the accreditation process needs to center not only on gathering evidence but on "becoming more systematic and intentional about gathering data about the right *things* — and on *using* the resulting information to continuously improve."[4]

In *Using Evidence of Student Learning to Improve Higher Education*, edited by university assessment thought leader George Kuh and his colleagues, the distinction between doing assessments and using results is summarized: "Assessment's purpose is to answer questions, shape better policies, make better decisions…. 'If an assessment doesn't help improve teaching and learning activities, why bother with it?'"[5]

How can we simplify and visualize the core components of a data-informed, continuous improvement process? Many useful resources, including Wiggins and McTighe's *Schooling by Design*;[6] Boudett, City, and Murnane's *Data Wise*;[7] and Bryk and colleagues' aforementioned *Learning to Improve*, describe effective systems. Most recently, Kuh and his colleagues at Indiana University published a handy and succinct cyclical graphic, which captures key steps in the process:

4 Western Association of Schools and Colleges, "Evidence Guide: A Guide to Using Evidence in the Accreditation Process: A Resource to Support Institutions and Evaluation Teams," Working Draft (January 2002), 5; online at https://www.csusm.edu/wasc/evidence_guide_jan_02.pdf.

5 Jillian Kinzie, Pat Hutchings, and Natasha Jankowski, "Fostering Greater Use of Assessment Results: Principles for Effective Practice," in *Using Evidence of Student Learning to Improve Higher Education*, ed. George D. Kuh et al. (San Francisco: Jossey-Bass, 2015), 56.

6 Grant Wiggins and Jay McTighe, *Schooling by Design: Mission, Action, and Achievement* (Alexandria, VA: Association for Supervision and Curriculum Development [ASCD], 2007).

7 Kathryn Parker Boudett, Elizabeth A. City, and Richard J. Murnane, *Data Wise, Revised and Expanded Edition: A Step-by-Step Guide to Using Assessment Results to Improve Teaching and Learning* (Cambridge, MA: Harvard Education Press, 2013).

EASY

PLAN & IDENTIFY OUTCOMES

COLLECT DATA

ASSESS IMPACT OF CHANGE

Assessment Cycle

ANALYZE DATA

HARDEST

IDENTIFY & IMPLEMENT CHANGES

SHARE RESULTS

HARDER
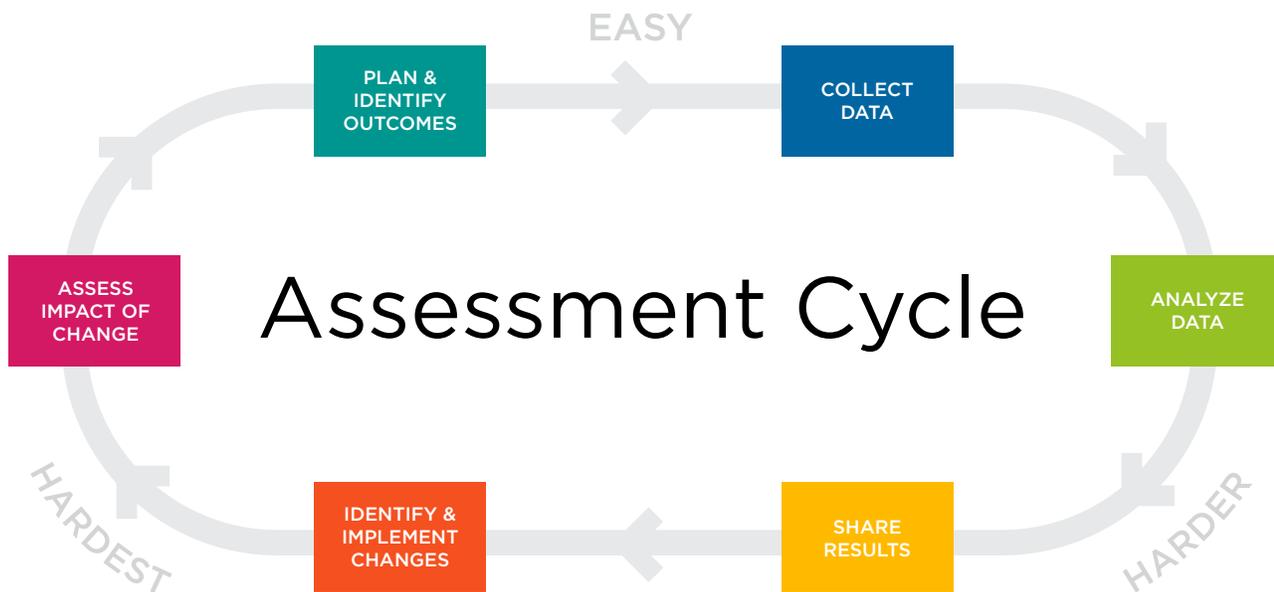
Source: Adapted from Jillian Kinzie, Pat Hutchings, and Natasha Jankowski, "Fostering Greater Use of Assessment Results"

The process begins with clarification, commitment, and communication of the institution's intended outcomes. Ask, "What are we holding ourselves accountable for?" Work from mission, prioritize, and hold these outcomes high. This is what counts.

In the assessment cycle graphic, data collection comes second. Go out and get the information, using the best tools at your disposal to collect evidence about your intended outcomes.

One important element is missing in the graphic: forming guiding questions. Let's say that critical thinking is the mission-aligned, high-priority outcome you're focusing on. Before collecting data, ask some questions to guide your work. For example:

- Which groups of students grow the most in critical thinking over four, seven, or 12 years?
- In which grades does the most growth happen?
- Do students who develop these skills the most differ from

those who advance the least in their enjoyment of school, their engagement in class, their completion of homework, or their participation in extracurricular activities?

The process can be made far more powerful when you approach data collection with a purpose, a quandary you want to resolve, a gap you want to fill, or a problem you want to solve.

After you have collected the evidence, the work becomes more challenging. Analysis requires time, patience, discipline, and collaboration. Sharing data, which is the next step, should be done with a plan and careful follow-through to ensure understanding and ownership by key constituencies.

Hardest of all, according to Kuh and colleagues, other experts, and people in the field, is translating the data analysis and communication into meaningful action and then knowing whether the intended effect has been accomplished. This is both challenging and essential. If these last steps remain incomplete or are poorly implemented, many voices in your school will rightly question and challenge the value of the data collection and analysis steps.