Center for Education Policy Research
HARVARD UNIVERSITY

STRATEGIC DATA PROJECT

STRATEGIC USE OF DATA RUBRIC

The Strategic Use of Data Rubric is a resource developed by the Strategic Data Project to provide direction and support to educational organizations in their efforts to transform data use. It is a tool that establishes a common language and a framework that enables a structured and systematic assessment of an organization's strengths and challenges around data use. Using the rubric as a basis for gathering evidence of data use across the organization allows educational leaders to identify specific areas for improvement and highlight specific steps to move the organization toward using data more strategically.

Programs and Major Initiatives

	BASIC	EMERGING	STRONG	EXEMPLARY
Organizational Strategy *To what extent does the organization use a strategic plan to organize program and initiative priorities?*	No strategic plan; or if strategic plan exists, fails to inform major initiatives.	Strategic plan informs some major initiatives.	Strategic plan informs most major initiatives.	Strategic plan informs all major initiatives.
	Major initiatives/programs frequently generated, crisis-driven and uncoordinated with strategy.	Major initiatives superficially aligned with strategy.	Major initiatives significantly aligned with strategy.	Major initiatives tightly aligned with strategy; alignment understood well by agency.
	Limited understanding of current initiatives. No complete list of initiatives in one place.	Some understanding of current efforts.	Significant understanding of current efforts.	Deep understanding of current efforts. New projects not authorized without assessing current initiatives.
	No effort to avoid duplication across programs. No effort to eliminate or rationalize old initiatives.	Some effort to avoid duplication across programs.	Efforts exist to coordinate programs and avoid duplication	Limited number of major initiatives. No duplication across programs.

	BASIC	EMERGING	STRONG	EXEMPLARY
Goal-Setting *To what extent does the organization use data and analysis to set goals for programs and major initiatives?*	Major initiatives are introduced without outcome or implementation goals.	Major initiatives are introduced with established goals, but goals not informed by analysis, nor aligned with strategic plan.	Major initiatives introduced with goals, targets, and timelines; all aligned with the strategic plan.	Major initiatives introduced with goals, targets, timelines, responsibilities, and dependencies; all aligned with the strategic plan.
	Targets and goals non-existent.	Targets and goal exist but not created with evidence or analysis.	Targets and goals exist, established from trend data and research.	Targets and goals exist, are both challenging and realistic and have been established from trend data, research, and predictive analytics.
		Targets and goals are not well connected to implementation, operational outputs, or outcomes.	Targets and goals are largely connected to implementation, operations, outputs, and outcomes.	Targets and goals are always directly connected to implementation, operations, outputs, and outcomes.
	No monitoring of progress.	Little monitoring of progress.	Monitoring of progress largely focused on implementation, but not measurable outcomes.	Monitoring of progress includes review of implementation, measurement of outcomes, and use of predictive analytics to anticipate progress and adjust tactics.

Access and Use of Program Data

To what extent are data available and utilized to manage programs and inform decision-making?

BASIC	EMERGING	STRONG	EXEMPLARY
Program data (e.g., school, classroom, student-level information) not housed centrally; some data not housed at all.	Some program data housed centrally, data often unreliable.	Most program data housed centrally and often reliable.	Majority of program data is reliable and housed centrally.
No baseline (pre-program) data available.	Little baseline (pre-program) data available or collected.	Baseline (pre-program) data available but not consistently collected.	Baseline (pre-program) data consistently collected before program start.
Little analysis of student data to determine program adoption decisions and program priorities.	Some analysis of student data used to determine program adoption decisions and program priorities.	Careful analysis of student data determines program adoption decisions and program priorities.	Rigorous, comparative analyses and predictive analytics drive program adoption decisions and program priorities.

Program Management and Monitoring with Data

To what extent are data used to understand, manage, and monitor current program operations?

BASIC	EMERGING	STRONG	EXEMPLARY
No monitoring of program operations.	Occasional monitoring of program operations.	Formal monitoring of program operations against goals, targets, and timelines established at program launch.	Formal monitoring of programs against goals, targets, and timelines. Examination of different scenarios that may alter program to increase impact, lower cost, or respond to change.
Unaware of relevant research.	Awareness of relevant research, but not used to make decisions.	Awareness of relevant research; research used to make decisions.	Relevant research used to drive further internal research that informs and evaluates after pertinent information collected.
No attention on results from prior programs.	Little attention on results from prior programs.	Some attention on results from prior programs that were evaluated with pre-established criteria.	High attention on results that use data from prior programs and were evaluated with rigor and explicit pre-established criteria.
Similar programs not compared in terms of value to student outcomes	Similar programs superficially compared in terms of value to student outcomes.	Similar programs compared with some depth in terms of value to student outcomes.	Similar programs compared in terms of impact and cost-effectiveness.

Evaluation and Decision Making

To what extent does the organization evaluate the outcomes of its programs and major initiatives?

BASIC	EMERGING	STRONG	EXEMPLARY
No evaluation plans exist.	Some evaluation plans exist, often created after program start, but are often vague and lack actionable results.	Many evaluation plans exist before program start, are explicit and moderately strong.	Evaluation plans exist for all major initiatives, and are explicit (with strong designs, including randomization) to determine initiatives' impact and next steps.
Outcome evaluation not considered in decisions to continue, expand, or terminate programs.	Outcome evaluations occasionally influence decisions to continue, expand, or terminate programs.	Outcome evaluations often influence termination or expansion decisions.	Outcome evaluations always influence closure or expansion decisions, including standard use of sunset clauses to allow program expansion to be periodically evaluated.
Decisions based on prior beliefs and assumptions rather than evaluation results.	Decisions sometimes based on evaluation results, though these still may support prior beliefs or assumptions.	Decisions more often based on evaluation results and sometimes are contrary to prior beliefs or assumptions.	Decisions always based on and driven by evaluation results.
Closure decisions made erratically due to politics, shifting priorities, or immediate resource needs (i.e., budget crises).	Closure decisions rarely based on results; more often based on politics, shifting priorities, or immediate resource needs (i.e., budget crises).	Closure decisions often based on results; sometimes politics, shifting priorities, or immediate resource needs (i.e., budget crises).	Closure decisions always based on results of evaluations; results generally immune to external influence.

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Performance Management

Target and Goal Setting

To what extent does the organization use data and analysis to set goals for system-level performance management?

BASIC	EMERGING	STRONG	EXEMPLARY
Few, if any, targets exist for schools/districts, departments, or organization as a whole. Targets that exist not established through data analysis.	Targets exist, but are unrealistic, immeasurable, or only input-based (i.e. # of meetings held).	Targets that exist are both input- and outcome-based (i.e., % of students at proficiency, % of students graduating within 4 years) but not always realistic, may be set too low, or are too numerous to inform priorities.	A limited number of targets exist and are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant, Time-Bound) targets set across the schools/districts, departments, or organization.
	Targets not consistent and even contradictory across levels (i.e., all schools or districts required to raise achievement by 2 points per year while agency target is 5 points per year).	Targets generally consistent across levels of the organization and cascade from the system level.	Targets consistent throughout levels of organization and function in cascading manner. A "balanced scorecard" is used to set targets (i.e., targets incorporate a diverse set of measures that may include student achievement, finance, operations, and human capital data).
Organizational stakeholders do not participate in target-setting process. Targets not presented to staff or leadership in agency.	Organizational stakeholders may participate in target-setting process, but targets not taken seriously by staff or leadership.	Organizational stakeholders participate in target-setting process, and are invested in meeting goals.	Organizational stakeholders participate in target-setting process with robust fact base. Meeting targets considered critical by staff and leadership
Target-setting process arbitrary,and unclear or unknown to most organizational stakeholders (executive, departmental, district or school-level leaders).	Target-setting process unclear to most organizational stakeholders.	Target-setting process generally clear to most organizational stakeholders.	Target-setting process clear and consistent across the organization.

Quality and Access to Organizational Data

To what extent are the organization's data and systems able to manage operations and track performance?

BASIC	EMERGING	STRONG	EXEMPLARY
Data not housed centrally; some data not housed at all; often reside mostly on paper or "rogue" spreadsheets.	Some data housed centrally, data often unreliable; generally reside in silos and difficult to assemble.	Data collected from a few different sources, but is somewhat easily linked by systems or staff members.	Data is reliable and majority is collected, stored, and reported via central database.
Appropriate data generally not available.	Some appropriate data available, not in timely manner or at correct level (i.e., school-level instead of student-level).	Appropriate data generally available in timely manner, at correct level, with appropriate tools to manipulate data.	Appropriate data always available in real time, at multiple levels, with ability to "cut" data multiple ways using appropriate tools to manipulate data.
Data is generally inaccessible or accessible only through a complex process.	Limited data access granted to a few individuals, but most data inaccessible, particularly to external users.	Data systems provide multiple users access, and data often shared with select external agencies.	Data is consistently accessible to most internal users and to relevant external users.
Available data often inaccurate and inconsistent data from different sources provides different answers for same question.	Available data sometimes inaccurate, and inconsistent data from different sources often provide different answers for same question.	Available data generally accurate and usually gives consistent answers for same question.	Available data are predominantly accurate and provide multiple users consistent answers for same question.

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Performance Data for Measurement and Monitoring

To what extent does the organization use outcomes to measure and monitor organizational performance?

BASIC	EMERGING	STRONG	EXEMPLARY
No clear set of expectations or measureable outcomes used for the performance evaluations that occur.	Evaluations of performance based on some expectations, but lack measurable outcomes.	Evaluations of performance based on expectations and measurable outcomes (e.g., student achievement, human capital, budget, and operations data).	Evaluations of performance based on clearly defined expectations and measurable outcomes from student achievement, human capital, budget, and operational data.
No performance management targets exist to monitor school, district, and/or department progress toward goal(s).	Performance management targets exist, but they are irregular and variable.	Performance management targets exist for repeated tasks.	Performance management targets exist and are based on rigorous analysis.
No formal review process.	Review processes in place, but occur infrequently.	Reviews of school, district, and/or department progress toward goal(s) conducted somewhat frequently using these targets.	Reviews of school, district, and/or department progress toward goal(s) conducted regularly and consistently.
If performance is monitored, the process is very unclear.	Target monitoring conducted but unclear; leaders know they are off track, but cannot articulate why.	Target monitoring is clear and includes initiatives to understand challenges to reach goals (i.e., root cause analysis and action planning).	Target monitoring clear, includes root cause analysis and action planning informed by sophisticated data analysis.
Little to no accountability systems in place.	Target monitoring exists, but accountability for meeting/missing targets not clear.	Accountability system in place and progress toward meeting/missing targets is basis for management conversations.	Accountability systems form the basis of all management decisions, and have active participation by senior leadership. Review of progress includes action-planning for interdepartmental and department/school/district dependencies.

Accountability and Decision-Making

To what extent is performance management used to inform decision-making and hold organizational members accountable for results?

BASIC	EMERGING	STRONG	EXEMPLARY
External stakeholders (public, community, parents, board members) have little understanding of what performance management processes exist.	External stakeholders have a limited understanding of performance management processes and work only minimally with policy makers to ensure relevance.	External stakeholders are somewhat collecting, reporting, and ensuring relevance of performance management information.	External stakeholders provide support collecting, reporting, and ensuring relevance of performance management information, and are well-informed about information's relevance.
No performance outcome information made public.	Little appropriate performance outcome information made public.	Some appropriate performance outcome information made public, but indigestible.	All appropriate performance outcome information is public and digestible.
Performance management information is not used to inform policy decisions.	Performance management information informs policy decisions on an ad hoc basis, often serving to support decisions already made by leadership.	Performance management information is routinely used for decision-making, but only in some areas of the organization.	Performance management information is used for decision-making across all levels of the organization and continuously engages senior leadership.
Closure decisions made erratically due to politics, shifting priorities, or immediate resource needs (i.e., budget crises).	Closure decisions rarely based on results; more often based on politics, shifting priorities, or immediate resource needs (i.e., budget crises).	Closure decisions often based on results; sometimes politics, shifting priorities, or immediate resource needs (i.e., budget crises).	Closure decisions always based on results of evaluations; results generally immune to external influence.

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Resource Allocation and Budgeting

Financial Planning and Strategy

To what extent does the organization employ a strategic approach to budget and financial planning?

BASIC	EMERGING	STRONG	EXEMPLARY
Financial planning not connected to strategy.	Financial planning focused on financial management, not agency's educational strategy.	Regular financial planning exists and considers educational strategy.	Financial planning process has clear, public priorities aligned to agency's education strategy.
Yearly budget planning process based mostly on external timelines and previous year expenditures.	Yearly budget planning process based on previous year expenditures, perhaps with some increment.	Yearly budget planning process robust, with horizon greater than one year.	Budget planning process multi-year, driven by strategy.
Little to no long-term financial planning or resource alignment.	Some regular long-term financial planning and resource alignment exists.	Long-term financial planning exists. Resource allocation based on educational strategy.	Long-term financial planning considers multiple revenue scenarios with clear action plans (i.e., what's added or cut) for each scenario. Resource allocation based on educational strategy.
Target-setting process arbitrary,and unclear or unknown to most organizational stakeholders (executive, departmental, district or school-level leaders).	Target-setting process unclear to most organizational stakeholders.	Target-setting process generally clear to most organizational stakeholders.	Target-setting process clear and consistent across the organization.

Processes for Budgeting and Spending Review

To what extent are the organization's budget and resource allocations driven by a clear and structured process?

BASIC	EMERGING	STRONG	EXEMPLARY
Program and policies enacted without consideration of costs or resource availability.	"Prioritized" or special budget allocations drive most program funding.	An established budgeting process rooted in a robust fact base drive decisions to fund programs and departments.	Formal budgeting process ranks initiatives in terms of relative importance.
There is no regular review process for spending.	Spending review process held sporadically.	Spending review processes held regularly.	Spending is periodically reviewed using departmental budgets with sophisticated financial analyses (e.g., zero-based budgeting or activity-based costing techniques).
Budget process involves only a few central office leaders.	Budget process highly centralized.	Budget process includes some information exchange between central offices and schools/departments.	Budget includes open communication of information between central offices and schools/departments.
Budget process understood only by a few central office leaders.	Budget process understood only by central office.	Budget process understood by central office and some	Target-setting process clear and consistent across the organization.

Use and Analysis of Financial Data	BASIC	EMERGING	STRONG	EXEMPLARY
To what extent does the organization use data and analysis to review and adjust budget allocations?	Line item additions and subtractions made ad hoc without fact base or reference to agency strategy.	Line item additions and subtractions made with little reference to agency strategy (but not ad hoc).	Line item additions and subtractions based on agency strategy.	Line item additions aligned to strategy and considered together, not individually.
	Budget requests made without evidence-based justification.	Budget requests made with evidence-based justification. Evidence is internal, however, and not benchmarked against best practices.	Budget requests made with evidence-based justifications, using internal and external benchmarking data.	Budget requests required and made with robust, evidence-based justifications.
	No attempts made to generate impact estimates for budget cuts or additions.	No attempts are made to evaluate relative impacts of individual budget proposals.	Impact estimates and justifications of individual budget proposals always provided.	Relative "return on investment" of requests considered and used to prioritize funding.
	Budget allocations inconsistent and inflexible. Small resource changes cause crises in the system.	Budget allocations largely driven by trend-chasing, leading to wide variations over time.	Budget allocations largely consistent and with little variation over time, but are somewhat inflexible and face barriers to be responsive to resource changes.	Overal funding strategy consistent and stable, but also flexible enough to rapidly respond to resource changes.

Accountability and Decision-Making	BASIC	EMERGING	STRONG	EXEMPLARY
To what extent does the organization consider data-driven outcomes to inform decision-making?	Departments and/or schools not held accountable for expenditures or outcomes.	Departments and/or schools seldom held accountable for expenditures or outcomes.	Departments and/or schools held accountable for both expenditures and outcomes – though the connection between the two is left implicit.	Departments and/or schools held accountable for both expenditures and outcomes; clear connections are made between the two.
	Financial reviews and reviews of departmental outcomes are not linked.	Financial reviews and reviews of departmental outcomes are somewhat linked.	Financial reviews are often linked to departmental outcomes and directly impact budgeting decisions made by both department heads and senior leadership.	Financial reviews are always linked to departmental outcomes and directly impact budgeting decisions made by both department heads and senior leadership.
	Budget allocations determined through political pressure or personal relationships.	Budget allocations rarely compare resources between programs and initiatives.	Budget allocations and required resources determined through fact-based analysis to allocate resources for programs and departments.	Budget allocations and required resources determined through fact-based analysis to allocate resources for programs and departments. Required resources explicitly budgeted and appropriately resourced via formal process.
	No public criteria to evaluate budget requests.	Public criteria to evaluate budget requests unclear.	Public can access clear decision-making process to include or exclude budget requests.	Clear public criteria to evaluate budget requests.