



Education Reform Toolkits:
Resources to achieve results

Metrics Bank

Example Metrics for School-Level Dashboards and Scorecards

developed by district and charter operators
with support from



Updated 12/15/2009

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I. What is this tool and who is it intended for?

This guide and metric bank were developed for school- and district-level administrators who are in the process of populating school-level dashboards and/ or scorecards for performance management.

These materials are divided into two parts: this Word document provides basic guidelines and advice on how to assemble dashboards¹ that are easy to understand, informative and actionable. The attached Excel-based Metric Bank provides example metrics used on dashboards in 14 states, school districts and charter management organizations around the country².

The tool is explicitly restricted to examples and commentary regarding effective end products and does NOT include important components of successful dashboard implementation such as:

- Alignment with district strategic goals and other reporting documents
- Alignment with bargaining entities around end uses for these documents
- Incorporating end-user feedback throughout the process
- Community engagement

¹ While the word “dashboard” is generally used to describe frequent (daily to quarterly), formative readouts and the word “scorecard” tends to describe annual reports designed more for backwards-looking assessments of progress, the authors have encountered a fair degree of inconsistency in term usage from organization to organization. Thus, while we only refer to dashboards in this document from this point forward, the information provided can be applied to scorecards as well.

² The following organizations contributed to this guide and metric bank: Austin Independent School District, Texas; Charlotte-Mecklenburg Schools, Ga.; Chicago Public Schools; Dallas Independent School District; Denver Public Schools; Detroit Public Schools; Fresno Unified School District, Calif.; Fulton County Schools, Ga.; Green Dot Public Schools, Houston Independent School District, Miami-Dade County Public Schools, New York City Department of Education, Oakland Unified School District, Calif.; and the state of South Carolina.

II. Ten tips for deciding what to include on a dashboard

Because both dashboards and scorecards are decision making tools for various stakeholders (e.g., community members, superintendents, principals, teachers, etc.), there are a number of guidelines one can follow to create reports that are useful and effective for a broad audience.

The guidelines below represent advice shared most frequently by contributing school districts. These principles are useful when evaluating the example metrics found in the Excel Metric Bank. Refer to the example at the end of this section for practical application of these principles.

1. Clearly define the target audience and ultimate use for the dashboard

A dashboard will be more targeted and succinct if the audience and purpose are known ahead of time. The uses for these reports vary from giving teachers early warnings and opportunities to shift direction mid-year, to informing the public on the relative performance of a school, to helping superintendents make decisions about school resource allocation.

2. Include stakeholders in the dashboard development process

A key element of an effective dashboard is user buy-in and adoption, though the process for accomplishing this is outside the scope of this tool.

3. Give preference to metrics that are “actionable”

Because there is limited space on a dashboard that is kept to one to two pages, preference should be given to metrics that measure things for which the organization has developed interventions. For example, an “actionable” metric might be “number of low-income students taking at least one AP course” because the school has developed a program to recruit more students to these classes.

4. Select metrics that are aligned with strategic priorities

If the organization has laid out a clear set of strategic priorities, all of these priorities should be clearly reflected on dashboards. For example, if the superintendent has declared that school safety is one of his top priorities for the next few years, school-level dashboards should include metrics that will help track progress toward this goal, such as “number of reported violent incidents per 100 students” and “percentage of students that report feeling safe at school.”

5. Emphasize student achievement metrics

Because the primary function of a school system is to help students learn, grow and prepare themselves to be citizens and productive members of the workforce, metrics selected should reflect this. That is, for functions (such as school sites) where direct measures of student outcomes are available, these should be disproportionately represented on dashboards. For example, academic and graduation data will often take up 70 percent of high school dashboards and scorecards, whereas facilities quality, teacher retention, etc. represent the other 30 percent.

6. Select metrics that are specific and well-defined

If a metric is not carefully worded and specific, the data collection and analysis may be left open to interpretation. For example, a non-specific metric might read, “high school graduation rate” whereas a specific metric might read, “four-year graduation rate for incoming freshmen as

calculated by the Manhattan Institute Method, broken down by ethnicity and socioeconomic status.”

7. Include historical data and rank comparison

Dashboards should include at least two previous cycles of data for easy reference. In addition, dashboards should show where the school stands relative to similar schools. Raw scores are difficult to interpret and act upon in a vacuum, whereas inclusion of longitudinal data and relative scores allows decision-makers to see trends.

8. Specify concrete targets

Dashboards should not only include current and historical data, but also incorporate any targets set by the organization at the beginning of the cycle. This provides a benchmark by which to measure progress.

9. Keep the dashboard short and readable (one to two pages)

Dashboard users frequently complain that dashboards are too long and complicated. A manager or principal provided with a dashboard that contains 100 metrics to track will not know where to begin or what they should focus on. Instead, limit dashboards to one to two pages and prioritize metrics such that any given party is only responsible for monitoring 10 to 20 metrics, and that they know which among those are high priorities.

10. Subdivide the dashboard into topical sections

School- and district-level dashboards will often contain metrics in widely varying topic areas (e.g., “academic rigor” alongside “operational effectiveness”). It is therefore important that these topic areas are either clearly subdivided for easier reading, or that separate dashboards are generated by topic or responsible party.

11. Include time stamps

Because dashboards, particularly those published more frequently, contain time-sensitive information, be sure that all pages of the dashboard are time-stamped. This will prevent principals and others from acting on out-of-date information.

High School Scorecard Example

Below is a scorecard example from a Dallas Independent School District high school that illustrates several of the concepts discussed in this section.

⑨

2/6/2009

		ACTUAL	3-YEAR TREND oldest → newest			2010 GOAL	HS RANK	ACTUAL	3-YEAR TREND oldest → newest			2010 GOAL	HS RANK	
⑤ STUDENT ACHIEVEMENT	STUDENTS WHO MET MINIMUM STANDARD							STUDENTS WHO MET COLLEGE-READY STANDARD						
	TAKS	MATH	54%	41%	54%	54%	90%	★★☆☆☆	10%	8%	13%	20%	60%	★★☆☆☆
		READING/ELA	81%	77%	79%	81%	90%	★★★☆☆	27%	17%	21%	27%	60%	★★★☆☆
		SCIENCE	55%	46%	46%	55%	90%	★★★☆☆	7%	8%	6%	7%	60%	★★★☆☆
		SOCIAL STUDIES	91%	80%	84%	91%	90%	★★★☆☆	37%	36%	33%	37%	60%	★★★☆☆
⑩ STUDENT ACHIEVEMENT	SAT/ACT	Students who took an Advanced Placement (AP) test**					21%	17%	15%	21%	50%	★★☆☆☆		
		Test takers scoring 3, 4, or 5 on at least one AP test**					48%	51%	41%	49%	50%	★★★★☆		
		AVERAGE SCORE** SAT = 928 ACT = 18	Graduates who have taken either SAT or ACT**					45%	47%	51%	45%	70%	★★☆☆☆	
		Examinees with college-ready SAT/ACT score**					16%	16%	15%	16%	50%	★★★★☆		
		Graduates enrolled in post-secondary education**					⑥ 43%	n/a	n/a	49%	-	★★☆☆☆		
⑩ STUDENT ACHIEVEMENT	Students completing at least one TEA advanced or dual enrollment course**					15%	16%	15%	15%	35%	★★☆☆☆			
	Percent of district's advanced curriculum offered					23%	25%	27%	23%	-	★★☆☆☆			
⑩ ON TRACK/ GRADUATION	Students who graduate in four years*					55%	75%	88%	55%	95%	★★☆☆☆			
	Students present at least 90% of the time					85%	72%	71%	85%	-	★★★★☆			
	Freshmen on track for graduation					56%	50%	47%	56%	-	★★★★☆			
⑩ STUDENT GROWTH	Students who made expected gains on TAKS math					57%	n/a	n/a	57%	-	★★☆☆☆			
	Students who made expected gains on TAKS reading					82%	n/a	n/a	82%	-	★★★★☆			
	School Effectiveness Index (SEI - average score is 50)					46	42	50	46	-	★★☆☆☆			
⑩ TEACHERS	Average teacher attendance rate					94%	93%	94%	94%	-	★★★★☆			
	Teachers retained from previous year					72%	82%	85%	72%	-	★★☆☆☆			

Selection principles

- ⑤ Emphasize student achievement metrics
- ⑥ Select metrics that are specific and well-defined
- ⑦ Include historical data and rank comparison
- ⑧ Specify concrete targets
- ⑨ Keep the dashboard short and readable
- ⑩ Subdivide into topical sections
- ⑪ Include time stamps

III. How do I use the metrics bank to help in generating my dashboard/scorecard?

Using the Excel-based metrics bank, operators can search for example metrics in a number of ways. They can search through all metrics derived from dashboards for particular “levels” (e.g., HR dashboards versus high school dashboards), metrics that belong to particular topic areas (e.g., those related to school safety versus those related to teacher recruiting effectiveness), metrics that have particular “responsible parties” (e.g., metrics for which the HR department is responsible versus those for which a school is responsible), and by a few other criteria. These criteria can be used to narrow a search for metrics individually or in combination. Regardless of the type of filter used to narrow your metric search, the result will be a list of example metrics that meet the criteria chosen (metrics found in column AE, highlighted in yellow).

Searching by topic area

The topic area filters allow you to work through the generation of your dashboard topic by topic (e.g., first selecting a set of metrics that are meant to track student progression on standardized tests, then selecting a set that are targeted at teacher retention, and finally selecting some to track attendance). The filters for topic areas are found in columns B through AC.

Primary topic area

Five primary topic areas that broadly cover all activities performed by a school system are listed in the chart below with descriptions. They are found in columns B through F of the metrics bank and are highlighted in orange. To restrict your metric search to one of these primary topic areas, simply select the “y” choice under its corresponding drop-down menu.

PRIMARY TOPIC AREA	DEFINITION
Increase student achievement	Includes academic-related topics such as test scores, grades, attendance, graduation rate
Provide a safe, productive environment	Includes metrics related to the school environment such as safety, security, facilities, cleanliness, school culture, etc.
Build and maintain a talented, effective and satisfied workforce	Includes metrics related to staff recruitment, retention, training, evaluation, satisfaction, etc.
Operate efficiently	Includes metrics related to finances and making effective use of resources such as budgeting, departmental effectiveness, etc.
Ensure public support and customer satisfaction	Includes board and community relations, internal and external communications, surveys, and general satisfaction.

Secondary topic area

The secondary topic areas generally represent sub-categories of primary topics. For example, the secondary topic area, “College/ career readiness” is a sub-topic of both “Increase student achievement” and “Provide a safe, productive environment.” Similarly, the secondary topic area “HR systems” is a sub-topic of “Build and maintain a talented, effective and satisfied workforce.”

These secondary topic areas are found in columns G through AB and are highlighted in blue . To restrict your metric search to include one of these secondary topic areas, simply select the “y” choice under its corresponding drop-down menu.

SECONDARY TOPIC AREA	DEFINITION
College/career readiness	Metrics related to college or career readiness such as graduation rates, college preparatory exams, college success, etc.
Assessments and exams	Metrics related to federal, state or local examinations or assessments
Student progression (courses and grade levels)	Metrics related to student progression such as grade promotions, academic growth, year over year student improvement, etc.
Programs/initiatives/extra-curriculars	Metrics related to programs for sub-groups such as Special Education, Gifted and Talented Education, district or school initiatives, or extra-curricular activities.
Engagement/attendance/truancy (all stakeholders)	Metrics related to student or staff engagement/satisfaction, attendance rates or truancy
Demographics, enrollment, other baseline data	Metrics related to general school/organization statistics such as demographics, student enrollment and other baseline numbers.
HR Systems	Metrics related to HR systems such as payroll, grievance reporting, etc.
Staff evaluation and effectiveness	Metrics related to staff effectiveness either through evaluation or other methods
Staff preparation/training	Metrics related to the preparation and training of staff.

SECONDARY TOPIC AREA	DEFINITION
Staff retention and Staff recruitment	Metrics related to the recruitment and retention functions of a school system.
Facilities and equipment	Metrics related to facilities or equipment such as building quality/maintenance, laptop availability, etc.
School support services (transportation, food, etc.)	Metrics related to non-academic school services such as food service, transportation, office supplies, etc.
Discipline	Includes student suspension, expulsion, truancy and other disciplinary measures.
Security/safety and health	Includes incidence of violence and crime, security detail involved, etc.
School culture	Includes in a general way metrics related to the culture of the school
External communications	Includes metrics related to the ability of the system to communicate internally or externally such as crisis management, reporting achievement results, etc.
Transparency and access (includes responsiveness)	Metrics related to the ability of the organization to include families and the public in decision-making as well as keeping them informed as to ongoing operations.
Board/governance interface	Metrics related to the ability of the administration to engage effectively a governing body such as a school board
Finance/budget planning process	Includes metrics related to finances and resource management
"Departmental" efficiency/effectiveness	Includes metrics related to the effectiveness or efficiency of departments or schools, such as relative school rankings, # of unfilled positions for the HR department, etc.
Cost reduction measures	Metrics related to cost reduction

Searching by responsible parties

This filter for searching by responsible parties is found in column AD and describes the part of the school district most directly responsible for a particular metric. Users can choose from district level, functional levels (e.g., HR department or IT department), or school/group of schools level. As an example, the HR department might be most directly responsible for “# of teaching positions unfilled at the start of the school year,” whereas a school might be most directly responsible for “# violent incidents per capita” or “% growth year over year in 8th-grade math scores.”

To filter with this column, simply select one of the responsible parties in the drop-down menu.

Searching by other criteria

There are a number of other criteria included in columns AJ through AM that may prove useful in a search. They are described in the following table:

Field	Description
Originator	The school district or CMO that generated the dashboard from which a particular metric was extracted
Document title	The unique name of the dashboard from which the metric was extracted. Filtering by this field allows users to see all metrics on a particular dashboard.
Year generated	The year in which the dashboard containing a particular metric was published
Organization type	Describes whether the metric was extracted from a dashboard used by a CMO or a district

To filter with these fields, simply select one option from the drop-down menu associated with the field of interest.

School District 1 Example

Below is an example of how a school district might use the metric bank.

School District 1 is in the process of generating high school-level semi-annual reports to be used by area superintendents for tracking school progress and providing additional support where necessary. There is already a set of metrics agreed upon by teachers and principals to track academic progress (and these metrics represent 60 percent of the school dashboards), but the district is having trouble deciding what kind of functional, non-academic metrics to include, particularly related to safety and discipline issues.

First, the district selects “Provide a safe, productive environment” as a primary topic area (in orange: see below).

	INCREASE STUDENT ACHIEVEMENT	PROVIDE A SAFE, PRODUCTIVE ENVIRONMENT	BUILD AND MAINTAIN A TALENTED, EFFECTIVE, AND SATISFIED	OPERATE EFFICIENTLY	ENSURE PUBLIC SUPPORT AND CUSTOMER SATISFACTION	College/ career readiness	Assessments and exams	Student progression (courses and grade levels)	Programs/ initiatives/ extra-curriculars	Engagement/ attendance/ truancy	Demographics, Enrollment, other stakeholders	HR Systems	Staff evaluation
1													
	Sort Ascending	Sort Descending											
	(All)	(Top 10...)											
	(Custom...)												
	Y												
	(Blanks)												
	(NonBlanks)												
5	Y	Y											
6	Y	Y											

Next, the district selects “Discipline” under the secondary topic area section (in blue and green) in column T (see below).

Staff preparation/ training and effectiveness	Staff retention	Staff recruitment	Facilities and equipment	School support services (bus, food, etc.)	Discipline	Security/ Safety and health	School culture	External communications	Transparency and access (incl responsiveness)	Board/governance interface	Finance/ Budget planning process	Cost reduction measures	Responsible party/ function	METRIC
														Percent of attendance by campus, third six weeks of 2007 compared to 2008
														2008 over 2007 percent change in attendance by campus, third six weeks
														2008 percent of attendance by campus by grade level, third six weeks
														2008 over 2007 percent change in attendance rate by grade level, third six weeks
														Percent of students with 5 or more unexcused daily absences by grade level, third six weeks
														Percent of unique students disciplined by disposition, third six weeks
														% of freshmen graduating within 5 years

This yields about 40 example metrics, a subset of which is shown below.

Category	Metric	Origin
Y	Percentage of students that are satisfied/highly satisfied with opportunities to meaningfully participate	Oak Sch
Y	Student suspension rate per semester	Oak Sch
Y	Student tardy rate per semester	Oak Sch
Y	Teacher and staff attendance	Oak Sch
Y	Student suspension rate	Oak Sch
Y	Student tardy rate	Oak Sch
Y	Average attendance for students in elementary school during fall, winter and spring	Oak Sch
Y	Average attendance for students in middle school during fall, winter and spring	Oak Sch
Y	Average attendance rate for high school students in fall, winter and spring	Oak Sch
Y	Staff attendance	Oak Sch
Y	Suspension rate for elementary school students in fall, winter and spring	Oak Sch

From this list of metrics, School District 1 decides to incorporate three. One is “Out-of-school suspensions per 100 students, relative to previous years,” a second is “incidence of inappropriate behavior” and a third is “percent of students who feel safe.”

These three are chosen based on their alignment with the district’s strategic goals, their “measurability,” and the fact that the district has interventions available to address poor school performance against these metrics.