



EAB

Academic Performance Solutions

The True Drivers of Instructional Cost

Navigating GoToWebinar



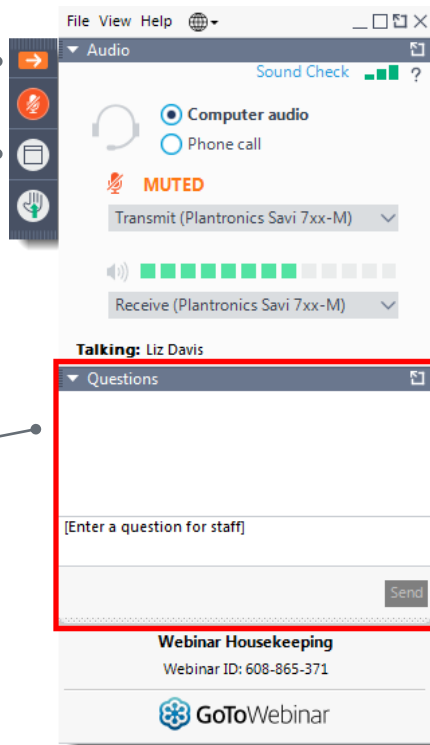
Basic Logistics

Click the orange button to open or hide the control panel.

Click the gray button with the screen icon to make the presentation full screen.

To Ask a Question

Enter questions or comments in the question box and click "Send."

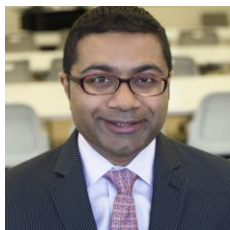


Today's Presenters



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The screenshot shows the EAB website's 'Academic Performance Solutions' page. The header includes the EAB logo, navigation links (About, Offerings, Blogs, Events, Careers, Areas of Expertise), a search bar, and a 'Log in now' button. The main heading is 'Academic Performance Solutions'. Below it, a paragraph states: 'Now more than ever, institutional success depends on university leaders taking a strategic, methodical approach to university management—and that starts with the right data. Academic Performance Solutions (APS) is a solution designed to empower academic and financial leaders with the department-specific performance and cost data—as well as reliable peer benchmarks—they need to make more effective decisions.' A 'Request a Demo' button is visible. The 'Featured Resources' section contains two items: 'The 5 biggest instructional cost drivers on campus' with a 'Read the insight' link, and 'Decision support for your departments' with a 'Download the infographic' link.



Connect with EAB





▶ Start with best practices research

- › Research Forums for presidents, provosts, chief business officers, and key academic and administrative leaders
- › At the core of all we do
- › Peer-tested best practices research
- › Answers to the most pressing issues

▶ Then hardwire those insights into your organization using our technology & services

Enrollment Management

Our **Enrollment Services** division provides data-driven undergraduate and graduate solutions that target qualified prospective students; build relationships throughout the search, application, and yield process; and optimize financial aid resources.

Student Success

Members of the **Student Success Collaborative** use research, consulting, and an enterprise-wide student success management system to help students persist, graduate, and succeed.

Growth and Academic Operations

Our **Academic Performance Solutions** group partners with university academic and business leaders to help make smart resource trade-offs, improve academic efficiency, and grow academic program revenues.

1.2B+

Student interactions annually

1M+

Individuals on our student success management system

1,200+

Institutions we are proud to serve

1

Goal: Make education smarter

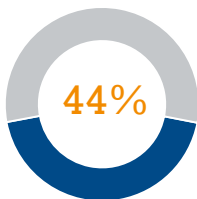
Academic Costs: A Bulk of Institutional Spending



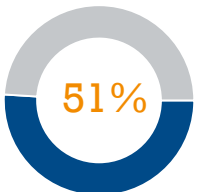
Academic Costs Amount to Nearly Half of Total Institution Expenses

Academic Costs as a Percentage of Total Expenses at Public and Private Institutions¹, 2015

Public Institutions



Private Institutions



A Multitude of Decisions and Decision-Makers



President, Provost, and CBO

Implementing the Strategic Plan

"Do we need to add a new faculty line to Biology?"

"How can we avoid across the board budget cuts?"



College Deans

Managing the Program Portfolio

"Do we have enough student demand to start a Data Science program?"

"Why aren't my students graduating in four years?"



Department Chairs

Making Hundreds of "Micro-Decisions" Every Term

"Do we have enough capacity to grant this course release?"

"Can I increase seats in this lecture without reducing student outcomes?"

1) Chronicle of Higher Education analysis of U.S. Department of Education data on colleges revenue and expenditures in 2015.

Academic Leaders the Lynchpin

Yet Often Constrained in Decision-Making

Deans and Chairs Drive Impactful Decisions...



Academic
Program Review



Budget and Resource
Allocation



Course and Workload
Planning

Yet Very Difficult to Inflect Change



More than a Full Plate

Administrative responsibilities are additive



These Are My Colleagues and Friends!

Politically difficult to pursue hard choices



Just Thrown In

Often not prepared with the tools and skills to manage the academy



Flying Blind

Time-consuming and difficult to obtain data reports

Yet Barriers to Optimal Resource Allocation Persist



Incomplete, Inaccurate Data

Lack of usable department cost data prevents objectivity and makes it difficult to evaluate the return on investments



Ad Hoc Allocation Processes

Resource allocation depends more on historical precedent than on rewarding performance or enabling growth in response to student demand



Lack of Unit-level Incentives

Successful efficiency efforts are rarely rewarded because many departments that use fewer resources often receive fewer resources in the future



Unclear Reallocation Options

Highly specialized departmental resources cannot easily be repurposed in reaction to rapid changes in student demand

Academic Performance Solutions in Brief

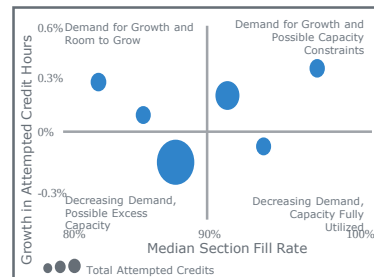
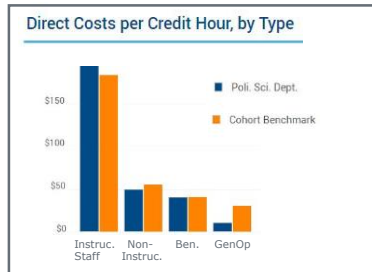
Performance Analytics Contextualized with Benchmarks

Academic Program Review

Budget and Resource Allocation

Course and Workload Planning

Departmental Intercurricular Dependencies			
Department Name	Own Majors	Service Majors	Attempted SCH
Anatomy and Cell E	48.3%	51.7%	960
Biology	64.1%	35.9%	93,149
Chemistry	16.8%	83.2%	72,728
Computer Science	53.0%	47.0%	69,073
Mathematics	31.2%	68.8%	138,899
Physics	11.1%	88.9%	48,360
Psychology	62.0%	38.0%	124,901
Statistics and Actua	-	100.0%	22,098
Rollup	41.2%	58.8%	570,168



How can we more strategically evaluate department health on an annual basis?

- ✓ Compare enrollment trends to peer benchmarks
- ✓ Assess demand-capacity mismatches across all departments
- ✓ Compare course completion rates to peer benchmarks

How can we standardize and streamline resource allocation decisions?

- ✓ Consolidate underfilled sections and redirect resources to bottlenecks
- ✓ Inform faculty line allocation decisions with peer benchmarks on teaching loads
- ✓ Evaluate instructional costs per student credit hour across departments

How can we realign offerings to align with demand and support student outcomes?

- ✓ Compare class sizes and fill rates to peer benchmarks
- ✓ Match proliferation of distinct courses with enrollment trends
- ✓ Analyze course load trends by instructor type



Reviewing APS Benchmarking Methodology

Standardized Departments Created for Apples-to-Apples Comparison

Creating the Dataset

- ✓ Developed standardized data dictionary
- ✓ Transformed each member's data into comparable data points

Key Calculations

» Total Costs

- Aggregate-level costs
- Often used for budgeting purposes

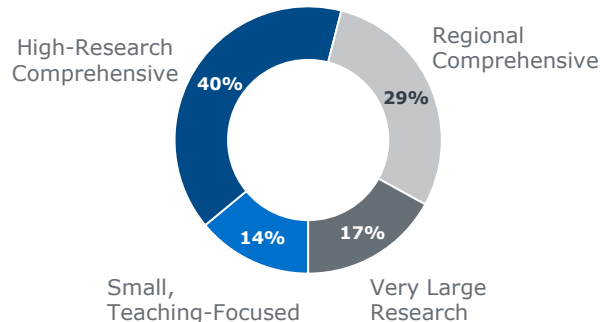
» Costs per SCH

- Total costs divided by attempted student credit hours
- Used for benchmarking purposes and to uncover resource utilization efficiencies

APS Benchmarking Collaborative

AY 2015

n=35



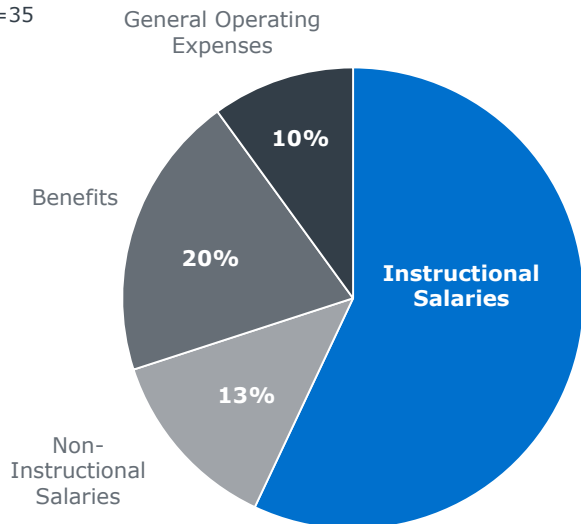
Higher Education's Greatest Investment? Faculty

More Than Half of Costs From Instructor Salaries

Distribution of Departmental Direct Costs by Category, Across the APS Collaborative

AY 2015

n=35



57%

Department-Level Costs
Spent on Instructor Salaries

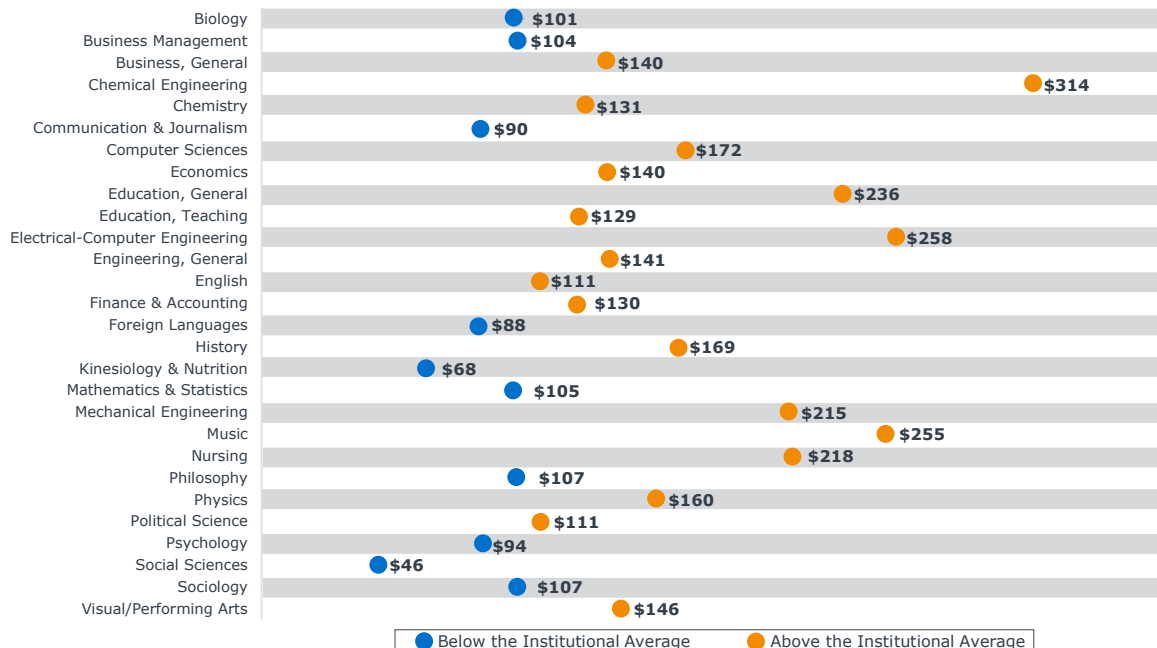
**A university's faculty is its
greatest asset—and one of
its largest investments.**

Discipline-Level Benchmarks Lend Greater Visibility 11

Departmental Differences in Instructional Salaries, Sample List

Average Instructional Salaries per Attempted Student Credit Hours¹, AY 2015

n=35



1) Includes all undergraduate and graduate attempted student credit hours and total instructional salaries.

Inflecting Instructional Cost Per SCH

Considering Ease and Impact of Changes Required

Two Levers to Reduce Instructional Salary Costs per SCH



Change instructor salaries

Often fraught process, is influenced by discipline, geography, union presence and political atmosphere

Redeploy instructional resources

Academic leaders have ability to determine action steps on opportunities surfaced

Quantifying the Drivers of Instructional Cost

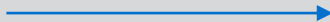
Three Approaches to Recovering Costs

The Difference Between Optimal and Actual

Three Approaches to Closing the Gap

Unproductive Credits

Credits are lost due to failing grades and student withdrawals from courses



1 Improve course completion rates

Underfilled Sections

Institutions commonly offer more sections than needed to meet student demand



2 Right-size section offerings

Instructional Load

Full-time faculty often teach less than the standard course load



3 Balance faculty course loads

Improving Course Completion

Three Avenues of Discovery Help Pinpoint Improvement Opportunities



1 Courses with High Unproductive Credits

APS analysis shows 35% of unproductive credits occur in only 1% of courses



2 Number of Repeats

Repeats extend time to graduation and increase likelihood of bottlenecks, in addition to using up capacity



3 Section Completion Rate Variability

Courses with high variability in section completion rates by instructor

Outside Influences on Course Completion



Students bring a variety of **previous academic experiences** and skills



Seniors complete at higher rates than first-years, presuming differences in **student level**



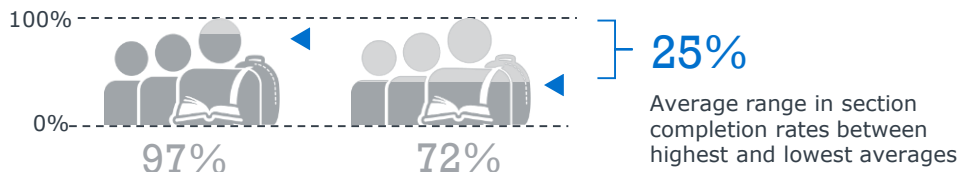
Student demographics such as socioeconomic background or status as a first-generation student can influence performance

Minimizing Section Completion Rate Variability

Range of Section Completion Rate Variability Across the APS Collaborative¹

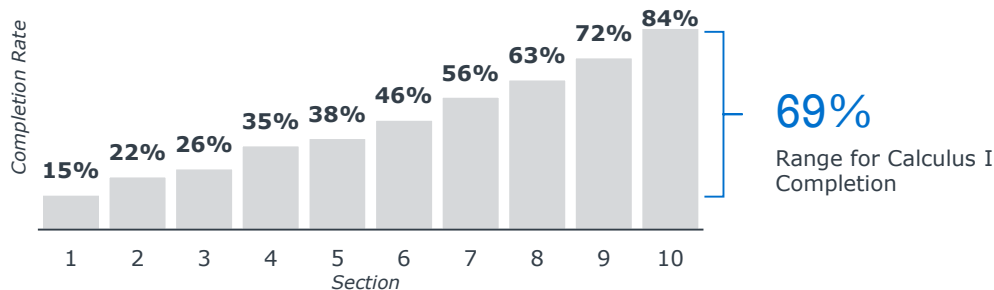
AY 2015

n=191,647 sections



Variation in Calculus I Section Completion Rates

Very Large Research Institution, Fall 2015



1) Methodology: Found the range of completion rate for each course with five or more sections at each school in the collaborative, then took the average in the 2015 academic year.

Quantifying the Drivers of Instructional Cost

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Three Approaches to Closing the Gap

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Faculty often teach less than the optimal course load



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Examining Sections Offered

Two Opportunities to Align Supply With Demand



1 Multi-Section Courses

Identifying low-fill rate multi-section courses where some of the sections offered could be collapsed



2 Single Section Courses

Diagnosing the necessity of offering the same single section course during both the fall and spring terms

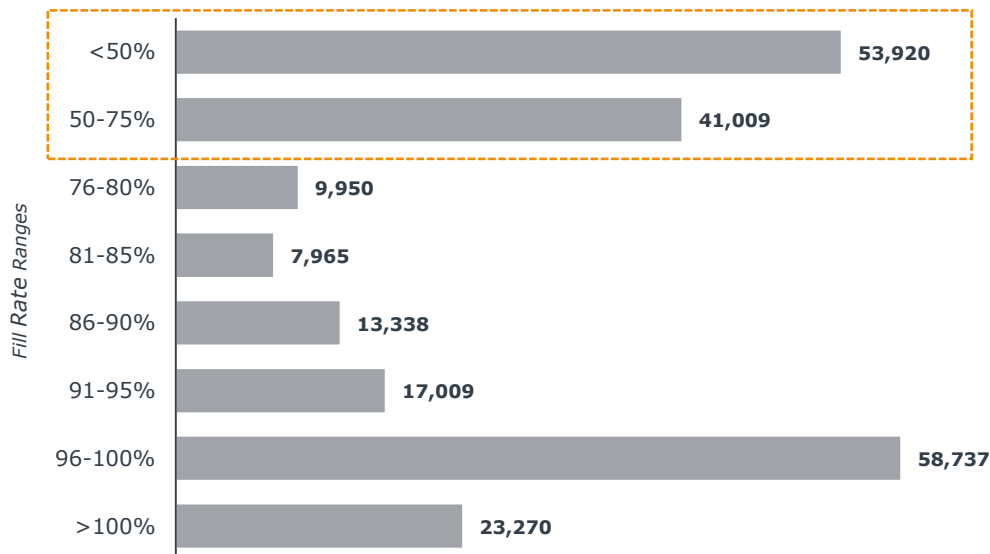
How Full Are Our Courses?

Empty Seats Leave Instructional Resources on the Table

Distribution of Sections¹ by Fill Rate (Ranges)

Fall 2014 and Spring 2015

n=191,647 sections



42%

Sections with
fill rate of 75%
or less

1) Individual Instruction course types were excluded.

Potential Savings from Section Consolidation

Lower Division Reallocation¹ Opportunities if 25%, 50%, or 75% of Possible Sections² Collapsed, Average by Cohort

Based on 85% Target Fill Rate, AY 2015

Small Teaching-Focused

3%

Collapsible
Sections

25%	50%	75%
\$57 K	\$115 K	\$173 K

High-Research Comprehensive

25%	50%	75%
\$278 K	\$556 K	\$834 K

5%

Collapsible
Sections

Regional Comprehensive

5%

Collapsible
Sections

25%	50%	75%
\$225 K	\$450 K	\$676 K

Very-Large Research

25%	50%	75%
\$307 K	\$618 K	\$925 K

4%

Collapsible
Sections

1) Reallocated instructional salaries was calculated using National Center for Education Statistics on average faculty salaries in 2015.

2) Individualized Instruction course types were excluded.
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Quantifying the Drivers of Instructional Cost

Three Approaches to Recovering Costs

The Difference Between Optimal and Actual

Unproductive Credits

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Three Approaches to Closing the Gap

1 Improve course completion rates

Underfilled Sections

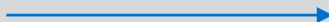
Institutions commonly offer more sections than needed to meet student demand



2 Right-size section offerings

Instructional Load

Faculty often teach less than the optimal course load



3 Balance faculty course loads

Faculty Time: A Precious, Limited Resource

How Faculty Spend Their Time



“Standard” Is Subjective



Departmental **goals**, **mission**, and student **demand** should be used to determine a standard workload.

Is There Even An Optimal Course Load?

Assessing Faculty Course Loads¹

Median and 75th Percentile Course Load of Tenured and Tenure-Track Faculty by Cohort, Fall 2014 and Spring 2015

Small, Teaching-Focused

6

Median
Course Load

7

75th Percentile
Course Load

Regional Comprehensive

6

Median
Course Load

7

75th Percentile
Course Load

High-Research Comprehensive

4

Median
Course Load

5

75th Percentile
Course Load

Very Large Research

3

Median
Course Load

4

75th Percentile
Course Load

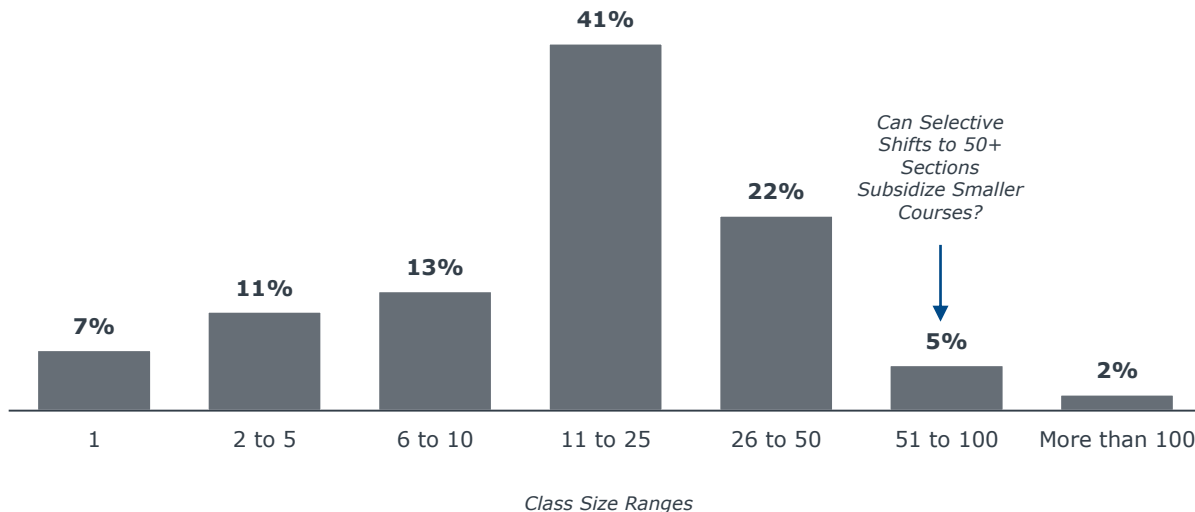
1) Individual Instruction course types were excluded.

Maximizing Faculty Resources with Class Size

Distribution of Sections¹ by Class Size Across the Collaborative

AY 2015

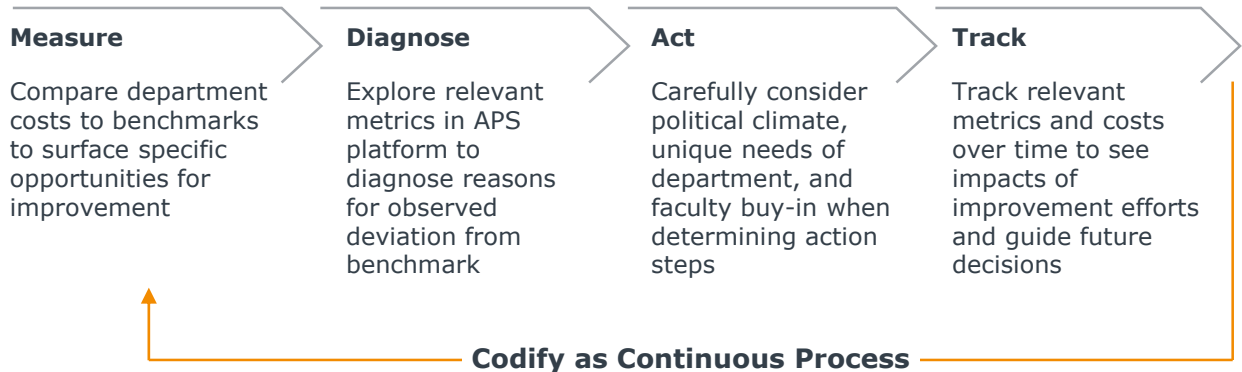
n=191,647 sections



1) Individualized Instruction course types were excluded.
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Framework for Leveraging Benchmarks Effectively

Apples-to-Apples Comparisons Surface Opportunities for Improvement



Supported by APS Platform

Supported by EAB
Research

Supported by APS
Platform

Beyond Hypothetical: Localize Best Practices

Using APS to Conduct Fill Rate Analyses Guided By Research

Seat Utilization



- Identify which colleges and departments have the highest and lowest median fill rates
- Use data to support resource allocation discussions

Section Consolidation



- Identify specific courses that have unused capacity
- Model different target fill rates before making decisions to collapse sections

Single Section Analysis

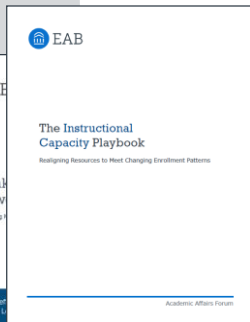


- Gain visibility into single section courses offered multiple times per year
- Drill into specific courses to make decisions around offering more or less often

Course Bottlenecks



- Filter for a specific college or department to uncover capacity constraints blocking student progress
- Add new sections if bottlenecks are in required courses



AAF's Instructional Capacity Playbook advises replacing old metrics with **Section Fill Rate Analyses**

Value Extends Beyond the Platform



1 DATA ACTIVATION

Extract

Synthesize data from disparate information systems

Validate

Apply standard definitions and crosswalks to resolve potential data gaps

Configure

Determine inclusions, exclusions, and what data goes where

Enhance

Recommend improvements to data governance and collection protocols

2 OPPORTUNITY IDENTIFICATION



APS **DATA QUALITY AUDIT** identifies the most pressing data gaps and guides incremental investments to improve data governance



INSTITUTIONAL OPPORTUNITY ASSESSMENT delivered onsite annually



DISCIPLINE-LEVEL BENCHMARKS available in the platform



NAVIGATION RESOURCES including user-friendly how-to guides



On campus and web-based **USER TRAINING** for APS power users



PRACTICES AND PLAYBOOKS derived from EAB Best Practice Research



ANNUAL SUMMIT to convene the collaborative and facilitate networking



WEBINARS to share key insights and highlight use cases



IMPLEMENTATION TEAM



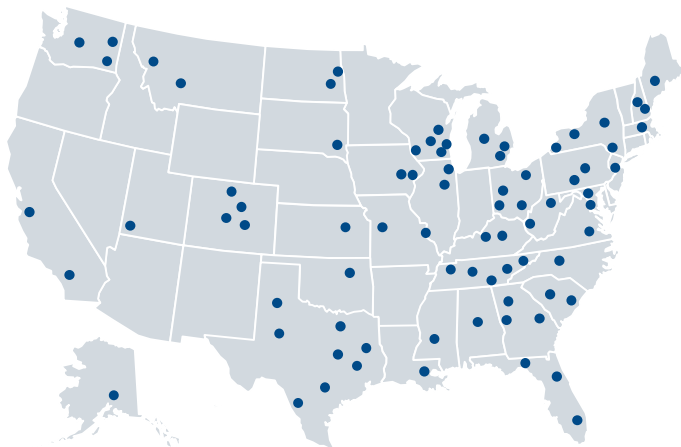
DEDICATED CONSULTANT

Advisor, thought partner, and single point of contact

A Growing Collaborative of Like-Minded Institutions



Partnering with 90+ Institutions Nationwide



A Diverse Collaborative

- AAU Members
- Regional/Urban Comprehensives
- Public Flagships
- Private Liberal Arts

Our Services



APS Platform

*College and
Department-Level
Performance Data*



Discipline-Level Benchmarks

*Unique Cost, Enrollment
Demand, and Faculty
Utilization Metrics*



Best Practice Adoption

*Accelerating
Implementation of
High-Impact
Practices and Policies*

Questions?



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