



Four Lenses of School Data:

Using Data to Build a Learning Community and Accelerate Educational Improvement

by Bobby Moore, EdD



As the old adage goes, "what gets measured gets improved." In education, data can be a powerful tool to help teachers and principals improve their practice, measure district, school, and educator performance, and ensure all students have the resources necessary to learn and graduate college and career ready. There can be no school improvement or "true" learning community without the careful collection and analyses of multiple measures of school data.

Following are five guidelines to consider when collecting and analyzing data:

1. **If you are going to ignore or not use the data—don't collect it.**
2. **Always make your data teacher- and user-friendly.**
3. **Collect data from multiple sources.**
4. **Either benchmark your data or have comparison groups.**
5. **Never react to data—only respond thoughtfully.**

It's important to use multiple measures to gather information on student performance, educator effectiveness, district processes and initiatives, and perceptions from internal and external stakeholders. As a school leader, I viewed these measures through four lenses: **Formative, Qualitative, Summative, and Value-Added.**

Formative Data

It has been well documented through much of the literature on learning communities and effective school research that common assessments, collaborative scoring, and frequent assessments, as well as

teachers planning instruction and building assessments collaboratively are high-yield strategies for student learning. It's important to use these strategies, along with implementing formative instructional practices (pacing guides, clear learning targets, rigorous scoring rubrics, effective feedback, etc.) and embedding routines, structures, and procedures that allow teachers an opportunity to collect, examine, and respond to data as evidence of student learning. Together, this approach can lead a school and district to quick turnarounds.

Ensuring teachers collect formative data daily, weekly, monthly, and quarterly is vital to improve student learning. Formative assessments are not always paper and pencil tests. They can be check-ins, check-outs, "thumbs-up-if-you-understand questions," and classroom response system questions, among others. However, assessments are only formative if the information acquired actually informs and refines the teacher's practice and instruction.

While some schools and districts have experienced much success purchasing formative or short-cycle assessments, there are distinct advantages to teachers digging deep into the curriculum with their colleagues to identify learning targets, power standards, and skills for developing high-level questions. This opportunity allows teachers to improve their

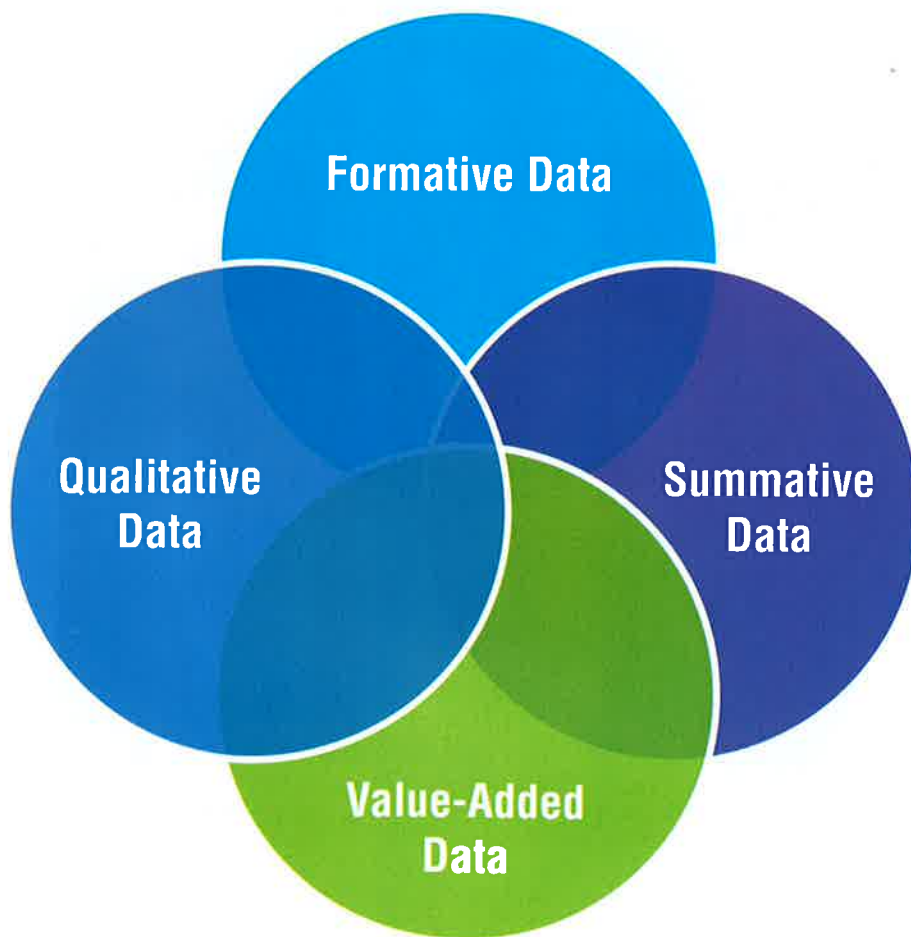
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practice. Some districts have short-cycle assessments at nearly every grade level that teachers are expected to administer and analyze. Students should receive descriptive and specific feedback from the teacher following the assessment. Other districts are evolving to “penalty free” grading by giving A’s, B’s, C’s, and “Not Yet.” A “Not Yet” grade communicates to the student that he/she has time to correct mistakes, and the school is not giving up on his/her learning.

Other examples of formative assessments include AIMS web, Fountas, and Pinnel reading assessments, as well as other school programs that inform teaching and/or intervention/enrichment. It is important to establish benchmarks and a timeline for administrating these assessments to assist teachers and principals during the year. And, remember, **always make data teacher- and user-friendly.**

Qualitative Data

Many schools miss out on the tremendous gift of feedback by not collecting qualitative data—either observation or survey data. While there is much emphasis on using observations for evaluation, the opportunity to provide feedback to teachers based on what is observed is important. These comments should be to lift morale, attitude and student performance and are essential to good leadership. Beyond what is “seen” is what is heard or felt. While not always perfect, great surveys have been



created to get to things that are important. Survey data may not always reveal the “truth,” but teachers and leaders need to understand the perceptions of internal and external stakeholders to courageously and effectively lead school improvement. **Never react to data—only respond thoughtfully.**

Team Surveys: Several times per year, districts can use surveys to measure and communicate information to department teams about the efficiency of team meetings, the importance of following collaborative norms, or how well they demonstrated teamwork. Surveys should be anonymous and formative in nature, and the results should be compiled and distributed in a coaching session with teams.

Principal Surveys: Teachers appreciate the opportunity to provide input into school and district decisions. It’s important to regularly solicit feedback to help leadership and others improve practice and make the best decisions for the district.

Stakeholder Surveys: In the district where I was a principal, we surveyed graduating seniors. Every three years, we also surveyed

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all parents, students, and staff members. This data provided valuable insight into internal and external stakeholder perceptions of the district, while offering meaningful feedback to shape goals and improve operating systems. As a superintendent, we included tax payers (including non-parents) in our surveys. We discovered nearly 87 percent of respondents to a taxpayer survey in 2010 agreed or strongly agreed with the statement, "I am kept informed through the districts newsletters and website."

Summative Data

Summative assessments include state achievement tests and end-of-course exams. ACT Quality Core end-of-course exams, for example, can be analyzed for an ACT score prediction and value-added growth. This information can be helpful to measure the quality of instruction and/or the effectiveness of district programs. However, **it is important to either benchmark data or have comparison groups.** Our district was part of *SOAR*—a statewide school improvement collaborative of more than 120 Ohio districts led by Battelle for Kids in which we were able to compare our end-of-course exams with those from other schools.

Value-Added Data

Value-added analyzes student achievement results and estimates the influence that districts, schools, and individual educators have on the

academic growth (learning) rates of students. While value-added offers critical information about the effectiveness of current programs, it does not tell the "whole story." Districts should **collect and analyze data from multiple sources** to capture the most reliable picture of district, school, and educator performance. Personally, I have often stated that I believe a teachers' value added data is more of a classroom effectiveness rating which is not only influenced by the classroom teacher, but also by the curriculum, structures, and procedures in the school and the school's leadership. If we operate from this paradigm, we will be much more likely to look immediately for solutions to low value added data instead of labeling teachers.

Value-added data helped foster a smooth transition to a full inclusion model as teachers discovered that students on individual education programs were growing more when they were "included" in the classroom with a content expert and not isolated to a resource room. Teacher-level value-added data allowed our district to identify teachers who had strengths working with high- or low-achieving students. We could match students with teachers' strengths during intervention periods and classroom instruction. Value-added information also reinforced some dramatic changes made to class schedules. For example, the data led the district to a decision to block mathematics and reading every day for 80 minutes, while teaching science and social studies for half of the year for 80 minutes. Many parents and some teachers were skeptical of the decision, but



our strong value-added results in raising student progress validated this decision. Collecting and analyzing school data allows teachers to conduct action research during the year and test their own hypotheses.

Rubrics for Initiatives

One of the most important steps in leading change in a school or district is ensuring initiatives are implemented with fidelity. Often, new school programs do not have the positive impact that was intended, because district leaders do not take the time to build support and understanding among stakeholders before and during implementation. Rubrics can be effective tools to measure the execution of a new initiative and offering support, when needed, to grade-level teams. Rubrics should be created by focusing on the key “vital behaviors” that are necessary for the initiative to be successful.

Benchmarking Data

One of my favorite movie clips is a scene from Rambo II. Rambo was asked to go into a prisoner of war camp and take photographs of the POWs. He was frustrated by the request and responded, “I should just leave them there?” Unfortunately, many schools do a great job of collecting data, but few take the appropriate actions to respond to it. **If you are going to ignore or not use the data—don’t collect it.** Creating a timeline and benchmarks can be effective ways to ensure data are collected and action is taken.

Our district established benchmarks for formative and summative assessments. In addition, we compared our state-level data with a group of other local schools. Comparison data is important. If a group of fourth grade students at your school are 90 percent proficient in reading, the district may get excited at first glance. However, if the fourth grade students at 25 other schools in the area are 95 percent proficient, then your students are far behind. It is important for districts to create “data dashboards” and benchmark their data against other schools. Districts should not only look at other area school districts, but also examine how the same class performed the prior year.

In Summary

Carefully collecting and analyzing data are essential to building and maintaining a strong learning community. But, no single data source offers a magic bullet in transforming our schools. Districts need to incorporate multiple measures, including formative, qualitative, summative, and value-added data, to ensure the most reliable picture of district, school, and educator effectiveness and guide educational improvement. Many districts suffer from the DRIP Syndrome (*Data Rich, Information Poor*). Districts need to create relevant, teacher-friendly data to accurately inform decisions. Creating a system that embraces data will aid the evolution of a true learning community and empower staff and administrators to successfully advance student learning.

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