

# Using Data to Improve System Effectiveness: Practices of High Performing Superintendents

*Based on Selected Sources*

*"Using Data to Improve Schools: What's Working."*

<http://aasa.files.cms-plus.com/PDFs/Publications/UsingDataToImproveSchools.pdf>  
AASA, Paul D. Houston

*"Achieving with Data: How High Performing School System Use Data to Improve Instruction for Elementary Students."*

<http://newschools.org/about/publications/achieving-with-data>  
Center on Education Governance, University of Southern California

*"Using Data to Improve Educational Outcomes"*

Pathways to College Network  
<http://www.pathwaystocollege.net/pdf/data.pdf>

*Policy 5800: Standards of Professional Practice for Superintendents, Principals and Teacher Leaders*

West Virginia Board of Education

*Central Office Transformation for District-Wide Teaching and Learning Improvement*

<http://www.wallacefoundation.org/KnowledgeCenter/KnowledgeTopics/CurrentAreasofFocus/EducationLeadership/Pages/central-office-transformation-for-district-wide-teaching-and-learning-improvement.aspx>  
The Wallace Foundation

**SUPERINTENDENTS' LEADERSHIP INSTITUTE**

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## Practices of High Performing Superintendents: Using Data To Improve Student Outcomes

### Summary of Selected Articles on Data Use

- 1. Focuses Collective Effort on Student Learning and Builds a System that is Performance-Based** - Foundational to highly effective systems is creating a pervasive focus on student learning where everyone is held accountable for "adding value" to student success. Central to district effectiveness is the creation of a performance-based accountability system where there are *performance goals and benchmarks* established (and monitored) at the school and system level. These goals center on "valued student outcomes" and are the basis of individual and school evaluations. In WV, the valued outcomes are student achievement, graduation rates, college/career readiness and 21st century skills. By creating a performance-based system, the superintendent can keep everyone's "eye on the ball" using key data to "monitor the score."
- 2. Creates Viable Continuous Improvement Processes at the District, School and Classroom Level** - For data to matter to staff, there must be an organized and collaborative way of understanding and using it for school and classroom improvement. All "data-driven" districts have a well thought-out "improvement system," usually based on Deming's concepts of continuous improvement. Thus, these districts do not leave improvement to chance; they intentionally build collaborative teams at the classroom, school and district level. These collaborative teams are the vehicle for getting staff to understand performance on key outcomes, for analyzing data, reaching consensus on action and focusing collective effort on improved results. These teams are highly valued, supported by district resources, and involve all key staff in reaching the performance goals set at the school and district level.
- 3. Creates and Supports a Data Management System** - Highly effective school systems have dedicated personnel that take charge of the data, work with staff to determine data needs, and provide technical assistance with data tools and graphic displays. These systems understand that principals and teachers are extremely busy and do not have the time to identify, collect and depict data in usable forms. Thus, these systems identify a structured process for this to happen. This means identifying someone at the district and school level to "own" this important work. Unfortunately, if data management is everyone's job, it will probably be no-one's job.
- 4. Develops Data Literacy Among Key Users** - Data will be of little value if the staff lacks the basic expertise in using it. Thus, data driven districts develop and deliver professional development for data users by specific roles, i.e., teachers and teacher collaborative teams, principals/school leadership teams, etc. This process often begins by identifying the "basic data skills" that all users need (including identifying basic data sources, accessing the data, interpreting the data, asking the right questions, and expanding knowledge by "mining" the data) and customizing professional development by user groups.
- 5. Gives Priority to the Improvement of Classroom Instruction and School Effectiveness** - The superintendent keeps the conversations and planning for school and system improvement centered on students' mastery of the district's adopted curriculum. This keeps everyone focused on the improvement of instruction in every classroom as well as the overall effectiveness of each school. Teachers and principals are viewed as the most important people in the organizational structure. In "data-savvy" systems, there is attention placed on the use of formative data to determine if students are mastering the adopted curriculum and district-wide accountability for intervening when they do not.
- 6. Restructuring Central Office and Building Central Office Expertise to Improve Learning** - Most districts that are highly successful have restructured the way central office works with schools. This is built on the belief that the district can never affect the improvement of *all* schools until the central office is structured to deal with each school as an individual entity. This begins by making sure that all central office staff know that "whatever their job, they must add value to the effectiveness of schools and to the teaching/learning process." These superintendents tend to use a "system of support" concept rather than a top down "directive" approach to improvement. The district office addresses each school's unique problems by working in a supportive and collaborative way. This approach starts with clear performance goals and benchmarks but gives the school considerable flexibility on "the how" of improvement.



## LEADERSHIP RUBRIC

### *Using Data to Improve System Effectiveness: Practices of High Performing Superintendents*

- 3 = This is a consistent and pervasive practice throughout the school system.
- 2 = This practice prevails in the school system but needs strengthened.
- 1 = This practice exists only in isolated instances.
- 0 = This practice does not exist in the school system.

**DIRECTIONS:** Please review the description of the six (6) core practices and indicators associated with effective data use. Using the scale provided, rate your system's performance and arrive at an average score for each practice. In the column to the right, jot any comments or question you would like to surface in the group discussion.

<b>CORE PRACTICES:</b>	
<p><b>1. Focuses Collective Effort on Student Learning and Builds a System That Is Performance-Based</b></p> <p><b>Core Concept:</b> The superintendent centers the system on student learning and evaluates individual and organizational effectiveness on <i>performance evidence</i> (data) related to valued student outcomes; there is clear understanding of where the schools and school system stand and where they need to be.</p> <p><b>MY DISTRICT SCORE BASED ON THE INDICATORS BELOW IS: _____</b></p> <p><b>Key Indicators:</b></p> <p>3 2 1 0 (a) maintain a laser-like focus on the improvement of specific student outcomes.</p> <p>3 2 1 0 (b) ensure there are clear measurable <i>performance</i> goals and benchmarks for improving student outcomes at the district, school and classroom level.</p> <p>3 2 1 0 (c) identify and use core data to evaluate and publicly report progress, creating a clear understanding of "where we are and where we need to be." In WV, this includes</p> <ul style="list-style-type: none"> <li>• measures of improved student achievement,</li> <li>• increasing graduation rates and decreasing dropout rates,</li> <li>• preparing all students for post-secondary education and careers, and</li> <li>• developing 21st century skills.</li> </ul> <p>3 2 1 0 (d) use performance evidence (benchmarks) as a significant factor in monitoring and evaluating staff and school effectiveness.</p>	<p><b>GROUP DISCUSSION:</b></p> <p>Examples/insights I can contribute to the discussion:</p> <p>Questions I want to surface about this leadership behavior:</p>
<p><b>2. Creates Viable Continuous Improvement Processes at the District, School and Classroom Level</b></p> <p><b>Core Concept:</b> The superintendent ensures there are viable continuous improvement processes at the district, school and classroom level. These processes use data to develop a unified and coherent strategic plan and result in a sense of collective accountability for the improvement of valued student outcomes.</p> <p><b>MY DISTRICT SCORE BASED ON THE INDICATORS BELOW IS: _____</b></p>	<p><b>GROUP DISCUSSION:</b></p> <p>Examples/insights I can contribute to the discussion:</p>



**Key Indicators:**

- 3 2 1 0 (a) use a continuous improvement process to develop strategic priorities at the district level; this process involves the county board, principals, teachers and other appropriate stakeholders in data analysis, goal setting, and strategy development for improving the system.
- 3 2 1 0 (b) ensure that all schools in the district have a viable continuous improvement process to develop a strategic improvement plan; this process involves staff and other key stakeholders in data analysis, goal setting, and strategy development for improving the school.
- 3 2 1 0 (c) create a system-wide sense of importance about the school and district strategic improvement plans and the goals they are designed to attain.
- 3 2 1 0 (d) use the improvement plan as a vehicle for keeping improvement efforts focused; intentionally screen out initiatives that may fragment efforts.
- 3 2 1 0 (e) work with principals and district staff to assure there is appropriate alignment between the district and school improvement priorities so together they represent a coherent approach to district improvement.
- 3 2 1 0 (f) have a "tight" management system for monitoring the implementation of both the school and school system strategic plans..
- 3 2 1 0 (g) expect each school in the district to have teacher collaborative teams that meet regularly; these teams use data to modify and adjust instructional delivery.
- 3 2 1 0 (h) work with principals to provide appropriate time, structure, resources, professional development and other supports necessary for effective teacher collaborative teams.

**Questions I have about this leadership behavior:**

**3. Maintains and utilizes an effective data/information system**

**Core Concept:** The superintendent ensures the district has an accessible comprehensive longitudinal data and information system that is used to support decision-making at the classroom, school and district level.  
**MY DISTRICT SCORE BASED ON THE INDICATORS BELOW IS: \_\_\_\_\_**

**Key Indicators:**

- 3 2 1 0 (a) establish clear norms and expectations that data will be used to improve district, school and classroom planning and decision-making.
- 3 2 1 0 (b) have personnel at the district and school level with designated responsibilities for managing and providing data.
- 3 2 1 0 (c) central office staff, principals and teachers know where to go and who to see to get the data they need.
- 3 2 1 0 (d) assure there are on-going interactions with staff at all levels of the organization to determine the kind of data and information needed to improve their work.
- 3 2 1 0 (e) have a comprehensive data inventory or guide that communicates the type of data available for various purposes and users.
- 3 2 1 0 (f) effectively supports the unique data needs of:
  - individual teachers and teacher collaborative teams to monitor and improve instructional effectiveness;
  - principals/school leadership teams to monitor and improve school effectiveness; and
  - board of education/central office staff to monitor and improve district effectiveness.
- 3 2 1 0 (g) assist staff with collecting and analyzing data and information that may not be readily available in the

**GROUP DISCUSSION:**  
Examples/insights I can contribute to the discussion:

**Questions I have about this leadership behavior:**



district's data management system but is necessary to address specific school or classroom problem.

#### 4. Builds staff capacity for data driven decision-making

*Core Concept: The superintendent ensures that staff has the knowledge, skill and support to access and use data effectively.*

MY DISTRICT SCORE BASED ON THE INDICATORS BELOW IS: \_\_\_\_\_

**Key Indicators:**

- 3 2 1 0 (a) identify professional knowledge and skills that staff are expected to have to effectively access, analyze data and apply information and findings.
- 3 2 1 0 (b) conduct professional development that builds staff capacity to access and effectively use the data.
- 3 2 1 0 (c) have a defined support system that provides teachers and principals with the data analysis tools and technical assistance when they need it.
- 3 2 1 0 (d) encourage the use of data and information systems with students; have teachers work with students to monitor their own learning with data notebooks and portfolios that track learning progression.

**GROUP DISCUSSION:**

Examples/insights I can contribute to the discussion:

Questions I have about this leadership behavior:

**GROUP DISCUSSION:**

Examples/insights I can contribute to the discussion:

**5. Gives priority to the improvement of classroom instruction and school effectiveness.**  
*Core Concept: The superintendent keeps the conversations and planning for school and system improvement centered on students' mastery of the district's curriculum. This keeps everyone focused on the improvement of instruction in every classroom as well as the overall effectiveness of each school. Teachers and principals are viewed as the most important people in the organizational structure. In "data-savvy" systems, there is attention placed on the use of formative data to determine if students are mastering the content standards and objective; furthermore, there is district-wide accountability for intervening when they do not.*  
MY DISTRICT SCORE BASED ON THE INDICATORS BELOW IS: \_\_\_\_\_

**Key Indicators:**

- 3 2 1 0 (a) Frame improvement efforts around the central question, "Are our students mastering the content standards and objectives?"
- 3 2 1 0 (b) Use the following four questions to guide school and classroom improvement efforts:
  - What do we want students to learn; i.e., what knowledge, skills and dispositions do we expect them to acquire?
  - How will we know if students are learning the essential skills, concepts and dispositions we believe are important?
  - How will we respond when some of our students do not learn? What processes are put in place to ensure students receive additional time and support for learning in a timely, directed and systematic way?
  - How do we enrich and extend the learning for students who are already proficient?
- 3 2 1 0 (c) Create and/or use data systems that tract individual student mastery of the content standards and objectives.
- 3 2 1 0 (d) Foster development and use of formative assessments to gather information about each student's mastery of the content standards and objectives (In WV, Acuity).
- 3 2 1 0 (e) Organize teacher collaborative teams to use formative assessments, teacher- made assessments and

Questions I have about this leadership behavior:



<p>samples of student work to guide, adjust and improve instruction.</p> <p>3 2 1 0 (f) Organize school leadership teams to review formative data and alter school-wide practices and processes accordingly.</p> <p>3 2 1 0 (g) Hold school leaders accountable for monitoring results of teacher collaborative teams;.</p> <p>3 2 1 0 (h) Hold district staff accountable for monitoring work of school leadership teams.</p>	
<p><b>6. Structures central office staff to support school and classroom effectiveness.</b></p> <p><b>Core Concept:</b> <i>The superintendent understands that the expertise and organization of the central office matters substantially to district-wide teaching and learning improvement. Thus, the superintendent evaluates the overall structure, focus and efficacy of the central office staff when considering ways to impact student learning. The superintendent considers ways to re-structure the district staff in order to enhance internal collaboration, improve "team" performance, and focus everyone's collective effort on the improvement of student learning.</i></p> <p><b>MY DISTRICT SCORE BASED ON THE INDICATORS BELOW IS: _____</b></p> <p><b>Key Indicators:</b></p> <p>3 2 1 0 (a) Communicate clearly to all central office staff the ultimate responsibility each person has to add quality to the system's goal of improved student learning.</p> <p>3 2 1 0 (b) Create a "data savvy" central office staff who are knowledgeable of the performance of each school on key outcomes and indicators.</p> <p>3 2 1 0 (c) Shift units, offices, personnel and/or reporting lines to better focus work on the improvement of student learning.</p> <p>3 2 1 0 (d) Shift concept of organizational hierarchy to "teachers at the top" and promote the concept of customer service by the central office to individual schools, teachers and principals.</p> <p>3 2 1 0 (e) Focus on "school as the unit of change" and orchestrate district services to support each school's unique needs and issues.</p> <p>3 2 1 0 (f) Develop central office staff collective knowledge of school and instructional effectiveness.</p> <p>3 2 1 0 (g) Hold central office staff accountable for results in schools and classrooms through performance goals and benchmarks.</p>	<p><b>GROUP DISCUSSION:</b></p> <p>Examples/insights I can contribute to the discussion:</p>
	<p><b>Questions I have about this leadership behavior:</b></p>