Center for Education Policy Research
HARVARD UNIVERSITY

STRATEGIC DATA PROJECT
HIGHER EDUCATION

STRATEGIC USE OF DATA RUBRIC **POSTSECONDARY EDUCATION**

The Strategic Use of Data Rubric for Postsecondary Education is a resource developed by the Strategic Data Project to provide direction and support to institutions 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 institution's strengths and challenges around data use. Using the rubric as a basis for gathering evidence of data use across the institution allows educational leaders to identify specific areas for improvement and highlight specific steps to move the institution toward using data more strategically.

CONSTRUCT	INDICATOR	RATING			
		BASIC	EMERGING	STRONG	EXEMPLARY
A) Institutional Strategy: To what extent does the institution use a strategic plan to organize program and initiative priorities?	*To what extent does the institution's strategic plan inform major initiatives?*	No strategic plan; or if 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.
	To what extent are the institution's various planning processes aligned and complementary?	Key institutional planning processes occur in silos and are not aligned.	Key institutional planning processes occur somewhat collaboratively and/or the institution has some plans that align.	Key institutional planning processes occur collaboratively, and most key plans align.	The institution has a clear process for aligning the strategic planning process with enrollment management plans, recruitment/ retention plans, academic program plans, etc.
	To what extent do the institution's major initiatives align with strategy?	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.
	To what extent is there an understanding of current efforts?	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.

Domain header: **DOMAIN I: Programs and Major Initiatives**

	To what extent is there effort to avoid duplication across programs?	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.

DOMAIN I: **Programs and Major Initiatives**					
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B) Goal-Setting: To what extent does the institution use data and analysis to set goals for programs and major initiatives?	*To what extent does the institution introduce major initiatives with goals aligned with the strategic plan?*	Major initiatives are introduced without outcome or implementation goals.	Major initiatives are introduced with established goals, but the goals are neither informed by analysis nor aligned with the strategic plan.	Major initiatives are introduced with goals, targets, and timelines; all aligned with the strategic plan.	Major initiatives are introduced with goals, targets, timelines, responsibilities, and dependencies; all are aligned with strategic plan.
	To what extent do targets and goals exist?	Targets and goals are non-existent.	Targets and goals exist but were not founded in evidence or analysis.	Targets and goals exist and were established from trend data and research.	Targets and goals exist and are both challenging and realistic. They have been established from trend data, research, and predictive analysis.
	To what extent are targets and goals connected to implementation, operational outputs, and outcomes?	Targets and goals are non-existent.	Targets and goals are not aligned to implementation, operational outputs, or outcomes.	Targets and goals are largely connected to implementation, operational outputs, or outcomes.	Targets and goals are always directly connected to implementation, operations, outputs, and outcomes.
	To what extent is there monitoring of progress and what does it entail?	No monitoring of progress.	Little monitoring of progress.	Monitoring of progress 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.

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C) Access and Use of Program Data: To what extent are data available and used to manage programs and inform decision-making?	*To what extent are data housed centrally and how reliable are they?*	Program data (e.g., pre-enrollment, enrollment, course taking, and course performance, and credit accumulation information, and financial aid) 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.	Almost all program data are housed centrally and reliable.
	To what extent are baseline data available and how consistently are they collected?	No baseline (pre-enrollment) data available.	Little baseline (pre-enrollment) data available or collected.	Baseline (pre-enrollment) data available but not consistently collected.	Baseline (pre-enrollment) data consistently collected before program start.
	To what extent is there analysis of student data and how does the analysis determine program adoption decisions and program priorities?	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.

	To what extent are student data available in a timely way that allows for proactive intervention?	Institution primarily relies on lagging indicators.	Institution relies largely on lagging indicators, with some attention to leading indicators.	Institution makes use of some timely leading indicators and sometimes uses these data to inform decision making.	Institution makes robust use of leading indicators in a timely way and uses them to proactively intervene with students in need of additional supports.
	To what extent has the institution built partnerships to access key longitudinal data (i.e. PK-12 district data, labor market outcome data, transfer data, etc.)?	Institution relies solely on internal data.	Institution relies primarily on internal data, with some access to aggregate PK-12 or labor market outcome data.	Institution has built some partnerships to access individual-level longitudinal data.	Institution has built robust partnerships to access individual-level longitudinal data.
	To what extent does the institution consider return on investment data when making key programmatic decisions?	Institution does not consider ROI or considers only internal/ institutional ROI of programs or initiatives.	Institution considers internal ROI but has only a rough idea of student or taxpayer ROI of programs or initiatives based on aggregate labor market data.	Institution considers internal ROI and has some sense of student and/or taxpayer ROI, based on individual-level labor market data.	Institution has rigorous models to identify not only internal ROI, but also student and taxpayer ROI, and uses these data to inform decision making.

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D) Program Management and Monitoring with Data: To what extent are data used to	*To what extent is there monitoring of program operations?*	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.

understand, manage, and monitor current program operations?	*To what extent is there an awareness of relevant research and use of it to make decisions?*	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.
	To what extent is there attention on results from prior programs?	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.
	To what extent are similar programs compared in terms of value to student outcomes?	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.

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E) Evaluation and Decision Making To what extent does the institution evaluate the outcomes of its programs and major initiatives?	To what extent do evaluation plans exist?	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.
	To what extent does the institution have a clearly articulated set of outcome metrics used to drive evaluations of programs and initiatives?	No clear set of outcome metrics and/or metrics vary by department, course, etc.	A key set of outcome metrics drive some evaluations of programs and initiatives.	A key set of outcome metrics drive most evaluations of programs and initiatives.	The institution has a key set of strong outcome metrics, aligned with institutional goals, that drive evaluations of programs and initiatives.

To what extent are outcome evaluations used to inform decisions to continue, expand, or terminate programs?	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 decisions to be periodically evaluated.
To what extent are decisions based on evaluation results?	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 and assumptions.	Decisions always based on and driven by evaluation results.

		RATING			
		DOMAIN II: **Performance Management**			
CONSTRUCT	INDICATOR	BASIC	EMERGING	STRONG	EXEMPLARY
A) Target and Goal Setting: To what extent does the institution use data and analysis to set goals for system-level performance management?	*To what extent do targets exist?*	Few, if any, targets exist for specific departments/programs, or institution 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 retained semester to semester, % of students completing credential in 2 years) but not always realistic (e.g., too low or too numerous to inform policy).	A limited number of targets exist and are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant, and Time-Bound) targets set across the institution's departments/programs.
	To what extent are targets consistent across levels of the institution?	No targets set.	Targets not consistent and even contradictory across programs/departments/institution (i.e., all programs required to increase enrollment by 2% per year while institutional target is 5% per year).	Targets generally consistent across institution and cascade from the system level.	Targets consistent throughout levels of institution's programs/ departments 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 enrollment, student success, finance, operations, and human capital data).
	To what extent is the target-setting process clear to institutional stakeholders?	Target-setting process arbitrary, and unclear or unknown to most *institutional* stakeholders.	Target-setting process unclear to most *institutional* stakeholders.	Target-setting process generally clear to most *institutional* stakeholders.	Target-setting process clear and consistent across the institution.
	To what extent do institutional stakeholders	Institutional stakeholders do not participate in target-setting process.	Institutional stakeholders may participate in target-	Institutional stakeholders participate in target-setting process with developing fact	Institutional stakeholders participate in target-setting process with robust fact base.

	participate in the target-setting process?	Targets not presented to staff or leadership in agency.	setting process, but targets aren't taken seriously by staff or leadership.	base and are invested in meeting goals.	Meeting targets considered critical by staff and leadership.

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B) Quality and Access to Institutional Data: To what extent are the institution's data and systems able to manage operations and track performance?	*To what extent are data collected, stored, and reported?*	Data not housed centrally; some data not housed at all; often reside mostly on paper or "rogue" spreadsheets.	Some data are housed centrally but generally reside in silos and is difficult to assemble.	Data collected from a few different sources but are somewhat easily linked by systems or staff members.	Data are reliable. Majority of data are collected, stored, and reported via central database.
	To what extent are data available?	Appropriate data generally not available.	Some appropriate data available, not in timely manner or at correct level (i.e., school-level instead of course or program-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.
	To what extent are data accessible?	Data are generally inaccessible or accessible only through a complex process.	Limited data access granted to a few individuals, but most data inaccessible to external users.	Data systems provide multiple users access, and data often shared with select external agencies.	Data are consistently accessible to most internal users and to relevant external users.
	To what extent are available data accurate and consistent?	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 provide different answers for the 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 the same question.

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C) Performance Data for Measurement and Monitoring: To what extent does the institution use outcomes to measure and monitor institutional performance?	*To what extent do performance management targets exist?*	No performance management targets exist to monitor institution, department and/or program 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.
	To what extent is there target monitoring?	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.
	To what extent is there a formal review process?	No formal review processes.	Review process in place but occurs infrequently.	Reviews of institution, department, and/or program progress toward goal(s) conducted somewhat frequently using these targets.	Reviews of institution, department, and/or program progress toward goal(s) conducted regularly and consistently.
	To what extent are evaluations of performance based on expectations and measurable outcomes?	No clear set of expectations or measurable 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 outcome, human capital, budget, and operations data).	Evaluations of performance based on clearly defined expectations and measurable outcomes from student outcome, human capital, budget, and operational data.

	To what extent do accountability systems exist?	Little to no accountability systems in place.	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).	Accountability systems form the basis of all management decisions and have active, cross-departmental participation by senior leadership.

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D) Accountability and Decision-Making: To what extent is performance management used to inform decision-making and hold institution members accountable for results?	*To what extent do external stakeholders provide support in the performance management process?*	External stakeholders (public, community, 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.
	To what extent is performance outcome information made public?	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.
	To what extent does performance management information inform policy decisions?	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 institution.	Performance management information is used for decision-making across all levels of the institution and continuously engages senior leadership.

	To what extent are program expansion/ closure decisions based on results?	Expansion/closure decisions made erratically due to politics, shifting priorities, or immediate resource needs (i.e., budget crises).	Expansion/closure decisions rarely based on results; more often based on politics, shifting priorities, or immediate resource needs (i.e., budget crises).	Expansion/closure decisions often based on results; sometimes politics, shifting priorities, or immediate resource needs	Expansion/closure decisions always based on results of evaluations; results generally immune to external influence.

DOMAIN III: **Resource Allocation and Budgeting**					
CONSTRUCT	**INDICATOR**	**RATING**			
		BASIC	EMERGING	STRONG	EXEMPLARY
A) Financial Planning and Strategy: To what extent does the institution employ a strategic approach to budgeting and financial planning?	*To what extent is financial planning connected to strategy?*	Financial planning is not connected to strategy.	Financial planning is focused on financial management, not institution's educational strategy.	Regular financial planning exists and considers educational strategy.	Financial planning process has clear public priorities aligned to institution's education strategy.
	To what extent is the yearly budget planning process driven by strategy?	Yearly budget planning process is based mostly on external timelines and previous year expenditures.	Yearly budget planning process is based on previous year expenditures, perhaps with some increment.	Yearly budget planning process is robust, with a horizon greater than one year.	Budget planning process is multi-year and driven by strategy.
	To what extent is there long-term financial planning and resource allocation based on educational strategy?	There is 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 is 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 is based on educational strategy.
	To what extent does the institution blend and braid funding from multiple sources to drive strategic priorities.	The institution makes no attempt to strategically blend/braid funds from multiple sources, where appropriate.	Institution sometimes seeks to blends/braid funds from multiple sources, where appropriate.	Institution regularly seeks to blends/braid funds from multiple sources, where appropriate.	Institution strategically blends and braids funding, where appropriate, to support programs and initiatives aligned to strategic priorities.
	To what extent is the target-setting process clear to institutional stakeholders?	Target-setting processes are arbitrary, unclear, or unknown to most stakeholders (department or program leaders).	Target-setting processes are unclear to most institutional stakeholders.	Target-setting processes are generally clear to most (but not all) institutional stakeholders.	Target-setting processes are clear and consistent across the institution.

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CONSTRUCT	**INDICATOR**	**RATING**			
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B) Processes for Budgeting and Spending Review: To what extent are the institution's budget and resource allocations driven by a clear and structured process?	*To what extent are program and policies enacted in accordance with a formal budgeting process?*	Program and policies are 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 drives decisions to fund programs and departments.	Formal budgeting process ranks initiatives in terms of relative importance.
	To what extent is there a regular spending review process?	There is not a regular review process for spending.	Spending review process is held sporadically.	Spending review processes is held regularly.	Spending is periodically reviewed using departmental budgets with sophisticated financial analyses (e.g., zero-based budgeting or activity-based costing).
	To what extent does the budget process include open communication between central administration and schools/departments/program?	Budget process involves only a few central administration leaders.	Budget process is highly centralized.	Budget process includes some information exchange between central administration and schools/departments/ programs.	Budget includes open communication of information between central administration and schools/departments/ programs.
	To what extent is the budget process clear and consistent across the institution?	Budget process is understood only by a few central office leaders.	Budget process is understood only by central office.	Budget process includes some information exchange between central offices and schools/departments.	Budget process is clear and consistent across the institution.

DOMAIN III: **Resource Allocation and Budgeting**					
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C) Use and Analysis of Financial Data: To what extent does the institution use data and analysis to review and adjust budget allocations?	To what extent are line item additions and subtractions based on institutional strategy?	Line item additions and subtractions are made ad hoc without fact base or references to institutional strategy.	Line item additions and subtractions are made with little reference to institutional strategy (but not ad hoc).	Line item additions and subtractions are based on institutional strategy.	Line item additions are aligned to strategy and considered together, not individually.
	To what extent are budget requests made with evidence-based justifications?	Budget requests are made without evidence-based justification.	Budget requests are made with evidence-based justification; however, evidence is internal and not benchmarked against best practices.	Budget requests are made with evidence-based justifications, using internal and external benchmark data.	Relative "return on investment" of requests are considered and used to prioritize funding.
	To what extent are budget allocations consistent, stable, and flexible?	Budget allocations are inconsistent and inflexible. Small resource changes cause crises in system.	Budget allocations are largely driven by trend-chasing, leading to wide variations over time.	Budget allocations are largely consistent, with little variation over time; however, they are somewhat inflexible and face barriers to be responsive to resource changes.	Overall funding strategy is consistent and stable but flexible enough to rapidly respond to resource changes.

DOMAIN III: Resource Allocation and Budgeting

CONSTRUCT	INDICATOR	RATING			
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D) Accountability and Decision-Making: To what extent does the institution consider data-driven outcomes to inform decision-making?	*To what extent are budget allocations and required resources determined through fact-based analysis?*	Budget allocations are determined through political pressure or personal relationships.	Budget allocations rarely compare resources between programs and initiatives.	Budget allocations and required resources are determined through fact-based analysis to allocate resources for programs and departments.	Budget allocations and required resources are determined through fact-based analysis to allocate resources for programs and departments. Required resources are explicitly budgeted and appropriately resourced via formal processes.
	To what extent does the institution consider return on investment in budget allocation decisions?	Institution does not consider ROI or considers only internal/ institutional ROI of programs or initiatives.	Institution considers internal ROI, but has only a rough idea of student or taxpayer ROI of programs or initiatives based on aggregate labor market data.	Institution considers internal ROI and has some sense of student and/or taxpayer ROI, based on individual-level labor market data.	Institution has rigorous models to identify not only internal ROI, but also student and taxpayer ROI, and considers these models when making resource allocation decisions.
	To what extent are financial reviews linked to departmental/programmatic outcomes and budgeting decisions?	Financial reviews and reviews of departmental/*programmatic* outcomes are not linked.	Financial reviews of departmental/ *programmatic* outcomes are somewhat linked.	Financial reviews are often linked to departmental/ *programmatic* outcomes and directly impact budgeting decisions made by senior leadership.	Financial reviews are always linked to departmental/ *programmatic* outcomes and directly impact budgeting decisions made by senior leadership.

To what extent is there clear public criteria to evaluate budget requests?	There are no public criteria to evaluate budget requests.	Public criteria to evaluate budget requests are unclear.	Public can access clear decision-making process to include or exclude budget requests.	There are clear public criteria to evaluate budget requests.
To what extent are departments and/or programs held accountable for both expenditures and outcomes?	Departments and/or programs are not held accountable for expenditures or outcomes.	Departments and/or programs are seldom held accountable for expenditures or outcomes.	Departments and/or programs are held accountable for both expenditures and outcomes, though the connection between the two is implicit.	Departments and/or programs are held accountable for both expenditures and outcomes; explicit connections are made between the two.