

# Data: Do You Know What You Need to Know?

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It was a warm Sunday afternoon in July and we were in a beautiful new resort hotel. Instead of sitting by the swimming pool sipping on cold lemonade, I was co-leading a full-day workshop on ninth-grade transition.

I wasn't alone. In fact, close to 900 people were in attendance. My co-leader had apologized for the size of the group, but as I reminded him, no one was complaining, and no one was leaving either.

The attendees were dedicated and eager to learn. Many had traveled extensively to learn how to address a pressing problem in their school—ninth graders.

I wanted to make certain that I addressed their needs, so I inquired as to why they were in attendance. I asked, "How many of you know your ninth-grade retention rate?" Less than five hands in 900 went up. "How many know the attendance rate of your ninth graders?" A few more hands went up. I asked more questions. "How many know the percent of total suspensions represented by ninth graders?" and "How many ninth graders had to repeat a course last year?" I was shocked. Only a handful of attendees had the data they needed to understand why they even needed to focus on ninth-grade transitions. They intuitively knew that they had a problem. They just didn't know what it was.

I have seen this scenario repeated many times. In literacy workshops, most participants don't have diagnostic data on their students. They have no idea how many students have difficulty reading their textbooks. In drop-out prevention workshops, only a small percentage of the participants have data on the ABC's of dropouts—attendance, behavior, and course failure.

In fact, if you have the data you need, you are in an elite group of school leaders. Sadly, most of the data that people really need costs little or nothing and is easily obtainable in their school.

## **More With Less**

It is no secret to anyone working in a school today that resources are limited. Schools are expected to raise student achievement with a reduced staff and reduced budgets. The people we have must accomplish more—we must increase our productivity. The question is, how do we do that?

Working harder is not the answer. The key is a laser-like focus. School leaders can no longer afford to major in the minors. We cannot afford to waste time on frivolities. We must identify two or three high-leverage points—those areas in which we can get the most improvement in student achievement from our effort—and we must direct 100% of our time and effort into those areas.

A while back, a colleague reminded me that “professionals keep score.” We can no longer rely on intuition to identify those high-leverage points. Today, we must do the right things, the right way, for the right reasons. We can no longer afford to guess at the root causes of low achievement. We need real-world data on our students in order to make informed decisions.

We need to focus on the one thing you must have and the one thing that most of your colleagues don’t have—the data you really need to raise the achievement of each and every student.

Most school leaders have data on state assessments. They have historical data on summative assessments taken by former students. Ironically, many school leaders do not have the data that they need to help the students they are currently serving.

Results of state assessments are the tip of the iceberg. The scores may indicate that there is a problem, but the results tell us very little about causes and possible solutions. For example, literacy skills, attendance, and instructional time may be root causes of low performance. On the other hand, curriculum alignment may be the key leverage point.

Examining data from state assessments is like standing at the end of the assembly line inspecting for defects. We know something is wrong, but we don’t know how it happened nor do we know what we need to do to correct the defect. Raising student achievement is about improving quality and we cannot improve quality by better inspection. We must build quality into the entire process. Therefore, school leaders need much more than state test results.

### **Data and Collaborative Leadership**

The bottom line is that all meaningful school change begins and ends with the collection and analysis of data. In the past, when we were tasked with sorting students for success, we could lead schools very well on intuition. It is much easier to sort than it is to create and continuously improve, yet sorting does nothing to improve quality. In today’s schools, we are attempting to raise the academic achievement of each and every student and that requires a much more complex and systematic approach.

Collaborative leaders who want to move their schools from good to great by effecting meaningful change understand that data is an essential tool in leading change and overcoming staff resistance. In fact, in high-performing schools, data analysis is a part of the culture that includes the following:

- **Transparency**—In high-performing schools, data is no secret. Everyone has access to all the relevant data including demographic data, academic data, data obtained from diagnostic assessments, data on student behavior, and data relating to student perceptions. Leaders in high-performing schools have learned that data transparency goes a long way to earning trust and buy-in from the staff.

- Focus—Data helps put the focus of a school where it should be—on students and student achievement. Data takes the focus away from adult wants and puts the focus squarely on student needs.
- Urgency—According to research on organizational change, a lack of urgency is the number one reason that change efforts fail. School leaders can effectively use data to make a case for change and to create a sense of urgency among the entire staff.
- Change History—Throughout their careers, most educators have experienced a bad change history. Annual movement from one fad to the next with little or no follow-up marks the careers of many educators. Hence, many educators are skeptical about new initiatives.
- Data Not Opinions—Opinions are like noses, everyone has one. Long-term, meaningful, and lasting change must be based on facts and data not opinions, philosophies, or guessing.
- Good Decisions—Hastily-made decisions and “shooting from the hip” are big time wasters in schools. Collaborating with staff on the meaning of real-world data takes more time but will lead to better-informed decisions and less time backtracking and cleaning up messes from poorly informed decisions.
- Motivation—High achievers are motivated by data on performance—feedback. When provided with performance-related data, achievers will improve. In addition, putting the focus on data helps to take personalities and philosophies out of the discussion and helps to engage staff in more meaningful discussions.
- The Change Process—Data helps identify needs, diagnose problems, peel back the layers and identify root causes, assess staff capacity, and monitor and assess progress.

### **Data and Curriculum, Instruction, and Assessment**

School leaders understand that unless they change what goes on in the classroom, student academic achievement will not improve. Data plays a key role in improving teaching and learning. Data from common formative and summative assessments can be used to inform instruction, focus review, and target remediation efforts as well as the following:

- Differentiate Instruction—Reaching each and every student demands that teachers differentiate their instruction to meet the needs of the individual learner. However, without data on their students, differentiation is reduced to a guessing game. Just as doctors use diagnostic data to decide upon a treatment plan, so too must school staff use diagnostic data on each student in order set up a customized individual learning plan (ILP). For example, it is extremely difficult for a teacher to differentiate instruction when he or she has no data on the literacy skills of his or her students. What if a third of the

students in a specific class could not read well enough to comprehend their textbook? Would that data make a difference in the teacher's approach?

- **Set Up Students and Teachers for Success**—The master schedule may be one of the best indicators of a school's priorities and its' ability to adapt to the varying needs of students. However, many school leaders do not collect data on the key indicators of a student-focused master schedule—the number of top teachers who teach the neediest students; the number of variations in allotted time for students to complete courses; the variety of instructional settings, including class size variations; and the number of interventions designed to assist struggling learners. A flexible schedule affords both students and teachers a better chance to succeed.
- **It's About Time**—Extending learning time has been found to be among the most effective ways of raising student achievement. Likewise, reducing learning time is almost guaranteed to lower achievement. Yet, school leaders sometimes make decisions about scheduling and teacher planning time that result in the loss of weeks of instruction each year. In discussing modified bell schedules used to accommodate students in need of additional assistance, an entry in [The Principal Difference](#) blog recently pointed out: “The extended lunch option removes 30 minutes of class time each day; the embedded option removes even more time due to the additional minutes needed for transitions between periods. Even in the best-case scenario, a half an hour per day subtracted from the typical high school 180-day year results in a loss of 90 hours of instructional time. This reduction translates into the equivalent of three weeks removed from each class. The embedded program loses nearly four weeks.” I am not arguing for or against these options, but I do believe that before the decision is made, data should be collected to better inform the process. I have spoken to school leaders who had no idea that they would be sacrificing three to four weeks out of the school year by implementing an open-lunch program.
- **Literacy**—Reading skills get kids into college. Writing skills keep them there. Many schools have set goals to have all graduates college-, career-, and workplace-ready. However, very few schools have diagnostic data on students' literacy skills—the gateway skills to postsecondary education.

### **Data and Personalization**

Student achievement is highest in schools that are warm and inviting, safe and orderly, and where there is someone for everyone. Leaders seek to create schools that students want to attend and where success is an expectation not a surprise. In short, leaders want to actively engage students. In addition to using so-called soft data including assessments of climate, satisfaction, and feelings of belonging, school leaders can also gather data that provides evidence of student engagement including the following:

- Attendance—Regular attendance is one of the best predictors of academic success. Conversely, poor attendance is an early warning of low engagement and eventual disengagement—dropping out. Research indicates that students with a 10% or greater absence rate are many times more likely to drop out. Regularly reviewing student attendance data is a must for any school seeking to improve academic achievement.
- Behavior—It is no secret to school leaders that students who engage in negative behavior are more likely to experience academic problems. In addition to collecting data on office referrals and suspensions, schools should look further into the data. For example, after analyzing discipline data, one school discovered that 90% of the suspensions involved 10% of the students. Further analysis determined that 60% of the suspensions involved ninth graders. Additional analysis determined that many of the suspended students had serious reading deficiencies and a long history of poor academic achievement dating back to the third and fourth grades. Using the data, the school was able to “chunk down” the problem and target specific students for interventions. Within two years, the school had reduced suspensions by 75% and raised overall academic achievement.

### **Course Failure: Successful Students Don’t Drop Out**

According to the research, course failure may be a better predictor of dropping out than test scores. Likewise, being on-target is a better predictor of graduation than ability, race, or gender. Too many students are passed from grade to grade because they are simply “too tall to retain.” Overage and under-credited students are more likely to have attendance problems, discipline problems, and are at greater risk of dropping out.

In fact, off-target students have only a 20% chance of graduating. Students who fail just one core course are more likely to drop out. Students with a D average or less almost never graduate. Finally, retained ninth graders have only a 10% to 15% chance of graduating.

With these facts in mind, schools should carefully gather and analyze data on:

- The number of overage, under-credited students
- Students with poor attendance
- Students with low grade-point averages
- Students repeating courses (and track which courses are being repeated)
- The number of students retained at each grade level, particularly the ninth grade.

From my experience, very few schools systematically track that data and a vast majority of schools do not know their retention rates.

Schools do not move from good to great by accident. High-performing schools have a number of things in common, but one is that they don’t operate on intuition. Their success is the result of deliberate, focused work and effort that begins and ends with a careful and thoughtful analysis of data.