Data reveals realities and dispels misperceptions. Education data offers insights into the performance of students, schools, and teachers. Academic rigor, parental involvement, and school culture can all be strengthened through the use of data. How? By giving principals the leverage to conduct powerful conversations that spark meaningful change.

What follows are best practices in collecting, organizing, and analyzing data that lead to measurable results in student achievement and school climate.
COLLECTING: CORRALLING THE DATA HERD
By employing leadership lessons, well-designed processes and protocols, and creativity, principals can find and use a range of data sources to tell a story of school standing and student achievement.

Set Priorities
In the world of data mining, principals and their teams must choose the “gems” that can be polished for true insight.

- Prioritize data selection around the year’s primary focus areas.
- Gather a data team and use a collaborative process to choose useful data.
- Apply results from curriculum-based measurements to reveal academic areas where deeper data dives can fuel improvement.
- Think outside the spreadsheet. Student work—collected through item skills analyses or in student notebooks—yields formative data for insights into students’ progress and grasp of material.

Develop Processes
Data is only as good as the methods deployed for its analysis.

- Impose a uniform analysis procedure for all transactions and purposes.
- Keep responses to data findings timely by embedding weekly assessments in every lesson.
- Design the school’s electronic data system to show gaps among previous-year, baseline, and current data.
- A little sleuthing can keep goals from missing their targets when the data supplied doesn’t seem to match reality. If demographic data seems off, for example, survey families on the racial and ethnic heritages with which they identify.

ORGANIZING AND LOGISTICS PLANNING
Managing the constant flow of data requires strict discipline and attention to detail. While principals monitor, administrators and teachers make changes in a continuous loop.

Plan for New Data
Maximize each delivery of fresh data with thorough preparation.

- Develop an assessment calendar of all data expected to benchmark student achievement throughout the school year.
- Build in half-days for benchmarking and other big assessments. Use the time to analyze data with grade teams and develop instructional plans informed by the data.
- Encourage teachers to use the electronic data system to share their successes.

Teacher Hiring and Evaluations
Teachers are the ultimate agents of change. If they’re comfortable with data, growth is evident.

- Scrutinize the data skills and comfort levels of potential teacher hires. Does their growth data show the ability to drive student improvement?
- Make data analysis a continuous learning process. Even veteran teachers can learn new things, and those with little data experience can start building their skills by hopping on the learning carousel.
- Back up data findings with the resources teachers need to achieve improvements, such as planning time, professional development, and access to experts.
- Reassign teachers who are unable to leverage data to promote student growth, moving them away from the front of the classroom. Those unable to adapt to a fact-based, data-driven culture should be encouraged to seek assignments elsewhere.

NOTES
What does our data reveal about our school’s areas of need?
Review academic data points such as student growth compared to peers, and ask three questions of each teacher: Are students safe? Are they learning? Can you prove it?

Administrative Duties
Well-run buildings facilitate learning. Fact-based foundations prompt wise administrative decisions.

- Use data to justify classroom assignments, placing students with the teachers most likely to move them forward.
- Spread students of even abilities among classrooms, helping teachers form groups of similarly able students to tackle challenges.
- Formative data can reveal a need for specialist positions, such as reading or math coaches.
- Use adult attendance as a data point for direct correlation to student attendance and achievement.

PERFORMING AN ANALYSIS FOR CHANGE
Craft approaches that extract maximum value. The data will propel student, school, and teacher progress.

Take a Close Look
Data demands more than a quick glance. Thoughtful, deliberative analysis must be followed by action steps and then by another round of analysis.

- Create baselines attached to national standards at least three times per year in every grade. Review students in that context for insights into what each grade level looks like and which students are and aren’t achieving it.
- Assign the data team to create one-page data snapshots at key intervals. Share them with teachers, so that everyone has access to information on grade-level standing by class and grade.
- Create common assessments at the end of each unit as well as protocols such as having teachers take the test to probe for misconceptions and distractors. After students take the test, the same team should review results for needed instructional changes.

Generate Change
Data puts the power to drive growth in the hands of teachers. Principals can employ data to implement lasting change.

- Use the “I notice” phenomenon to change systems, structures, and procedures. One school noticed that students would swarm the media center just before the bell rang. Creating scheduled checkout times led to calmer hallways and a predictable schedule that freed media specialists for more productive uses.
- Direct teacher teams to enter their meeting findings into the data system. Review this data regularly and provide the team leader with comments.
- Use summative data such as state year-end assessments to maximize learning by revising school processes and schedules.

Monitor Behavior
More than just academics are at stake. Data can pinpoint the context behind behaviors that disrupt learning.

- Task a behavior team with regular analyses of behavior data, capturing which interventions are and aren’t working. Determine triggers by scrutinizing time of day, the lesson underway, and instructor responses.
- Review the lesson plans of teachers who frequently make negative referrals. As educators know, excellent instruction can remedy poor behavior.
- Use incident reports in parent meetings to show behavior trends and patterns.
- Monitor students on and above grade level. Enrichments can prevent them from becoming bored and disruptive.

NOTES
Practice the “I notice” phenomenon. What are some observable patterns? How can change be facilitated in those areas?
Use Data With Students and Parents

Data can be a powerful tool in the campaign to recruit parents as allies in learning.

- Bring out data for parent-teacher meetings—even those led by students—to guide discussions about strengths and areas needing improvement. Be selective by using data that’s relevant and understandable.
- Teach parents to apply data to in-home learning.
- Share data with students, encouraging them to take responsibility for their own growth. Allow teachers to share classroom data, using charts and symbols to avoid breaching confidentiality.

Related Topics:
In addition to the ideas addressed in this section, here are some other topics for consideration related to managing data:

- Happier teachers for improved teacher attendance;
- Building a strong data team;
- Applying data to the development of the master schedule;
- Methods for disseminating data to students, teachers, and parents; and
- Empowering teachers to make data-driven changes.

Key Considerations:
There is plenty of data available, but its value lies in the ways you are able to organize and present it.

- Keep things simple with two-step action plans that teachers can implement and that students and parents can follow.
- Avoid surprises by creating a yearly assessment calendar. Know at the start of the school year what the staff should be talking about, and when.
- Capture and apply data while it’s fresh. Review and respond within 24 to 48 hours.
- Strong structure facilitates data-driven results. If a handful of students need to catch up on a lesson, classes should already be equipped for small-group sessions.
- Teachers take initiative to identify areas of improvement when they’re given free rein to utilize data findings.

Reflection Questions:

- What did we see, what have we heard, and what makes us wonder?
- What could have caused an undesirable result, and how do we remedy it?
- How can data be employed to motivate students?
- How can the school build its own assessment systems?
- How do we extract salient data from student work and experiences?

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