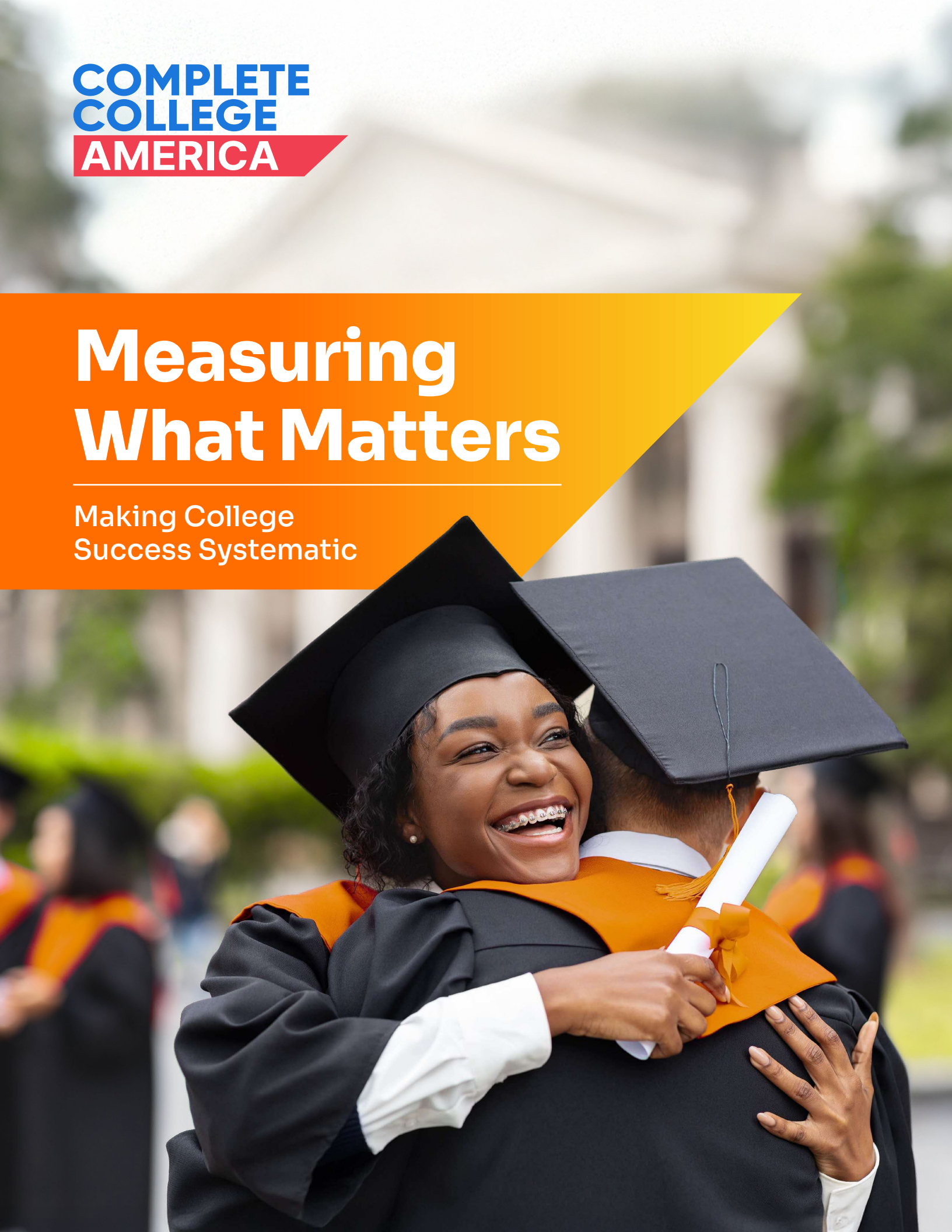
COMPLETE COLLEGE AMERICA

# Measuring What Matters

## Making College Success Systematic



# ABOUT COMPLETE COLLEGE AMERICA

The barriers to college completion are complex and intertwined. No one educator, department, institution, or state can solve them. Without a simultaneous and intersectional approach, those barriers will continue to rob all of us—educators, advocates, and students alike—of the life-changing benefits of a complete college journey.

Complete College America (CCA) builds movements for scaled change and transforms institutions. Since its founding in 2009, CCA has paired bold, innovative thinking with practical actions that colleges and policymakers can implement across every level of higher education. CCA's work centers on researching and testing education reforms, providing coaching and support, and advocating for change. Across these areas, CCA uses data to identify barriers and design successful strategies; aligns policy, perspective, and practice so complex systems operate effectively; connects experts to amplify their insights; and builds shared accountability. The organization is at the center of the broad CCA Alliance, which is driving change that works for every leader, every campus, and every system.



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COMPLETE COLLEGE AMERICA

# FOREWORD

Data are critical to understanding and supporting students' progression from early education into the workforce. We now have access to more data than ever, but when it comes to time to make decisions that improve outcomes for students, it can often feel as though we don't have the right data. That is why data experts and leaders from across the pre-K, K-12, postsecondary, and workforce sectors came together to create the Education-to-Workforce Indicator Framework, a comprehensive guide for how systems can measure and act on the data that matter most to help every student succeed.

However, the metrics that can help systems diagnose challenges, identify evidence-based strategies, and monitor the impact of those strategies are not always sufficient to inform the smaller, everyday actions that build up to outcomes for students. For example, the data that a district superintendent needs to develop a strategic plan and track progress against that plan can differ from the more detailed and frequent data that a teacher needs to effectively tailor and adapt instruction to each student. Yet both types of data are key to informing decisions that drive improvements in student achievement.

The measurement approach in *Measuring What Matters* can help bridge the data gap between policy and practice to ensure that decision-makers at all levels have the data they need to make progress on shared goals. The highlighted postsecondary metrics align with the Education-to-Workforce Indicator Framework while providing the type of fine-grained, real-time data that can inform the decisions made daily by college instructors, counselors, operational staff, and even parents and students themselves.

Other sectors should similarly continue to prioritize and standardize the measures that matter most at all levels for supporting students' journeys from early education through college and career. There has been significant progress in using data and evidence to make decisions that expand educational opportunity and support student success. But we know there is more work ahead. Thank you for picking up this framework and for your commitment to this goal.

**Naihobe Gonzalez**

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Lead Author, Education-to-Workforce Indicator Framework

# INTRODUCTION

Walk into any college president's office in America and you'll likely find a strategic plan that promises to transform student success. Strong strategic plans aren't just aspirational documents—they're often filled with concrete, evidence-based strategies that have worked at other institutions. The typical plan contains the greatest hits of higher education reform:

- Helping students choose the right academic path early
- Creating clear semester-by-semester road maps to graduation
- Providing extra support in challenging gateway courses like English and math

Dig deeper into strategic plans that have real detail and promise, and you'll find even more proven approaches.

Many colleges commit to helping students earn 30 credits in their first year, a milestone that dramatically increases graduation rates. They plan to reinvent academic advising, expand tutoring services, and ensure students can access basic needs like food and housing.

State systems often go further, setting ambitious targets for increasing the number of graduates in high-demand fields across colleges, universities, and systems, and eliminating long-standing gaps in graduation rates between students from different racial and household income backgrounds.

The strategies described in these plans aren't just good intentions—they're good ideas, backed by research and successful implementation elsewhere. Take corequisite support, where students take college-level courses while getting extra help, rather than being stuck in traditional remedial classes. Or meta majors, which group related academic programs together so students can explore career paths while staying on track to graduate. We know these strategies work.

At too many institutions, however, these carefully crafted plans gather dust on shelves.

**The problem isn't the strategies themselves or the desire of campus leaders and professionals to implement them. The problem is that colleges lack the tools to turn these plans into daily action.**

They don't have systems to measure whether their changes are working, from big-picture goals to daily progress markers. Without the right metrics and regular conversations about what the data show, even the most promising reforms fail to reach their potential.

Good intentions and good ideas aren't enough—colleges need good measurement systems to create real change or to **use data to drive action**.

Indeed, the higher education field's relationship with data has evolved dramatically over the past 20 years, but not enough. In the early 2000s, most colleges treated student success data as an afterthought, focusing almost exclusively on enrollment numbers. Few looked deeper into college completion metrics, let alone exploring nuanced institutional gaps in attainment by race, household income background, and other demographics. And those that did rarely went beyond basic retention and graduation rates. It was like trying to understand a complex story by reading only the first and last pages.

The 2010s brought progress, as colleges developed sophisticated tools to diagnose problems. They could identify where students struggled. Today, most work hard to pinpoint gaps in achievement between different student groups, so background does not become destiny.

**But diagnosis without treatment isn't enough.** Most colleges, universities, systems, and states still use data to describe problems rather than solve them. They create detailed maps of their challenges but never chart a course through them.

Today's challenges demand a more dynamic approach.

Every person at a college—from professors, to advisors, to operational staff—plays a role in student success. And everyone needs access to relevant, timely data to play their role effectively. Weekly metrics tracking program effectiveness, daily updates on student progress, and constant attention to institutional performance gaps aren't just nice-to-have features; they're essential tools for creating real change.

The key lies in transforming how colleges use these tools. Regular, structured conversations about data should become as routine as faculty meetings or budget reviews. These discussions must happen at the right time, with the right people, looking at the right reports. When done well, this approach allows colleges to spot problems early, adjust strategies quickly, and ensure that their carefully crafted plans deliver results for students.

## From lagging indicators to monitoring progress in real time

| | Completion movement is.. | Data depiction of student reality is.. | Ability to improve is... |
|---|---|---|---|
| 2000s | **Minimal**<br>College success is about going to college. | **Sparse**<br>Those dedicated to student success use retention and graduation rate data. | **Very low**<br>It is unclear what leading indicators predict retention and graduation. |
| 2010s | **About college success**<br>Focus on economic mobility and graduation rates. | **Diagnostic**<br>There is an understanding of completion failure, attrition, and gaps. | **Still low**<br>Most data are still used for describing reality rather than improving it. |
| 2020s | **Everyone's job**<br>Every function has a part to play in making systems change. | **Actionable**<br>Weekly measurement of student success metrics and reform metrics is in place. Performance gaps are key—morally and for basic management. | **High**<br>Regular, data-driven conversations on the right metrics and reports, at the right times, optimize implementation. |

Operationalizing a strategic plan requires working across three interconnected layers:

- **At the top, colleges connect their plans to key performance indicators**—those vital institutional metrics, like graduation rates, that show whether they're fulfilling their mission.
- **Below that layer sit the leading indicators that predict future performance**—the course completion rates and retention patterns that show months in advance if they're likely to hit the targets.
- **But the real engine of improvement lies in the third layer: real-time metrics paired with regular conversations about what they mean.** When advisors meet weekly to review registration data, when department chairs monitor course progress, and when leadership teams examine program effectiveness, these discussions turn abstract plans into concrete actions. And these actions, tracked through data that change daily, flow up through leading measures to eventually move the institutional key performance indicators (KPIs), or high-level metrics of overall success for a college, university, or system.

In this publication, Complete College America describes the various levels of metrics colleges need to track to have effective performance dialogues that create actual change on campus. This use of data will bring the good intentions of higher education leaders and professionals to fruition for students.

Complete College America has long prioritized the importance of using data. From past publications, such as *Using a Measurement System to Strengthen Student Success Reforms* and *Building on Completion Gains: Amplifying Progress and Closing Persistent Gaps*, to our professional development and workshop for campuses—including the annual Data Days event—we have been unrelenting in our emphasis on data for action. *Measuring What Matters* is the next step in helping campuses scale their data practices.

# Creating Strategic Plans That Drive True Institutional Progress

There are many systems, colleges, and universities with strong, detailed strategic plans. Many more, however, have documents that are labeled as strategic plans but function as glossy brochures and fundraising material rather than actionable road maps.

A strong strategic plan connects an institution's mission to measurable, specific outcomes—such as number of students completing their program of study—by detailing the concrete metrics, policies, reform efforts, and resources needed to achieve them.

Effective strategic plans are not static. Instead, they are working documents that outline exactly how many more students will graduate, how achievement gaps will shrink, and how graduates will meet workforce needs.

They also map out reforms and operations at a high level that will ultimately influence the daily work of professors, advisors, and staff members who will make these changes happen. They show how budget decisions, policy changes, and new initiatives connect to specific, measurable improvements in student success.

Strong strategic plans start with fundamental questions:

- What is our college's purpose?
- Who does our system or state agency serve?
- How will our university meet the unique needs of our time and place?

The answers begin with mission and vision—not just abstract statements about excellence, but clear declarations about what the college, university, or system intends to be and do in the world.

**But vision alone isn't enough.**

The best plans dive deep into reality, examining challenges and opportunities with unflinching honesty. A community college in a rural area that is losing population faces different challenges than an urban university in a growing tech hub. A regional public university serving mainly first-generation students needs different strategies than a statewide system trying to serve millions in a way that is greater than the sum of its university and college system parts.

Strong plans look at demographic trends, workforce needs, funding patterns, and technological changes. Most importantly, they examine what students need—not just to graduate, but to thrive in their careers and communities.

The initial review that informs the plan should be comprehensive and precise. It should cover everything that matters for student success but also organize these factors into distinct categories that don't overlap.

For example, a plan might include a category with measures of academic preparation. That category would include data about high school performance and college readiness, academic planning, caseload advising, and basic needs support in food and housing. It also would include an assessment of back-end operations and capacity to support those other factors, reporting on faculty resources, technology infrastructure, and finance.

Each category would get full attention, and together they would capture the complete picture of what drives student success. From this clear-eyed assessment come specific goals and priorities. These aren't vague promises to "enhance excellence" or "promote success." They're concrete targets, such as:

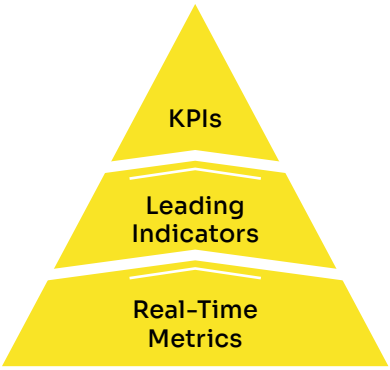
- Increasing the three-year graduation rate from 22% to 35%
- Cutting achievement gaps in half within five years
- Doubling the number of graduates in high-demand fields

Each goal comes with KPIs to track progress, and each KPI connects to specific projects and ongoing operations.

Take a university system trying to meet regional workforce needs. Its assessment reveals statewide shortages in healthcare workers, so the system establishes a goal of increasing nursing graduates by 40% over three years. The KPI is straightforward, but success requires coordinated effort across multiple universities.

In this example, projects outlined might include expanding clinical partnerships, hiring additional faculty, and creating new pathways for working nurses to earn advanced degrees. Each initiative needs careful tracking, noting data such as application rates, progression through prerequisite courses, and licensure exam pass rates.

**Good strategic plans will ultimately unfurl a cascade of metrics to operationalize the plan.**




- The top-level KPIs measure ultimate success, including metrics addressing graduation rates, workforce outcomes, and closing achievement gaps.
- Below these data sit the leading indicators that predict future performance, such as course completion rates, semester-to-semester retention, and student satisfaction scores.
- At the ground level are the real-time metrics that track daily and weekly progress, including class attendance, assignment completion, advising appointments, and registration rates.

This hierarchy of metrics, derived from strategic planning, allows colleges to connect daily operations to their highest aspirations. When all departments and programs know exactly how their work contributes to the broader goals, strategic plans become more than documents. They become frameworks for focused, coordinated action toward clear objectives.

# From Sporadic to Systematic: Assessing Metrics Maturity

A strategic plan-informed metrics hierarchy requires a measurement system that drives real change. This document uses a metrics tree to outline a measurement system.

The metrics tree helps colleges visually map the relationships between their KPIs, leading indicators, and real-time metrics. It showcases how measurable, actionable data points support high-level institutional goals.

But before diving into building its metrics tree, a college or university must know where it stands, taking inventory of its data culture and capabilities across three critical domains:

- How it designs and uses metrics
- How it structures conversations about data
- How these elements connect to create meaningful change

Based on a comprehensive assessment framework that examines everything from metric design to data-driven conversations, here's what Complete College America sees at most institutions:

### Metrics Design and Integration

- They have defined some outcome metrics but lack clarity in documentation.
- They have real-time data, but it isn't easily accessible to all who need it.
- They occasionally reference metrics in decision-making, but these metrics aren't fully integrated across departments.
- They rarely have systematic processes for reviewing and updating their metrics.

### Data-Driven Conversations

- Their data conversations happen sporadically rather than on a consistent schedule.
- Their departments and functional areas vary widely in their participation.
- They establish and document action items from data discussions, but follow-up is inconsistent.
- They rarely have systematic processes for reviewing and updating their metrics.

### Implementation and Problem-Solving

- They lack structured plans for implementing improvement actions.
- They allocate resources for improvement efforts reactively instead of strategically.
- They don't apply problem-solving methodologies consistently.
- They use cross-functional collaboration on performance gaps, but it isn't systematic.

**The good news is that many colleges have the basic building blocks in place**

They collect data, hold meetings about student success, and want to improve. The challenge lies in connecting these elements to create a cohesive system.

The usual gaps aren't in intention or capability. They're in consistency and integration.

The assessment in this report's Appendix is a roadmap for improvement. It shows where colleges need to strengthen their metrics, enhance their data conversations, and build stronger connections between measurement and action. Most importantly, it highlights the opportunity to transform occasional data use into a systematic approach to student success.

Assessment fatigue is real, but these assessments are critical if a college aims to establish an intentionally designed data framework that supports the institution's mission. Furthermore, continual assessment is necessary for ensuring that data efforts continue to align with the college's goals.

Closing the gap between where most colleges are and where they need to be isn't just about doing more with data. It's about doing it differently. The scattered metrics and sporadic conversations that characterize most institutions and systems today aren't just inefficient; they're insufficient for the scale of change higher education needs to achieve.

We need a more sophisticated approach that connects high-level goals to daily actions in a way that everyone at the college can understand and act upon.

This is where metrics trees come in. They're not just another management tool or data framework. They represent a fundamental reimagining of how colleges can organize their improvement efforts.

By creating clear lines of sight from institutional goals to daily operations, metrics trees do something surprisingly rare in higher education: They make abstract strategic plans concrete and actionable. This report shows how to build one.

# Designing a Metrics Tree

The journey to effective data-driven decision-making begins with a deceptively simple task: choosing what to measure. The most successful colleges approach this challenge systematically, recognizing that powerful KPIs emerge at the intersection of three critical elements:

- Strategic plans
- Proven best practices
- Existing reporting requirements

This alignment isn't just about efficiency—it's about creating a measurement system that drives real improvement rather than simply generating paperwork. The challenge lies in building a three-layer framework that connects high-level institutional goals to daily actions, transforming abstract strategic plans into tangible student success.

The first step might seem straightforward: Pick KPIs. But this task is often where colleges, universities, systems, and state agencies stumble. They either choose too many metrics, pick ones they can't reliably measure, or select indicators that don't align with how they're already required to report their performance.


The secret to choosing the right KPIs lies in finding the sweet spot between the three overlapping circles representing the strategic plan, proven best practices for KPI choice, and existing reporting requirements.

Start with the **strategic plan**. If a college commits to improving economic mobility for its region, it needs metrics that track not just graduation rates but also employment outcomes and earnings. KPIs should make the strategic plan's success measurable.

Otherwise, it's just wishful thinking.

Then, **for best practices in choice of KPIs**, it's helpful to keep in mind that combined decades of research from Complete College America and other organizations—like the Institute for Higher Education Policy and the Community College Research Center, for example—has identified the metrics that truly predict and reflect student success.

The Postsecondary Data Partnership from the National Student Clearinghouse, for instance, embeds many of these measures. It tracks proven predictors of graduation like credit accumulation rates, gateway course completion, and retention patterns. These data are helpful beyond the KPI layer, to choose predictors of college completion.

Then there's the reality of **reporting requirements**. Take graduation rates, for example. A community college might think tracking five-year completion rates for first-time students makes sense for its student population. But it's already required to report graduation rates to the federal government at 100%, 150%, and 200% of expected completion time, plus at two-year, four-year, six-year, and eight-year intervals.

Creating a separate five-year metric just adds complexity without adding insight, especially when accreditors and the media will focus on the standard measures anyway.

The quest for perfect KPIs becomes clearer with **specific examples**.

A regional public university that includes "increasing student success" in its strategic plan is one example. That's a worthy goal, but how should the university measure it? The challenge lies in the vague wording of "student success," a term that spans multiple meanings—from job placement to student engagement, or even overall well-being. Without a clear understanding of "success," a college would struggle to translate the aspiration into data-driven action.

By narrowing these broad goals into specific, trackable data points, universities can begin to transform strategic priorities into actionable change.

First, the university might want to track first-time, full-time, four-year graduation rates as a key metric. This measure aligns with the institution's strategic plan, which focuses on student success. It's also a proven metric; research consistently shows that faster time to degree correlates with higher completion rates and better economic outcomes. Additionally, the university already reports this data to the Integrated Postsecondary Education Data System (IPEDS), and accreditors reference the information.

Employment outcomes offer another example. If the university's strategic plan mentions workforce preparation, it might consider tracking median earnings after graduation. This metric appears in the College Scorecard, aligns with the growing national emphasis on economic mobility, and provides crucial information about the value of the university's degrees. And the institution should use existing state or federal methodology for measuring these earnings post-completion—specifically, how many years out—rather than creating its own formula.

When an institution identifies its KPIs at the sweet spot of strategic plans, best practices, and reporting requirements, the real work begins.

Think of each KPI as the top of a **three-layer pyramid**, with each layer operating on its own distinct timeline and driving different types of decisions.


**At the top sit the KPIs,** embedded in the strategic plan. These metrics, such as graduation rates and post-graduation employment outcomes, change slowly, often over years. Annual reviews of these measures inform big-picture decisions about institutional direction and major investments. When an institution's board or president asks about or seeks to share with others how well the college or university is serving students, these are the numbers they can use to tell the story.

KPIs must directly tie to student success reforms, to ensure those efforts lead to measurable progress. For example, a college implementing guided pathways might need to set a KPI that reflects students' progression through structured degree pathways. Possible selections include credit momentum, retention rates, and successful completion of gateway courses in the first semester.

Without defined connections, reforms risk becoming well-intended initiatives without clear measures of impact. **The middle layer, known as leading indicators**, tracks progress on student success reforms and tactics. These reforms and tactics are the specific strategies for moving those top-level metrics.

These metrics change each semester, helping the institution evaluate which approaches are working and which need adjustment. If a college or university has implemented corequisite support in math, for instance, it would track pass rates in those courses. If it's redesigned advising, it would monitor average, end-of-semester student-advisor contact rates and satisfaction scores. These metrics help in determining which projects to continue, adjust, or replace.

At the **bottom layer are real-time metrics**, the daily and weekly numbers that drive immediate action. These might include how many students have registered for the next term, which students missed their first week of assignments, or how many students attended tutoring sessions yesterday. The metrics change constantly and spark frequent, action-oriented conversations. When an advisor sees that a student hasn't registered for the next term, they can intervene immediately. When a department chair notices declining attendance in gateway courses, they can mobilize support services right away.

**The power of this three-layer system lies in its ability to connect long-term vision to daily action.** That advisor reaching out to an unregistered student isn't just clearing up an administrative issue; they're executing a strategic intervention that flows up through retention rates to ultimately affect graduation rates. Every daily action, informed by real-time metrics, builds toward semester-level and annual improvements in student success reforms, which in turn drive progress on institutional KPIs.

KPIs can influence one another, creating a chain reaction across categories. For example, by dividing KPIs into two broad categories, post-completion and completion, it becomes clear that post-completion metrics like employment outcomes depend on gradation metrics. And graduation metrics directly align with completion.

Additionally, some metrics appear in multiple categories. Retention is a prime example. As a leading indicator, retention directly impacts graduation rates, making it a key predictor of student success. However, because of its influence on overall institutional performance, institutions may identify retention as a KPI. This overlap highlights the importance of a structured data framework—a metrics tree—that accounts for how metrics interact and inform decision-making.

Running through an example top to bottom can help illustrate the point.

**At the top** in this example are post-completion success KPIs, the ultimate measures of whether a college is changing lives. These tell the complete story of what a college degree means:

- Are graduates continuing their education at four-year institutions?
- Are they landing good jobs with strong salaries?
- How much student debt are they carrying?

Some colleges even track broader impacts like health outcomes and civic participation, recognizing that education's ripple effects extend far beyond individual careers and affect the health and vitality of entire communities.

Completion metrics are stand-alone KPIs. But they also are directly beneath post-completion KPIs because post-graduation success depends on graduation itself. These completion metrics include:

- **Graduation rates, such as first-time, full-time students completing within 100% or 150% of expected time**
- **Six-year graduation rates for all students, regardless of enrollment status**
- **Total number of graduates, a point important to note for state goals**

**In the middle** layer are leading indicators, which change every semester and provide crucial insight into whether students are on track for success. Some leading indicators, like retention rates, are so predictive of student success that many colleges elevate them to KPI status.


Others key metrics in this layer include:

- **Credit momentum**—the percentage of full-time students earning 30 credits and part-time students earning 15 credits their first year
- **Pass rates** in gateway math and English courses, which signal early academic success
- **Credits earned vs. attempted**, an indicator of persistence and degree completion

However, there is more to this layer than academic progress. It also includes metrics that predict post-graduation success, such as:

- **Percentage of students in programs leading to above-median wages**
- **Number receiving Pell grants**
- **Average student loan burden**

These numbers change semester by semester, giving colleges regular checkpoints on both academic progress and future economic mobility.

## Tracking from KPI level to real-time metrics | Student success example

### Layer 1a: Post-completion success KPIs—Informs strategic plan

These include metrics that typically define college value, such as transfer after college completion, employment and earnings outcomes, debt after graduation, and non-economic outcomes. Examples:

- Employment in area of study
- Median wage (5 / 10 yr)
- Employment in state
- Transfer to next attainment level
- Civic and health outcomes
- Debt after graduation

### Layer 1b: College completion KPIs—Informs strategic plan

These include graduation rates and counts. Examples:

- 100% / 150% of completion time for first-time, full-time
- 6-year graduation rate, all students
- Total awards
- Total graduates

### Layer 2b: Leading indicators of college completion that inform student success reforms and tactics

These include common student success measures that change every semester. A few, like retention, are often KPIs as well. Examples:

STUDENT SUCCESS

- Retention
- Credit accumulation
- Math / English first-year
- Pass rates

VALUE

- % by program, tie to wage outcomes
- Average student loan
- Percent grant aid

At the bottom layer of the pyramid are real-time metrics: the daily and weekly numbers that fuel immediate action. These are the metrics that help institutions intervene before problems show up in their semester-level data. They can measure activities and trends like attendance patterns, advising session participation, and course engagement in learning management systems for faculty and students.

They're the daily, weekly, and bi-weekly pulse checks that make improvement possible. Understanding them requires recognizing three key principles:

- **They must connect directly to higher-level metrics to keep everyone focused on strategic goals.**
- **Sometimes they're simply more-frequent measures of KPIs and leading indicators.**
- **While they're the most important metrics for driving daily action, they're often the least tracked and discussed.**

Real-time metrics don't always follow a steady, continuous pattern. They can spike during critical periods during the academic year. For example, registration activity surges in the weeks leading up to the next term, making that period a critical time for tracking enrollment needs and identifying students at risk of stopping out.

But that doesn't mean institutions should ignore these metrics between peak periods. Tracking them in real time, even when they seem inactive, ensures institutions can respond immediately when sudden shifts occur—whether it's a drop in registration numbers, a spike in early course withdrawals, or an increase in advising requests. By staying proactive, colleges can anticipate challenges rather than reacting too late, and that ultimately can improve student outcomes.

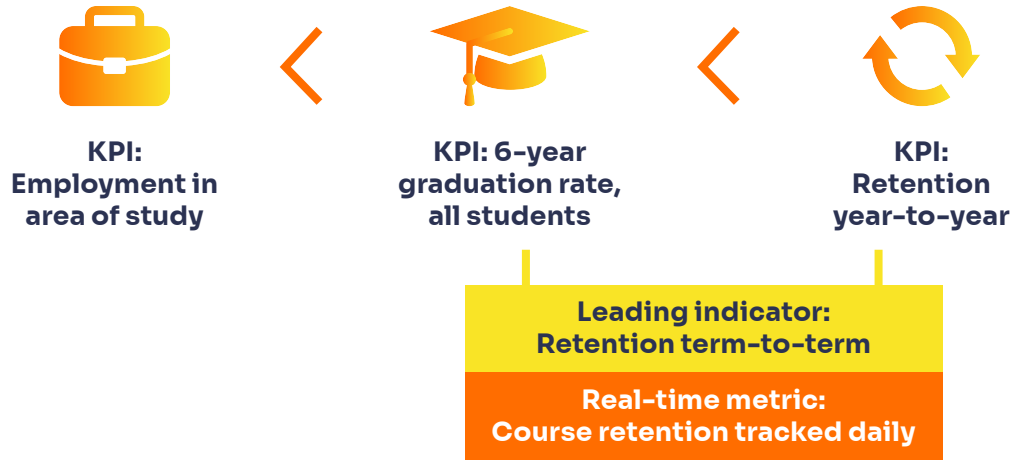
Real-time metrics fall into three distinct categories:

1. **Real-time KPIs and leading indicators**
2. **Student success reform measures**
3. **Operational metrics**

Real-time metrics don't operate in isolation. They are embedded within both KPIs and leading indicators, allowing institutions to track progress dynamically rather than wait for semester-end reports.

Retention is an example of this. It functions as a KPI, leading indicator, and real-time metric. Instead of treating this as an end-of-term metric, leading colleges track it daily during the current semester by:

- Monitoring which students have registered for the next term
- Watching registration patterns across different student groups
- Identifying and reaching out to students who haven't yet registered
- Tracking participation in registration-required activities like advising
- Tracking drop rates of individual courses, to monitor course retention rates



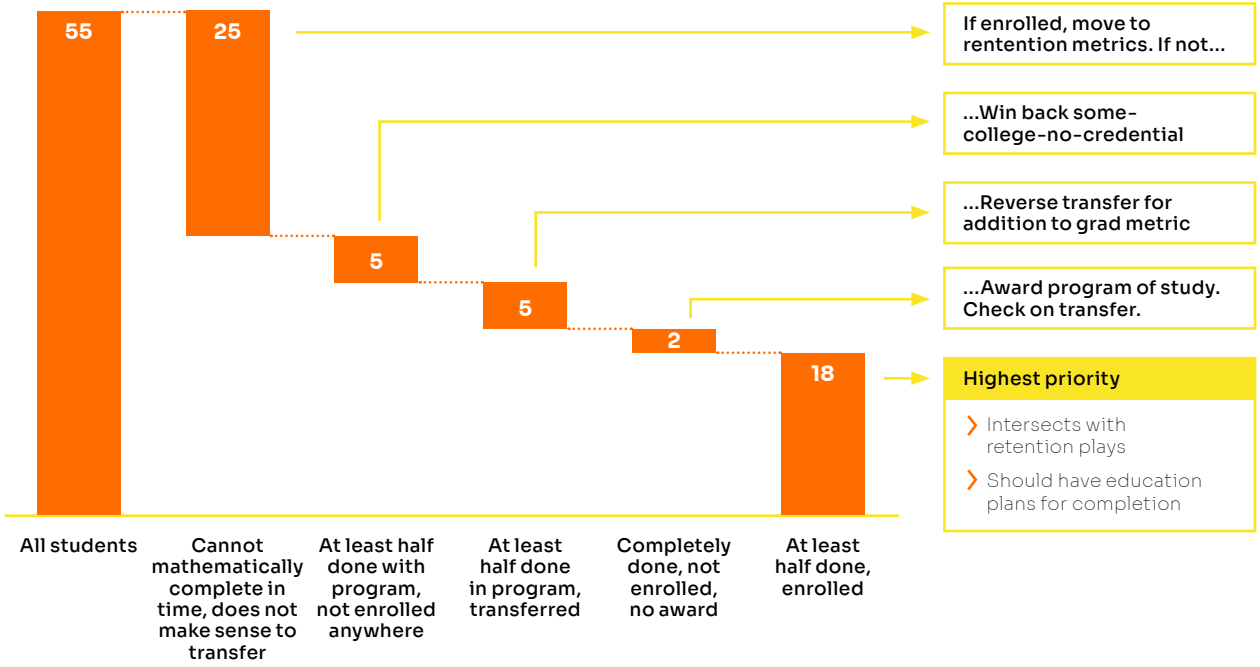

Institutions should track many of the most critical KPIs and leading indicators far more frequently than most realize. For example, they can measure **graduation rates** in real time, without waiting until graduation day. Right now, colleges and universities can forecast their 2026, 2027, and even 2028 graduation rates by:

- Counting students who've already completed (the numerator)
- Identifying students who could mathematically finish on time but aren't currently enrolled, or should reverse transfer credit, if possible, from a transfer destination (such as a student at a two-year institution who transferred to a four-year)
- Tracking which enrolled students are on pace to graduate
- Monitoring real-time performance through early alerts and course progress
- Finding students who've completed all requirements but haven't received their credential yet

The same approach works for tracking **total graduates**.

## Sample dashboard: Getting to smart metrics for completion management

### Perform degree audits in the tool of the institution's choice, or manually




Even dual enrollment, a key strategy for increasing college-going and college completion rates, is a metric that institutions can be track bi-weekly as high schools register their sophomores for junior year courses and juniors for senior year classes.

This real-time tracking also extends to post-completion success. Community colleges can work bi-weekly with four-year partners, for example, to track transfer enrollment. Universities can monitor graduate school acceptance and enrollment rates. The key is to transform what institutions think of as "annual" metrics into daily actionable data.

The second category of real-time metrics are those that track **student success reforms**, the proven strategies that boost completion rates. Every level of measurement, from KPIs and leading indicators to real-time metrics, reflects these efforts.

The real-time metrics indicate whether reforms are reaching students day by day. They provide insight into student behaviors, engagement, and challenges, allowing institutions to adjust their reform efforts in real time. Without real-time tracking, colleges risk delayed interventions, missing opportunities to provide support when students need it most.

By continuously monitoring these short-term indicators, institutions can ensure that long-term student success reforms translate to measurable progress. For example, guided pathways might set a KPI around graduation rates and track credit momentum as a leading indicator. Students are more likely to graduate when they follow clear, semester-by-semester academic plans.

But knowing this isn't enough. Colleges and universities need to track daily:

- **What percentage of students have fully prescribed academic plans**
- **How many are registering according to these plans**
- **Which students have deviated from their plans and need advising**

Student support services need equally careful tracking. For students deemed at-risk, colleges should monitor weekly:

- **How many students are flagged by early alert systems**
- **What percentage are enrolled in historically challenging course combinations**
- **Which students have GPAs that suggest academic difficulty**
- **How many at-risk students are receiving support services**
- **Whether support is reaching students quickly enough to make a difference**

Dual enrollment programs offer another rich source of real-time metrics. Beyond tracking enrollment numbers, leading colleges monitor:

- **How many dual enrollment students have created full college completion plans**
- **How many are engaging with college support services**

Community colleges can even track transfer pathways in real time. They can monitor:

- **Which students in transfer-focused programs have requested transcripts**
- **How many are meeting with transfer advisors**
- **Who's attending transfer partner information sessions**
- **What percentage of eligible students have submitted transfer applications**

These real-time metrics turn abstract reforms into daily actionable data, ensuring that strategies are reaching students instead of just existing on paper.

The third category of real-time metrics is **operational metrics**—the behind-the-scenes numbers that might seem mundane but, in reality, power everything else. These metrics track whether support systems are working as intended and reaching the students who need them.

Daily operational tracking should cover several key areas, as follows.

### Technology adoption and usage

- What percentage of advisors are using new career exploration tools
- How often they're using these tools in student sessions
- Which features they are using most effectively

### Faculty engagement and preparedness

- How many adjunct faculty have completed paid trainings
- Which departments are meeting professional development targets
- What percentage of faculty are using early alert systems

### Course availability and access

- Which sections have waitlists
- How quickly are waitlisted students getting into needed courses, or instigating new section creation
- What percentage of students are blocked from registration by prerequisites

Financial aid processes, particularly those associated with Satisfactory Academic Progress (SAP), require especially close monitoring. When students fail to meet federal SAP requirements—due to GPA, pace of completion, or maximum time frame for degree completion—they risk losing financial aid. This can quickly derail their education. Real-time tracking of SAP-related metrics should include:

- How many students received SAP holds this period, broken down by type of SAP violation (GPA, pace of completion, or maximum time frame to completion)
- What percentage of SAP-affected students have submitted appeals
- How many appeals are complete vs. missing documentation
- Average time between appeal submission and decision
- Approval rates

These operational metrics might not make headlines, but they're crucial for closing institutional performance gaps and improving completion rates. When these systems work smoothly, students can focus on learning instead of navigating institutional barriers. When they don't, even the best student success strategies can falter.

## Three aspects of real-time metrics to consider when defining interrelationships between them

- They must derive from post-completion and completion metrics to stay aligned to strategy and operations, approach, and student success reforms and other implemented projects.
- They sometimes are, in fact, the high-level metrics, just tracked as they progress toward the end of the semester, year, or other time frame.
- They are the most important measures because they define daily and weekly goals, but—outside of enrollment—they are also the least likely to be tracked, let alone discussed.

## Example: Real-time metrics

### KPIs and their leading indicators

- Dual enrollment
- Current students registering for next semester
- Registration and course success patterns for completion cohort / graduation rate cohorts
- Alumni in transfer destinations

### Student success reform indicators

- Percent of students on academic plans
- Percent of students with an at-risk profile meeting with assigned advisor
- Percent of dually enrolled students declaring a major
- Transcript requests

### Operational progress

- Percent faculty attending professional development for a given initiative
- Percent advisor use of new tool
- SAP appeals throughput
- Percent of sections with waitlists

In short, monitoring real-time metrics at multiple levels is foundational for meaningful improvement at the leading indicator and KPI levels. For example, proactive interventions based on real-time attendance tracking or early alerts can improve course retention. This in turn strengthens first-year credit accumulation and retention rates at the leading-indicator level. And this can improve retention rates and graduation rates at the KPI level.

However, movement in KPIs doesn't happen overnight, a point that emphasizes the importance of real-time metrics. Without ongoing tracking of real-time metrics, colleges are only reacting to problems after they appear in lagging data, rather than preventing those problems in the first place. By using real-time metrics to create a feedback loop, colleges can transform data into action, ensuring that student success reforms lead to measurable change at all levels.

In summary, building an effective measurement system requires colleges to carefully select KPIs that align strategic plans, proven best practices, and existing reporting requirements. Then those high-level KPIs connect with leading indicators and real-time metrics through a three-layer pyramid that drives actual improvement at the real-time metrics layer.

This approach ensures that every action, from an advisor reaching out to an unregistered student to a department chair monitoring gateway course success, ties directly to strategic goals. Implemented effectively, this system transforms abstract strategic plans into concrete daily actions that measurably improve student success, making data-driven decision-making a reality rather than just an aspiration.

## Data Dashboard Design: Define Metrics Before Data Collection

Once institutions determine their KPIs, leading indicators, and real-time metrics, they face a question that stops many colleges, universities, and systems in their tracks: Where will all this data come from?

Too often, institutions let data availability dictate their metrics, creating a backward system that measures what's easy rather than what matters.

The smarter approach flips this logic: First, decide what the institution needs to measure, and then figure out how to get the data. This approach allows colleges to build data systems that align with their strategic goals, rather than shaping goals around convenient data.

In many cases, however, this is easier said than done. Colleges often face significant challenges in data collection, due to outdated systems, siloed departments, or limited staffing.

Some critical metrics, like those tracking academic plan progress semester by semester, aren't automated and require manual tracking. Additionally, inconsistent data definitions can create confusion, making it difficult to compare and discuss information across different campus departments. Retention, for example, might have different definitions in Institutional Research (IR), student affairs, and academic advising, leading to misaligned conclusions and ineffective interventions.

Having **dashboards with consistent definitions** at all metric levels—featuring KPIs, leading indicators, and real-time metrics—facilitates productive, data-driven conversation. Without alignment, data loses its value, leading stakeholders to spend more time debating what the numbers mean than focusing on actionable items to improve student success.

Establishing a **data dictionary as a centralized source** for key metric and term definitions also ensures that alignment. Colleges should develop this resource with significant input from the IR team.

IR staff can verify that definitions align with national and state reporting standards. Additionally, this department can facilitate cross-functional conversations between academic affairs, student services, and administration, to build consensus around key terms and ensure that everyone is working from the same data framework.

While many essential metrics—such as completion rates and course registrations—already exist in student information systems or learning management platforms, **other crucial metrics might require more creativity and manual tracking**.

Institutions should consider tracking whether students are following semester-by-semester academic plans. Many advising systems can automate this tracking, but colleges without that technology also should monitor this information.

Institutions tracking this data manually can start with simple spreadsheets or advisor check-ins to monitor student progression on academic plans. This process may be labor intensive, but student success depends on tracking what truly matters, not just what is easiest to collect and track. The effort pays off by enabling institutions to make better-informed decisions that drive meaningful improvements.

Furthermore, when data are accurately tracked, colleges can demonstrate measurable progress to state agencies, accrediting bodies, and grant funders—often making those institutions more competitive for performance-based funding, state allocations, and external grants. Without precise data, colleges risk underreporting their progress, making it harder to justify funding requests or advocate for resources.

An intentional, metrics-first approach often reveals surprising truths. When colleges start manually tracking important metrics, they often generate internal pressure to find better solutions. That advising director, tired of maintaining spreadsheets, becomes a powerful advocate for investing in better tools. The manual process proves the metric's value, making it easier to justify technology investments later.

Conversations about metrics also will bring to light terms to include in the data dictionary. As teams review data weekly or monthly, they naturally will find data quality issues. For example, are departments defining "at-risk students" differently? Are withdrawal codes being used inconsistently across programs? These discussions become forums for improving not just performance but data quality itself. Over time teams will begin to standardize definitions, refine data sources, and build consensus around what matters most to measure.

**Start with what's available.** This iterative approach to data quality is far more effective than waiting for perfect data before acting. Perfect data are the enemy of good measurement.

Institutions should start with what they have, supplement that information with manual collection where needed, and let their regular data conversations drive continuous improvement in performance and data quality.

This pragmatic approach provides a natural path to the creation of dashboards, the most effective of which organize information around the core areas that emerge from a metrics tree. A strong dashboard system ensures that colleges use KPIs, leading indicators, and real-time metrics not only in tracking but also in driving institutional decision-making.

### Completion and Student Success

- Progress tracking for completion cohorts
- Daily / weekly retention patterns
- Credit accumulation rates by student group
- Gateway course success rates
- Early alert responses and outcomes
- Academic support service usage

### Enrollment Management

- Real-time recruitment funnel metrics
- Daily admission decision rates
- Registration patterns for continuing students
- Re-enrollment campaigns for stopped-out students
- Yield rates by program and student type

### Value and Economic Mobility

- Program enrollment distribution
- Loan burden by program
- Grant aid utilization rates
- Career service engagement

### Financial Effectiveness

- Budget variance tracking
- Strategic investment monitoring
- Student account holds
- Payment plan enrollment

The same "don't let perfect be the enemy" principle applies to dashboards. Effective dashboards do not necessarily require systems such as Tableau or Power Bi. To start, colleges can create basic views for data in the areas described here as well as in other areas.

Their dashboards might be simple tables or charts that update regularly, offering data such as daily registration numbers during enrollment periods, weekly course progress reports, and monthly retention tracking. The format matters less than the frequency and reliability of updates.

Next, institutions should add context that helps drive action. This requires more than just noting how many students are registered for next term. It also includes showing how the data compare to the same point last year, breaking the numbers down by student groups, and highlighting which programs are lagging.

In short, this context should make it impossible for viewers to look at the dashboard without seeing what needs attention. Key contextual elements include historical comparisons, peer benchmarks, goals and targets, and institutional performance gap analysis.

Finally, the best dashboards do more than inform—they become the foundation for action-oriented, data-driven conversations.

When used effectively, dashboards don't just reflect data. They evolve alongside institutional priorities and ensure data-driven, student-focused actions and reforms. A brief overview of this foundation is in this report's section "Stop Staring at Numbers; Start Talking About Change."

# Making Strategy Real: The Role of the PDP in Measurement Systems

Building dashboards can seem daunting, but institutions don't have to start from scratch. Many state systems provide high-quality dashboards that track some of the KPIs and leading indicators colleges identify for monitoring. The National Student Clearinghouse Postsecondary Data Partnership (PDP) is another source not only for dashboards, but also for analysis-ready files that colleges can use.

While daily and weekly data conversations drive immediate action, colleges need broader checkpoints to assess whether their strategies are working and their metrics still make sense. This is where the PDP plays a crucial role, offering quarterly or semi-annual insights that help institutions evaluate and refine their measurement systems and associated student success efforts.

Consider how this works in practice. A college might track daily registration patterns and weekly course success rates through its student information system (SIS), or through or dashboards that merge SIS data with other systems. But every quarter or semester, that college could turn to the PDP for a more comprehensive view that includes credit accumulation rates, gateway course completion, retention patterns, and transfer activity.

These metrics, standardized across institutions, help colleges see whether their daily and weekly actions are adding up to meaningful progress.

The connection to the three-layer measurement system described in this report is direct.

Take gateway course success, a common challenge for tracking. In the daily layer, advisors and faculty track attendance and assignment completion. Weekly, department chairs review current pass rates on assignments and exams, as well as drops. Quarterly or per-semester PDP reviews add crucial context: How do the final pass rates vary by race and ethnicity? How do they compare to similar institutions? Are students who pass these courses persisting to the next semester?

As another example, many colleges implement corequisite support for gateway math courses. Daily, they might track how many students attend supplemental sessions. The PDP allows them to examine longer-term patterns: How do these rates compare with peer institutions? Are completion gaps narrowing between different student groups? The answers might prompt adjustments to daily monitoring or even revisions to the college's KPIs.

It is this broader view that helps colleges evaluate whether their real-time metrics and interventions align with their strategic goals, so it is essential to pre-schedule these critical conversations at least twice per year, preferably for several hours of conversation and analysis.

The longitudinal aspect of the PDP's data collection combined with its access, momentum, and completion KPIs allow for trend analysis and evaluation of institutionally employed student strategies over time These data can be especially meaningful for tracking subgroup populations.

For example, if enrollment shows an increase in first-generation students, how are these students faring in the first year compared to the general population according to the early momentum metrics? And is this making a desired difference for the subgroup in the traditional measurements of retention and completion? These waypoints provide an institution with the ability to discern what additional clarity its data needs to facilitate informed and impactful decision. The PDP's Analysis-Ready files have data elements with which colleges can make this evaluation.

The PDP's standardized definitions and benchmarking capabilities make these reviews more productive. When colleges see that similar institutions achieve better results with certain student populations, it can prompt a deeper examination of their strategies. The PDP's disaggregation options—including race/ethnicity, Pell status, age, and enrollment status—help identify institutional performance gaps that might not be visible in day-to-day data. These options also assist institutions in quickly altering their student success efforts in a more targeted manner, without waiting to review six-year outcomes.

This tool also helps colleges connect their metrics to national best practices. The PDP includes metrics aligned with proven completion strategies, from credit accumulation targets to gateway course success rates. This alignment helps colleges evaluate whether their measurement systems capture the right leading indicators of student success.

**The PDP isn't a complete solution, however.** It works best as part of a broader measurement system that includes daily and weekly metrics. Its quarterly or semi-annual reviews complement, rather than replace, the regular data conversations that drive improvement. Additionally, the PDP doesn't capture many of the metrics that inform post-completion value outcomes, such as student engagement with support services or progress on career exploration. Those data require separate tracking.

The real value of the PDP lies in how it facilitates periodic strategic reviews. When leadership teams step back from daily operations to examine semester-level trends, the PDP provides structured ways to assess progress, identify gaps, and refine strategies. These reviews might lead colleges to adjust real-time metrics, reconsider leading indicators, or even update institutional KPIs.

This periodic recalibration is essential for maintaining effective measurement systems. Without regular strategic reviews informed by comprehensive data, colleges risk focusing on the wrong metrics or missing emerging challenges. The PDP provides a structured framework for these reviews, helping institutions maintain the connection between daily actions and long-term student success.

## PDP metrics, attributes, and benchmarks

| Metrics | Attributes | Benchmarks |
|---|---|---|
| Credit accumulation | First-time students / transfer in | State |
| Credit completion ratio | Cohort academic year and starting term | Public / private |
| Enrollment | Credential type sought | Two year/four year |
| Completion rates | Full time / part time | Carnegie classification |
| Gateway course completion | Dual enrollment | Historically Black College or University (HBCU) |
| Time to credential and credentials conferred | Summer enrollment | Hispanic-Serving Institution (HSI) |
| Within-term and term-to-term retention | Age band | Predominantly Black Institution (PBI) |
| Transfer activity | Race / ethnicity | Tribal College or University (TCU) |
| | Gender | Native American Serving Non-Tribal Institution (NASNTI) |
| | Pell grant status | Asian American and Native American Pacific Islander-Serving Institution (AANAPISI) |
| | GPA band | |
| | Math readiness | |
| | English readiness | |

# Stop Staring at Numbers; Start Talking About Change

Having the right metrics and sleek dashboards might feel like victory, but it's just the beginning.

Without regular, action-oriented conversations about what the numbers mean and what to do about them, even the most sophisticated measurement system is little more than digital wallpaper. The best organizations inside and outside of higher education understand this instinctively.

They know that data matter only when they drive decisions, and decisions improve outcomes only when they're made quickly, consistently, and at the right level.

The **Oakland Athletics** didn't revolutionize baseball only by finding better metrics, although their focus on on-base percentage, slugging percentage, and sophisticated, composite sabermetrics was revolutionary. The team found success by also reviewing statistics regularly instead of haphazardly or at season's end. Data informed every pitching change, defensive shift, and batting order decision. These practices helped them compete successfully against teams with three times their payroll.

The Oakland A's showed how the right metrics, reviewed at the right moments, could transform performance.

The **Mayo Clinic** offers another relevant example. It doesn't just track patient outcomes; it has built a system of leading indicators like satisfaction scores and readmission rates that predict those outcomes. The clinic reviews different metrics at different levels. Some practitioners might review daily patient feedback, for example, while others look at readmission patterns. Executives monitor outcome trends.

Each level has metrics that matter for its work, all connecting to the overall goal of better patient care.

Some **K-12 schools** also have embraced this approach to data measurement more fully than most colleges and universities and their systems and state coordinators. High-performing schools have built robust systems in which classroom-level metrics connect directly to schoolwide goals. Teachers review student progress daily, grade-level teams meet weekly to discuss intervention strategies, and administrators track monthly progress toward graduation targets.

These aren't just accountability measures. They're tools for immediate intervention when students fall off track.

The common thread? These organizations succeed not just because they have good metrics, but because they've built regular, action-oriented conversations around those metrics. They've made data part of their daily workflow, not just their annual reports.

### Oakland Athletics

- Devised better metrics for understanding performance, like on-base percentage, slugging percentage, and defensive efficiency.
- Used data for better in-game strategies to make the playoffs, against much wealthier teams.

### Mayo Clinic

- Uses metrics around patient satisfaction scores and readmission rates, including them as leading indicators for ultimate patient outcomes.
- Holds meetings on these measures at the right levels, with different KPIs being key for different parties, to move on the metrics above.


### K-12 Education

- Different national expectations influence not just funding levels, but also accountability metrics and conversations.
- Metrics connect the classroom to schoolwide KPIs.
- Performance dialogues are frequent at the teacher level.

Regular data-driven conversations create immense value.

First, they provide a structured forum where teams can spot problems and act quickly. When an advisor notices a pattern in registration delays during a morning meeting and implements a solution by afternoon, it creates a powerful lesson: We can see problems in our data and fix them immediately. This builds momentum for broader changes.

Second, these conversations signal a fundamental shift in how colleges operate. When teams see that an institution welcomes creative solutions steeped in evidence and that follow-through matters, it changes institutional culture. People start coming to meetings with data-backed ideas and concrete plans, not just observations and concerns. The focus shifts from explaining problems to solving them.

Finally, these conversations create demand for better tools and systems. When a department chair realizes their team needs more detailed course success data to make good decisions, or when advisors start asking for real-time registration alerts, they're not just requesting better dashboards. They're demanding better knowledge of student reality so they can improve upon it, more effectively and immediately.

But not all data conversations are equally effective. The best share several crucial qualities:

- **Clear Purpose:** Every conversation has a specific focus. Instead of trying to review every metric, teams zero in on the most pressing issues and opportunities.
- **Data-Driven Discussion:** Participants work from the same verified numbers, so debates focus on solutions rather than questioning the accuracy of the data.
- **Action-Oriented:** Each meeting produces specific commitments. Someone owns each action item, with clear deadlines and success metrics.
- **Constructively Critical:** Leaders balance support with challenge—creating an environment where participants ask tough questions, but teams feel empowered to solve problems.

**Making data conversations work requires orchestrating different discussions at different levels, each with its own rhythm and focus.** One way to think of it is as a cascade of conversations, each building on the others..

**At the ground level**, where daily decisions affect students directly, the conversations should be frequent and focused. An advising team might start each morning with five or 10 minutes of reviewing their dashboard of registration numbers, dividing up outreach tasks, and sharing what worked yesterday. These aren't just check-ins; they're tactical sessions that turn data into immediate action.

**One level up**, deans and directors need weekly or bi-weekly reviews. A dean of student success might meet every Monday with department heads to spot patterns across different service areas, reallocate resources where needed, and track whether last week's interventions made a difference. They're using the same dashboards as their teams, but they're looking for broader patterns that might need systematic responses.

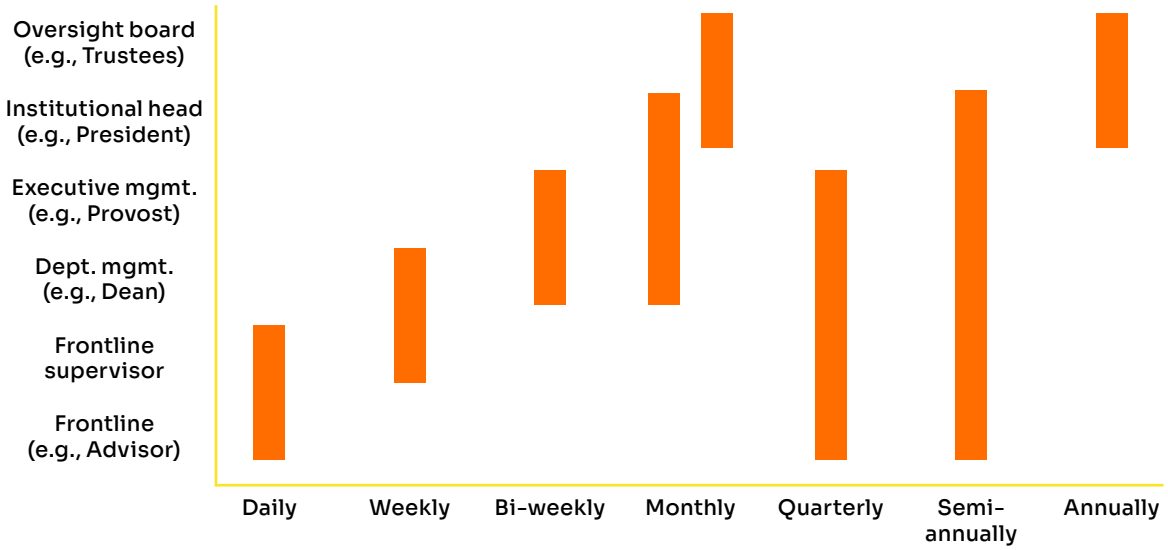
**In the next level**, vice presidents and other executive leaders need a different cadence, perhaps bi-weekly meetings that zoom out further to connect day-to-day patterns with institutional goals. In a university system, these conversations might happen simultaneously across multiple institutions, allowing leaders to spot systemwide trends and share successful interventions.

**At the top level**, presidents and chancellors need monthly, if not bi-weekly, touchpoints with these metrics in cabinet meetings. These discussions sometimes might include board members who can connect the data to broader strategic questions. These conversations often focus on whether short-term patterns suggest the need for larger strategic shifts.

Then there are **quarterly or semi-annual reviews**, when teams step back from real-time metrics to examine longer-term trends. This is where tools like the PDP become crucial, offering benchmarked data that shows how a college's efforts compare to peer institutions. These conversations inform bigger strategic decisions about which initiatives to scale up or wind down.

Finally, boards need **annual deep dives**, often at retreats, connecting all these layers of conversation to long-term strategic goals. While they're looking at the same core metrics, they're asking different questions: Are our strategies working at scale? Are we closing institutional performance gaps? Are we allocating resources effectively?

The key isn't following this exact schedule. Every institution needs to find its own rhythm. What matters is ensuring that each level of conversation connects to the others, creating a continuous flow of information and action from daily team meetings to annual board retreats. When done right, everyone sees how their piece fits into the larger puzzle of managing student success.



# Anatomy of Strong, Data-Driven Conversations

These conversations aren't casual check-ins. Each needs a rigorous structure, or a protocol for turning data into action. Whether it's a daily advisor huddle or a monthly presidential review, every data conversation should follow the same disciplined rhythm.

**It starts with accountability.** What actions did the group commit to in its last meeting? Who did what? What worked? What didn't?

This isn't about assigning blame; it's about building a culture where commitments matter, and everyone learns from successes and setbacks.

**The next step is to dive into the metrics that need attention.** This includes celebrating the wins while also, more importantly, focusing on the flags—the concerning trends and the gaps that need closing. Each troubling data point calls for making a clear choice: The group must determine that it needs more information to understand what's happening (and a specific plan to get that information). Or it must change something—such as a process, a policy, or an intervention strategy—to drive different results.

Those attending each meeting should keep a running list of longer-term projects and investigations. Maybe the group noticed a pattern that needs deeper analysis, or perhaps it's testing a new approach that needs time to show results. These items need regular check-ins to ensure they don't get lost in the daily rush.

Each meeting should end with crystal clear commitments: Who's doing what before the next conversation? What specific metrics will show whether those actions are working? When, exactly, will the group check in on progress?

This structure might feel rigid at first, but it serves a crucial purpose: It prevents these conversations from becoming what too many higher education meetings become: interesting discussions that don't lead to action. When everyone knows the protocol, meetings stay focused on what matters: turning data into decisions that help more students succeed.

Even the best-structured conversations can drift into routine status updates if teams don't know how to solve the problems their data reveal. Having good metrics and regular meetings isn't enough. Institutions also need systematic approaches to turn insights into solutions.

There are many problem-solving techniques that can help teams get from information to insight, and from insight to action.

**For example, the "Five Whys" technique cuts through symptoms to find root causes.** Consider college staff who note during a weekly meeting that fall-to-spring retention rates for first-year students are lower. Why?

Because many students, in this example, have registration holds that prevent them from enrolling. Why?

Because they haven't met with their advisors to plan their spring schedules. Why?

Because students report they can't find appointment times that work with their schedules. Why?

Because advising hours are available only during traditional business hours, when many students are in class or at work.

Now instead of seeing only a retention problem, the college has identified a specific operational issue to fix: Advising availability doesn't match student needs, and a hold that may be unnecessary is blocking registration.

The solution might involve adding evening hours, creating virtual appointment options, or restructuring advisor schedules to provide more flexible meeting times. It also could include getting rid of the hold for most, if not all, students.

The power of this technique is how it transforms a high-level metric—in this case, retention rates—into an actionable problem set with clear solutions. Without drilling down, the college might have tried generic retention solutions, like sending more reminder emails or offering registration incentives, that miss the real barrier keeping students from returning in this case.

**Another example, the 80/20 rule, helps teams focus on what matters most.** Perhaps in one system of community colleges, deans of instruction analyzing their gateway course data during a bi-weekly meeting discover that 80% of the colleges' first-year course drops came from just 20% or fewer of their class sections.

The deans narrow that 20% down to certain time slots and modalities. Students taking 8 a.m. classes or compressed schedule evening sections are failing at much higher rates than those in mid-morning or afternoon sections.

By focusing on restructuring these specific time slots—adjusting course lengths, adding more support services during these hours, and being more selective about which faculty teach at these times—they significantly improve overall pass rates without having to overhaul their entire course schedule.

This is the power of the 80/20 rule: It helps institutions avoid the trap of trying to fix everything at once. Instead of launching a collegewide initiative on course success, these colleges could focus their energy on the specific sections in which students were struggling most. The result is faster improvement with less resistance to change.

**A third example is process mapping. This technique reveals hidden barriers and opportunities.** Georgia State University, for example, used this technique to examine why some admitted students never registered for classes. By mapping every step from admission to registration, the university discovered that immunization record requirements were creating unexpected delays. The institution's solution was to offer on-site immunization, removing a barrier that no amount of advising or reminder emails could have fixed.

The key to successfully using these and other techniques for productive discussion is making them part of regular data conversations. When someone raises a concern about student success rates, teams should automatically ask "Why?" five times. When discussing registration bottlenecks, someone should sketch out the process flow. These problem-solving tools are the difference between meetings that identify problems and meetings that solve them.

# From Measurement to Movement: The Future of Student Success

The path to transforming higher education runs through better measurement systems, but the most sophisticated metrics and beautiful dashboards accomplish nothing if they don't drive action.

What distinguishes truly successful institutions isn't just what they measure; it's how they use those measurements to create change. The three-layer measurement system described in this document provides the architecture for improvement:

Regular, structured conversations about these metrics bring them to life.

This approach represents a fundamental shift in how colleges operate. Instead of treating data as something to report annually, leading institutions are making them the foundation of daily decisions.

They're not just collecting metrics; they're using them to spot problems early, test solutions quickly, and scale what works. Most importantly, they're democratizing data access, ensuring everyone—from board members of a state higher education agency to frontline advising staff at a college—understands how their work connects to student success.

The challenge today isn't technical. Institutions know what to measure and how to measure it. The challenge is cultural. It's about building organizations where data drive decisions, where problems trigger immediate action, and where everyone sees their role in student success.

The institutions that master this challenge don't merely drive data-driven decision-making. They redefine what's possible in higher education.

**Complete College America stands ready to continue helping institutions, systems, and states set up the structures, policies, and practices that they will need to measure student success and truly move the needle on college completion on a campus, system, and national level.**

APPENDIX

# Assessment Tool

| Component | Sub-Component | Score 1 | Score 2 | Score 3 | Score 4 | Score 5 |
|---|---|---|---|---|---|---|
| **Outcome and Process Metrics** | Clear definition and documentation of outcome metrics | There is no clear definition or documentation of outcome metrics. | Few outcome metrics are defined, and documentation is incomplete. | Outcome metrics are partially defined but lack clarity or alignment with goals. | Most outcome metrics are well defined, with some minor gaps in documentation. | All outcome metrics are clearly defined, documented, and aligned with institutional goals. |
| **Outcome and Process Metrics** | Comprehensive tracking of both student success and institutional process metrics | There is no tracking of student success or process metrics. | There is minimal tracking of metrics; data is outdated or rarely reviewed. | Tracking exists but lacks consistency and integration into decision-making. | Metrics are tracked, but some data or processes are not regularly analyzed. | Both types of metrics are comprehensively tracked, analyzed, and integrated into decision-making. |
| **Outcome and Process Metrics** | Availability and ease of access to real-time data | There is no access to real-time data. | There is limited availability of real-time data, and it is not regularly updated. | Real-time data is available but requires specific access or technical expertise. | Real-time data is available but not easily accessible to all. | Real-time data on metrics is easily accessible to all stakeholders. |
| **Outcome and Process Metrics** | Regular review and updating of metrics | There is no review or updating of metrics tree. | There is little to no review or updating of metrics tree. | Review is infrequent, and updates are made on an ad-hoc basis. | Metrics are reviewed frequently but updated irregularly. | Metrics are reviewed and updated regularly (e.g., quarterly) based on institutional changes and goals. |
| **Outcome and Process Metrics** | Institution-wide integration of metrics into executives' and board's decision-making | Metrics are not used in institutional decision-making. | Metrics are only occasionally referenced in decision-making. | Some departments use metrics, but there is no institution-wide integration. | Metrics are integrated into decision-making but not consistently across all departments. | Metrics are fully integrated across all departments and consistently guide strategic decisions. |
| **Understanding the Drivers of Outcomes** | Identification and documentation of the primary factors influencing student outcomes | There is no identification or documentation of key drivers. | Few key drivers are identified, and there is little documentation. | Key drivers are partially identified but not fully documented or understood. | Most key drivers are identified and documented, but there are gaps in understanding. | All key drivers are identified, documented, and understood across the institution. |
| **Understanding the Drivers of Outcomes** | Evidence of data-driven decisions based on identified drivers | There is no evidence of data-driven decisions based on key drivers. | Few decisions are based on data, with little consideration of key drivers. | Some data-driven decisions are made, but they are not consistent or systematic. | Data-driven decisions are made frequently but not always directly linked to key drivers. | Data-driven decisions are regularly made, with clear evidence linking decisions to key drivers. |
| **Understanding the Drivers of Outcomes** | Use of data analytics to predict future outcomes based on current drivers | There is no use of data analytics to predict future outcomes. | There is minimal use of data analytics; predictions are rare or unreliable. | Some data analytics are used, but the process is not systematic. | Data analytics are used, but the predictions are not consistently accurate. | Advanced data analytics are used to consistently predict outcomes and adjust strategies. |

| Component | Sub-Component | Score 1 | Score 2 | Score 3 | Score 4 | Score 5 |
|---|---|---|---|---|---|---|
| **Understanding the Drivers of Outcomes** | Periodic cross-functional review and updating of outcome drivers | There is no review or updating of outcome drivers. | Outcome drivers are rarely reviewed or updated. | Reviews are irregular, and updates are made reactively. | Outcome drivers are reviewed but not consistently updated. | Outcome drivers are reviewed and updated on a regular, scheduled basis. |
| **Disciplined Implementation of Improvement Actions** | A structured, organization-wide plan for implementing improvement actions | There is no structured plan for implementing improvement actions. | Improvement actions are implemented ad-hoc with minimal planning. | A plan exists, but it is incomplete or inconsistently applied. | A structured plan is in place but not fully implemented across all departments. | A comprehensive, structured plan exists and is consistently followed across the organization. |
| **Disciplined Implementation of Improvement Actions** | Accountability mechanisms at all levels to monitor progress | No accountability mechanisms are in place. | There is little accountability for progress on improvement actions. | Some accountability exists, but monitoring is sporadic. | Accountability mechanisms exist but are not consistently enforced. | Clear accountability structures exist, with regular monitoring and reporting. |
| **Disciplined Implementation of Improvement Actions** | Allocation of necessary resources to support improvement actions | No resources are allocated to support improvement actions. | Minimal resources are allocated, limiting the impact of improvement actions. | Resources are allocated on an ad-hoc basis and are often insufficient. | Resources are allocated but not always sufficient to meet needs. | Resources (staff, funding, time) are consistently allocated to support improvement efforts. |
| **Disciplined Implementation of Improvement Actions** | Use of feedback loops for continuous refinement | No feedback loops are in place for refining improvement actions. | Minimal feedback is collected, and refinement is rare. | Feedback is sporadically collected, with limited refinement of actions. | Feedback is collected but not consistently used for refinement. | Continuous feedback is collected and used to refine improvement actions in real time. |
| **Disciplined Implementation of Improvement Actions** | Transparent communication of progress on improvement actions | There is no communication of progress on improvement actions. | There is little communication of progress, leading to a lack of transparency. | Communication of progress is irregular or limited to certain groups. | Progress is communicated but not consistently or transparently to all stakeholders. | Progress on improvement actions is communicated transparently to all stakeholders. |
| **Training** | Regular provision of training programs for all staff, specifically focused on performance dialogues and root-cause problem solving | No formal training programs are in place. | Minimal training is offered, and not all staff have access. | Training is available but inconsistent in frequency or reach. | Training programs are available but not regularly offered to all staff. | Comprehensive training programs are offered regularly to all staff. |
| **Training** | Integration of standard problem-solving methodologies in the training | No problem-solving methodologies are included in training. | There is limited mention of problem-solving methodologies in training. | Problem-solving methodologies are mentioned, but not fully integrated into training. | Most training programs include problem-solving methodologies, but not comprehensively. | All training programs include thorough instruction on problem-solving methodologies (Lean, Six Sigma, etc.). |
| **Training** | Participation rates in training programs | There is very minimal or no participation in training programs. | Participation rates are low (less than 50%). | There is moderate participation (50-75%), with some departments underrepresented. | Participation rates are strong (75-90%) but vary between departments. | There are high participation rates (over 90%) across all departments. |
| **Training** | Application of skills learned in training | There is no evidence that training is being applied in the workplace. | There is little evidence of skills learned being applied in practice. | Skills are applied sporadically, with inconsistent results. | Most skills are applied, but some gaps remain in certain areas. | Skills learned in training are regularly applied and visible in daily operations. |

| Component | Sub-Component | Score 1 | Score 2 | Score 3 | Score 4 | Score 5 |
|---|---|---|---|---|---|---|
| **Training** | Evaluation of training programs' impact | There is no evaluation of training program impact. | There is minimal evaluation of training programs. | Some evaluation is conducted, but the process is informal and inconsistent. | Training programs are evaluated, but follow-up improvements are infrequent. | The impact of training is regularly evaluated and leads to continuous improvement of the programs. |
| **Infrastructure** | Availability and user friendliness of dashboards and tools | No dashboards or tools are available. | Dashboards exist but have significant usability issues or highly limited access. | Dashboards are available but not widely used due to usability concerns. | Dashboards are available but may not be fully optimized for ease of use. | Dashboards are readily available and highly user friendly for all stakeholders. |
| **Infrastructure** | Accuracy and timeliness of data presented | No relevant data are presented or used. | Data are outdated and rarely accurate. | Data are occasionally inaccurate or outdated. | Data are accurate but may have slight delays in updates. | Data are consistently accurate, updated in real time, and used by all stakeholders. |
| **Infrastructure** | Customization of dashboards to meet departmental needs | No customization of dashboards is possible. | Dashboards are generic, with no customization available. | Limited customization options are available for dashboards. | Some customization is available, but not all departments have tailored dashboards. | Dashboards are fully customizable and tailored to the specific needs of each department. |
| **Infrastructure** | Capacity of dashboard infrastructure to scale | There is no capacity for scalability. | Infrastructure struggles to scale and faces regular performance issues. | There is limited scalability; the infrastructure may not handle significant growth. | Infrastructure can scale but may require additional resources or adjustments. | Infrastructure is highly scalable, allowing for growth in usage and complexity. |
| **Performance Dialogues** | Frequency and consistency of performance dialogues, from frontline to governing boards | There are no formal performance dialogues in place. | Performance dialogues occur rarely and without regularity. | Dialogues occur but are infrequent or inconsistent across the organization. | Dialogues are frequent but may vary in consistency between departments. | Performance dialogues occur frequently and consistently across all levels of the organization. |
| **Performance Dialogues** | Active participation in performance dialogues | There is no participation in performance dialogues. | Few staff participate in performance dialogues. | Participation is inconsistent, with only some departments engaged. | Most staff and leadership participate, with occasional absences. | All staff and leadership actively participate in performance dialogues. |
| **Performance Dialogues** | Use of data in performance dialogues | No data is used during dialogues. | No data is used during dialogues. | Data is referenced occasionally but is not central to discussions. | Data is used in most dialogues but not consistently in every meeting. | Data is central to every performance dialogue, driving decisions and actions. |
| **Performance Dialogues** | Alignment of mission, objectives, and institutional metrics | There is no alignment between goals and institutional metrics. | There is limited alignment of goals with institutional metrics. | Some alignment exists but is inconsistent across departments. | Goals are mostly aligned but with some gaps in certain areas. | Individual and department goals are fully aligned with institutional performance metrics. |
| **Performance Dialogues** | Documentation and follow-up on action items | There is no documentation or follow-up on action items. | There is little documentation or follow-up on action items. | Action items are documented sporadically, with minimal follow-up. | Action items are documented, but follow-up is inconsistent. | Action items are well documented, and follow-up is systematic and thorough. |

| Component | Sub-Component | Score 1 | Score 2 | Score 3 | Score 4 | Score 5 |
|---|---|---|---|---|---|---|
| **Role-Modeling** | Leaders' regular use of performance management tools (dashboard, structured agendas, etc.) | Leaders do not use performance management tools. | Leaders rarely use performance management tools. | Leaders use tools occasionally but not as a regular part of their workflow. | Leaders frequently use tools but not consistently across all situations. | Leaders consistently use tools in everyday decision-making and communication. |
| **Role-Modeling** | Visibility of role-modeling behaviors | No role-modeling behaviors are evident. | There is little visibility of role-modeling behaviors. | Some leaders exhibit role-modeling behaviors, but it's not widespread. | Role-modeling is visible in most leaders but may be inconsistent. | Role-modeling behaviors are highly visible across all levels of leadership. |
| **Role-Modeling** | Encouragement from leadership to engage in performance dialogues | There is no encouragement from leadership. | There is minimal encouragement from leadership. | Occasional encouragement is given but lacks follow-through. | Leaders provide some encouragement but are not consistent. | Leadership actively encourages and supports staff engagement in performance management. |
| **Role-Modeling** | Incentives or recognition for contributing to improvements | There is no recognition or incentive system. | There is little recognition or incentive for contributions. | There is some informal recognition but no formal system in place. | Recognition or incentives are available but not regularly applied. | There is regular and formal recognition or incentives for staff who contribute to performance improvements. |
| **Role-Modeling** | Rates of staff adoption of performance management practices | There is no adoption of performance management practices. | There are low adoption rates of performance management practices. | There is moderate adoption of practices, with some departments lagging. | Adoption rates are strong but vary between departments. | There are high adoption rates across all departments, driven by leadership's example. |
| **Human Resources (HR) Implications** | Link between performance management and HR outcomes (promotion, raises, rewards, etc.) | There is no link between performance management and HR outcomes. | There is minimal connection between performance management and HR outcomes. | The link is occasionally made but lacks consistency. | A link exists but may not be uniformly applied across all areas. | There is a strong, clear link between performance management engagement and HR outcomes. |
| **HR Implications** | Integration of performance metrics into employee evaluations | No performance metrics are used in employee evaluations. | There is little use of performance metrics in evaluations. | Some metrics are referenced in evaluations, but they're not central to the process. | Metrics are used in evaluations but may not be consistently applied. | Performance metrics are a key part of employee evaluations and development plans. |
| **HR Implications** | Communication of expectations during recruitment | There is no communication of performance management expectations during recruitment. | There is minimal communication of performance expectations during recruitment. | Some communication of expectations occurs during recruitment, but it's unclear or inconsistent. | Expectations are communicated during recruitment but may not be consistently reinforced during onboarding. | Performance management expectations are clearly communicated during recruitment and onboarding, with regular follow-up. |
| **HR Implications** | Recognition systems | There is no recognition or reward system in place. | There is little to no formal recognition or reward for contributions. | Informal recognition occurs but lacks a structured reward system. | Recognition and reward systems are in place but may not be consistently applied across all departments. | A formal, well-defined recognition and reward system is in place, with frequent acknowledgment of contributions to performance improvements. |

| Component | Sub-Component | Score 1 | Score 2 | Score 3 | Score 4 | Score 5 |
|---|---|---|---|---|---|---|
| **Rapid Escalation and Resolution** | Mechanisms in place for escalating issues from the frontline | There are no formal mechanisms for issue escalation. | There are few mechanisms for escalation; issues are often resolved informally. | Some mechanisms are in place, but they are inconsistently applied or poorly communicated. | Mechanisms exist but may not be fully understood or used by all staff. | Clear, formal mechanisms for rapid escalation of issues exist, with well-defined processes for frontline staff to follow. |
| **Rapid Escalation and Resolution** | Timeliness and effectiveness of responses to escalated issues | Issues are rarely addressed in a timely or effective manner. | Issues are often delayed or unresolved, with minimal attention. | Responses to issues are inconsistent, with some delays and mixed effectiveness. | Issues are usually addressed quickly, but some may experience delays or suboptimal resolutions. | Issues are consistently addressed in a timely manner, with effective resolutions. |
| **Rapid Escalation and Resolution** | Empowerment of frontline staff to raise concerns | Frontline staff are not empowered to raise concerns. | Few staff feel empowered to raise concerns, with minimal support structures. | Some staff feel empowered, but barriers remain for others. | Most staff feel empowered but may hesitate in certain situations due to unclear processes. | Frontline staff feel fully empowered to raise concerns, with a strong culture of support. |
| **Rapid Escalation and Resolution** | Clarity in the process for escalating and resolving operational challenges | No formal process for escalation is in place. | There is minimal clarity in the process, with staff often unsure how to escalate issues. | The process exists but lacks clarity and is inconsistently communicated. | The process is somewhat clear, but there may be occasional confusion or gaps in documentation. | The escalation process is clear and well documented, and staff understand how to raise and resolve challenges. |
| **Rapid Escalation and Resolution** | Documentation and transparency of resolutions | There is no documentation or communication of issue resolution. | There is minimal documentation of issues and resolutions, with little transparency. | Documentation of resolutions is sporadic, with inconsistent communication to staff. | Most issues are documented, but some gaps exist in transparency or communication. | All escalated issues are thoroughly documented, and the resolutions are transparently communicated to all stakeholders. |
| **Problem-Solving** | Application of standard problem-solving methodologies (Lean, Six Sigma, etc.) | There is no application of standard problem-solving methodologies. | There is minimal use of structured problem-solving methodologies. | Problem-solving tools are used occasionally but not systematically. | Methodologies are applied frequently but may not be fully integrated into all processes. | Problem-solving methodologies are applied consistently across all departments, with visible results. |
| **Problem-Solving** | Cross-functional collaboration in addressing performance gaps | No cross-functional collaboration is in place. | Collaboration across functions to address performance gaps is minimal. | Collaboration happens sporadically, with limited cross-functional involvement. | Collaboration occurs but is not fully systematic or frequent. | Cross-functional teams regularly collaborate to address gaps and improve performance, leading to visible improvements. |
| **Problem-Solving** | Use of root-cause analysis to resolve operational inefficiencies | There is no use of root-cause analysis in problem-solving efforts. | There is minimal use of root-cause analysis, leading to temporary fixes. | Root-cause analysis is applied occasionally but not systematically or effectively. | Root-cause analysis is used frequently but may not always address the underlying issues. | Root-cause analysis is consistently applied, resulting in effective long-term resolutions to inefficiencies. |
| **Problem-Solving** | Sustainability of improvements made through problem-solving | No sustainable improvements are made through problem-solving. | Improvements are rarely sustainable, requiring frequent revisits. | Improvements are made but often require follow-up to sustain them. | Improvements are mostly sustainable, with the occasional need for further adjustments. | Improvements made through problem-solving efforts are sustainable and lead to long-term gains. |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