

CONNECTED18

Expansion Spotlight

An Introduction to EAB's Academic Performance Solutions
(APS)





▶ 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

1,300+

Institutions we are proud to serve

1

Goal: Make education smarter

Academic Performance Solutions in Brief

Performance Analytics Contextualized with Peer Benchmarks

Academic Program Review

| 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?

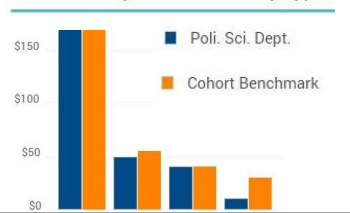
- ✓ Compare enrollment trends to peer benchmarks
- ✓ Assess demand-capacity mismatches across all departments
- ✓ Compare course completion rates to peer benchmarks

Median Course Completion Rates for Gateway Courses¹

| | | | |
|---------------------|------------|--------------------|------------|
| Intro to Biology | 89% | Intro to Chemistry | 87% |
| Intro to Psychology | 89% | Calculus I | 74% |

Budget and Resource Allocation

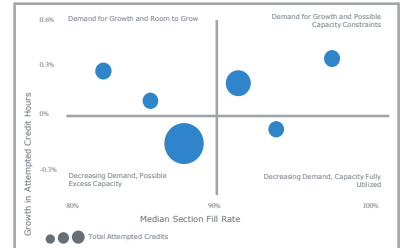
Direct Costs per Credit Hour, by Type



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

Course and Workload Planning



How can we structure 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

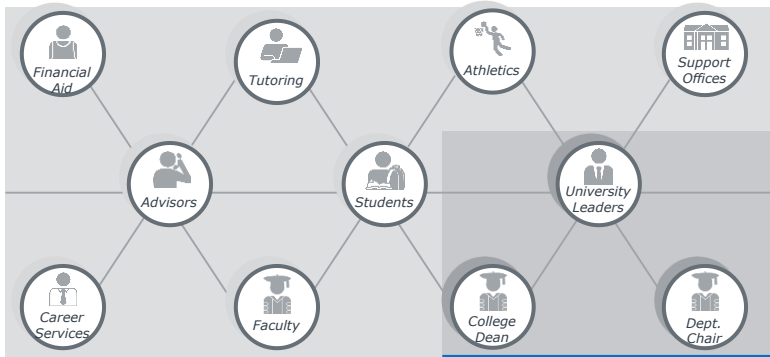
1) Analysis of 43 institutions in the APS Collaborative, AY15.

Coordinate Student Care and Resource Allocation



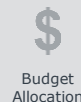
• Student Success Management System

- An enterprise-level technology that enables coordinated care, helping institutions proactively manage student success and deliver a Return on Education



• Academic Performance Solutions

- Structured analytics to facilitate resource allocation decisions and long-term sustainability



• SSMS and APS

- Together, the SSMS and APS help administrators address intersection points between student behavior and resource allocation:

| | Course Planning | Course Completions | Program Review |
|-------------------------|--|---|---|
| With the SSMS... | <ul style="list-style-type: none"> • Identify students with course registration concerns in key courses • Intervene by encouraging students to register in the right number and mix of courses each term | <ul style="list-style-type: none"> • Identify students with academic performance concerns in key courses • Intervene by connecting students with support services, like tutoring and advising | <ul style="list-style-type: none"> • Compare student graduation outcomes across programs and identify programs that require attention • Understand the impact of major switching on time-to-degree |
| With APS... | <ul style="list-style-type: none"> • Identify courses and sections that are over- and under-filled • Intervene by expanding over-subscribed courses and collapsing under-filled sections | <ul style="list-style-type: none"> • Identify courses with the most unearned credit hours • Intervene by considering structural changes, such as new training for graduate instructors or updating curriculum | <ul style="list-style-type: none"> • Compare enrollment trends at your institution to trends at peer institutions • Understand inter-disciplinary demand for coursework across departments |

- 1 Sizing the Opportunity
 - 2 Data-Informed Academic Operations Management
 - 3 Analytics with a Bias to Action
-

Business As Usual Is No Longer Sustainable

A Precarious Financial Situation For Most

Moody's Downgrades Entire Sector

MOODY'S
INVESTORS SERVICE

"Moody's Investors Service is revising the 2018 outlook for US higher education to **negative** from stable as aggregate operating revenue moderates while expense growth increases."

"I am confident my institution will be financially stable over the next 10 years."

53% College and University Presidents¹

48% Chief Business Officers²

A six percentage point decline from last year's survey

While Other Market Pressures Continue to Mount



Volatile student demand



Unbundling of degrees



Changing employer needs



Government and social calls for accountability



Disruptive technology



New competitors in education



Rise of social impact philanthropy

And the Academy Continues to Generate Most Revenues and Costs

60-70% Total University Expenditures from the Academy

~60% Total University Revenues from Academic Programs and Research

1) Inside Higher Ed and Gallup, 2018 Survey of College and University Presidents.

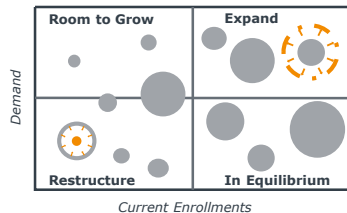
2) Inside Higher Ed and Gallup, "The 2017 Inside Higher Ed Survey of College and University Business Officers," 2017.

Academic Leaders: The Lynchpin

Deans and Chairs Driving Impactful Decisions...



...With Renewed Focus on Growth and Innovation



Yet Very Difficult for Them to Inflect Change



More than a Full Plate

Administrative responsibilities are additive on top of teaching, research, and community engagement



These Are My Colleagues!

Politically difficult to pursue hard choices; short enough tenure (four year average for chairs, six for deans) to dissuade bold leadership



Just Thrown In

Often not prepared with the tools and skills to manage the academy; 67% of chairs report receiving no formal training



Flying Blind

Time-consuming and difficult to obtain data reports (6-8 week backlog); what is available lacks context or orientation towards decision-making

- Source: AACSB, Deans Survey, 2014; University Council for Educational Administration, 2016; Survey of 336 department chairs by the University Council of Educational Administration's Center for the Study of Academic Leadership (2017).

How Do We Break the Cost-Quality Trade-Off?

A Third of Capacity Underused

Findings from EAB Research



Course Releases

15% to 40%

of FCH in service release



Small Classes

15% to 30%

of classes seat < 10 students



Unfilled Sections

10% to 25%

of sections statistically unnecessary



DFW Rate

10 to 25%

of all attempted credits wasted



Yet Faculty Resist Calls to Change

Common Faculty Concerns



"Efficiency is just code for lower quality"



"Life-changing educational experiences will be reduced to utilization targets"



"In ten years we'll only have pre-professional majors"



"Faculty will have to work harder for the same pay"

Defining Optimal Instructional Capacity...

...To Set Optimal Goals Based on Benchmarks

Maximum Theoretical Capacity

SCH created if...



All students have a **100% completion rate** in every course



All sections have a **fill rate of 100%**



Tenure/tenure-track faculty teach a minimum of **6 sections** and non-tenure track faculty a minimum of **3 sections**

Optimal Capacity

SCH created if...



All students earn the **75th percentile completion rate²** of their institution's cohort in every course



All sections have a minimum **fill rate of 85%**



Tenured/tenure-track and non-tenured faculty each teach at least the **75th percentile course load¹** of their institution's cohort

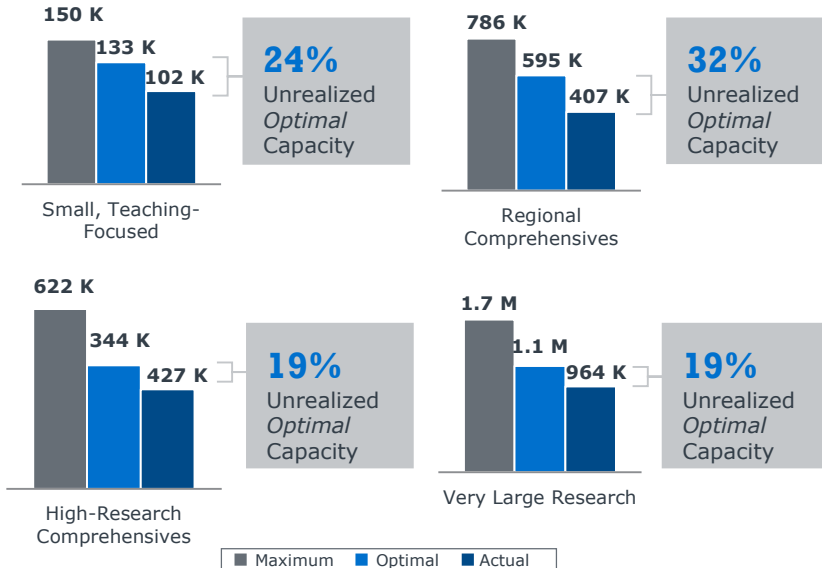
1) 75th percentile faculty course load: High-Research Comprehensives (Tenured/tenure-track: 5; Non-tenure track: 3), Regional Comprehensives (Tenured/tenure-track: 7; Non-tenure track: 5), Small Teaching-Focused (Tenured/tenure-track: 7; Non-tenure track: 4), and Very Large Research (Tenured/tenure-track: 4; Non-tenure track: 3).
2) 75th percentile completion rates: High-Research Comprehensives (93%), Regional Comprehensives (93%), Small Teaching-Focused (97%), and Very Large Research (94%).

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Teaching Capacity Left on the Table

Not Realizing Full Instructional Potential

Comparing Actual Credit Hours Produced to Average Maximum Theoretical and Optimal Capacity, by Cohort



APS Collaborative

25%
Unrealized *Optimal* Capacity

\$400M
Instructional Salaries That Could Be Reallocated

Quantifying the Drivers of Instructional Cost

Three Approaches to Recovering Costs

The Difference Between Optimal and Actual

22%

Unproductive Credits

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



Three Approaches to Closing the Gap

1 Improve course completion rates

25%

Underfilled Sections

Institutions commonly offer more sections than needed to meet student demand



2 Right-size section offerings

52%

Instructional Load

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



3 Balance faculty course loads

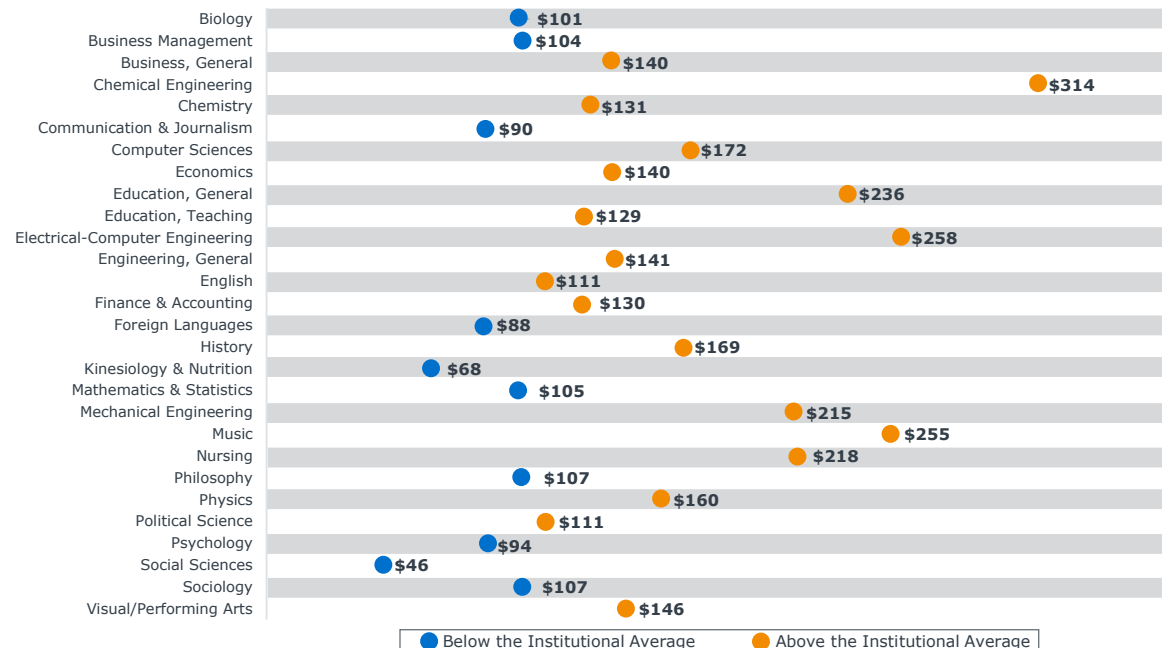
Unit-Level Benchmarks Lend Greater Visibility



Departmental Differences in Instructional Salaries, Sample List

Average Instructional Salaries per Attempted Student Credit Hours¹

n=35



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

1

Sizing the Opportunity

2

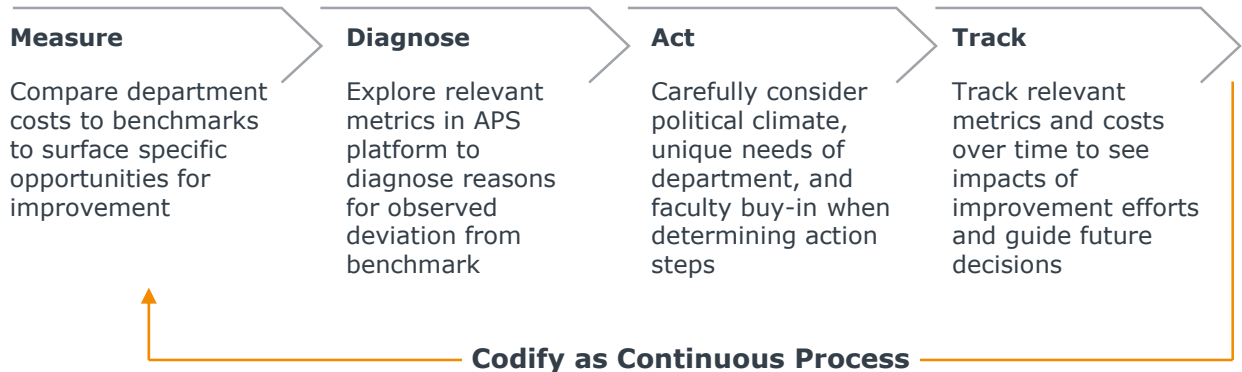
**Data-Informed Academic Operations
Management**

3

Analytics with a Bias to Action

Framework for Leveraging Analytics Effectively

Apples-to-Apples Comparisons Surface Opportunities for Improvement



Unpacking Academic Performance Solutions



Key use cases:

- > **Academic Program Review** that is *annual* and *strategic*
- > **Budget and Resource Allocation** that is *standardized* and *supported by benchmarks*
- > **Course and Workload Planning** that is *aligned with demand* and *supports student progress*



It's **transformational** in getting **deans** and **faculty** to see where our capacity is splintered, and where there's demonstrated need to reallocate capacity across department lines.

Provost

Public Research University



National Collaborative

Annual summit, webinars, and other opportunities for networking and learning



Peer Benchmarks

Apples-to-apples comparisons to peers and aspirational peers performance on 50+ metrics



Structured Analytics

Analyses to support academic planning conversations and decisions



The APS Platform



Activate

Data activation includes mapping files, standardizing definitions, data quality assurance



Access

Web-based access to key performance metrics gives visibility across student, HR, and finance data

Department-Level Benchmarks in APS Platform

Apples-to-Apples Comparisons on Key Performance Metrics



APS Benchmarks Dashboard Features

- Web-based** | Access via web-based platform with unlimited number of users
- Choose Your Own Cohort** | Build up to three peer cohorts for comparison
- Dynamic Filters** | Filter by course type, division and level, as well as academic year and term
- Department Drill Downs** | 40 standardized departments for comparison

Sample list of metrics:









- Attempted credit hours
- Earned credit hours
- Course completion rate
- Class size
- Class capacity
- Section fill rates
- Faculty mix
- Instructor course loads
- Cost per student credit hour

1) Benchmarks shown are sample data and do not reflect actual APS benchmarks.


- 1 Sizing the Opportunity
 - 2 Data-Informed Academic Operations Management
 - 3 **Analytics with a Bias to Action**
-

Value Beyond the Analytics Platform



| | | | |
|--|---|---|---|
| <p>Extract Synthesize data from disparate information systems</p> <p>Validate Apply standard definitions and crosswalks to resolve potential data gaps</p> <p>Configure Determine inclusions, exclusions, and what data goes where</p> <p>Enhance Recommend improvements to data governance and collection protocols</p> |  <p>APS DATA QUALITY AUDIT identifies the most pressing data gaps and guides incremental investments to improve data governance</p>  <p>On campus and web-based USER TRAINING for APS power users</p> |  <p>INSTITUTIONAL OPPORTUNITY ASSESSMENT delivered onsite annually</p>  <p>DISCIPLINE-LEVEL BENCHMARKS available in the platform</p>  <p>NAVIGATION RESOURCES including user-friendly how-to guides</p> |  <p>PRACTICES AND PLAYBOOKS derived from EAB Best Practice Research</p>  <p>ANNUAL SUMMIT to convene the collaborative and facilitate networking</p>  <p>WEBINARS to share key insights and highlight use cases</p> |
|--|---|---|---|

 **IMPLEMENTATION TEAM**

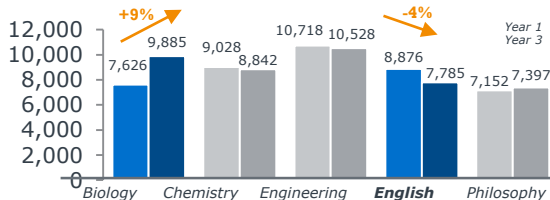
 **DEDICATED CONSULTANT** Advisor, thought partner, and single point of contact

Case-in-Point: Analytics with a Bias to Action

The College of Arts and Sciences at this large, public university was showing a slight decline (-1%) in attempted student credit hours, with a median fill rate of 50%. The drill-down analyses pictured below provided a clearer snapshot of the dynamics at play.

I Enrollment in the Arts and Sciences

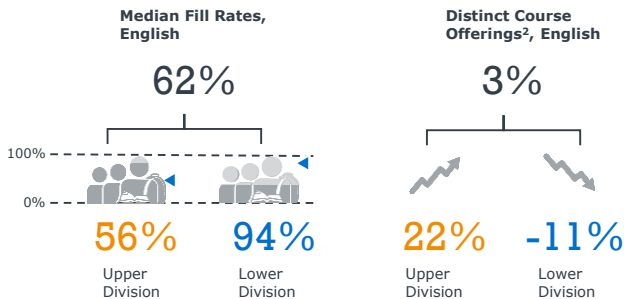
Five Highest-Producing SCH Departments¹, Three Year Trend



II A Major Decline

-17% Decrease in English Majors (CAGR) over three year period

III Rise in Upper Division English Courses Outpacing Demand



IV Where Do We Go From Here?

- ✓ How do we engage department chairs in resource allocation discussions?
- ✓ Can we divert faculty resources from declining areas to growing departments?
- ✓ How do we review the hiring process to plan for future resource allocation?
- ✓ Should we collapse under-filled sections to redirect resources to bottlenecks?

1) Blinded member institution. All campuses, undergraduate. Course types include lecture, lab and seminar.

2) Three year trend.

Localizing Best Practices Data & Analytics

Joining the Academic Performance Solutions national collaborative allows you to localize, prioritize, and systematize best practices from the Academic Affairs Forum into tangible initiatives that put deans and chairs in the driver's seat of academic planning decisions that are aligned with your institution's strategic plan.

*Excerpt from AAF Research Library:
The Instructional Capacity Playbook*

New Metrics for Understanding Instructional Capacity:

Section Fill Rate Analysis

Rather than default to adding more sections when enrollment hits the maximum, conduct a section fill rate analysis to uncover hidden sources of capacity and areas in need of additional resources



Beyond Just Hypothetical: Using APS to Conduct Fill Rate Analysis

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

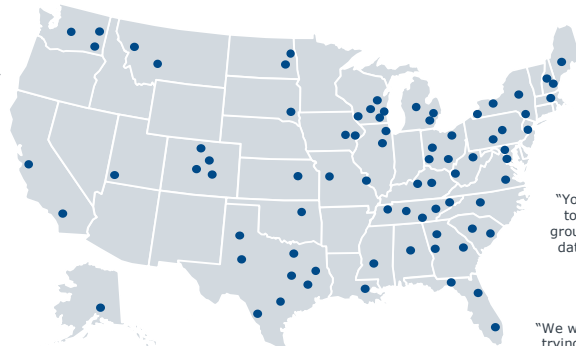
- Filter for a specific college or department to determine where students may be facing barriers to register because of capacity constraints
- Consider new sections if bottlenecks are in required courses

**Benchmarks for Comparison
Hardwired into the Platform**

Partnering with 90+ Institutions Nationwide

"The size of our studio sections within the arts are much lower than the benchmark; we can afford to increase them."

"We've never been able to incorporate cost per student credit hour data in program evaluation before now."



"You just did in 20 seconds what it has taken me two weeks to do."

"Your training inspired us to form a monthly user group to foster a culture of data-informed decisions"

"We were in the process of trying to build something similar but have gone so much further faster through our partnership with you."

"Wow - maybe I don't need to offer Sociology of Food as often as I am."

"I didn't realize we had 500+ courses with a maximum capacity listed as zero."

A Diverse Collaborative

- AAU Members
- Public Flagships
- 75% Public
- Regional/Urban Comprehensives
- Private Liberal Arts
- 25% Private



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