



How Auditing Data Quality Improves Decision Making: John Carroll University

April 11, 2018

Academic Performance Solutions

Navigating GoToWebinar



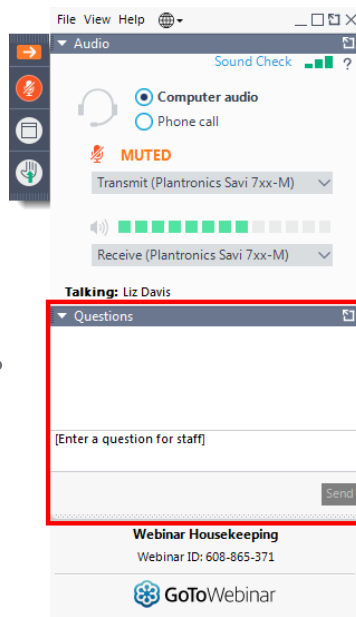
Basic Logistics

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



Executive Sponsor at JCU



Dr. Nick Santilli
Interim Provost and
Academic Vice President

APS Team



Jermaine Elliott
Consultant



Hersh Steinberg
Managing Director

John Carroll University (JCU)

- University Heights, OH
- Total enrollment: 3,523
- Master's Colleges & Universities: Larger Programs
- Joined APS in January 2017





▶ 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

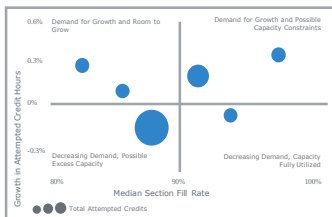
Goal: Make education smarter

APS: Equipping Leaders to Make Data-Informed Decisions



Academic Performance Solutions (APS) provides academic leaders with timely data and performance insights, as well as department-level peer benchmarks, to help tackle mission-critical issues.

COURSE PLANNING



How can we align our resources to meet institutional and student needs?

- Compare class sizes and fill rates to peer benchmarks
- Match proliferation of distinct courses with enrollment trends
- Determine optimal frequency for low-fill rate courses

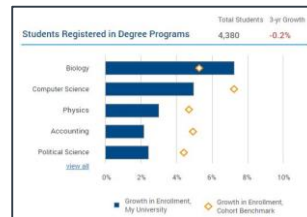
STUDENT PROGRESS



How can we redesign our courses or programs to improve student outcomes?

- Compare course completion rates to peer benchmarks
- Consolidate underfilled sections to redirect instructional resources and classroom space to bottlenecks
- Pinpoint instructor variation in high-impact gateway courses

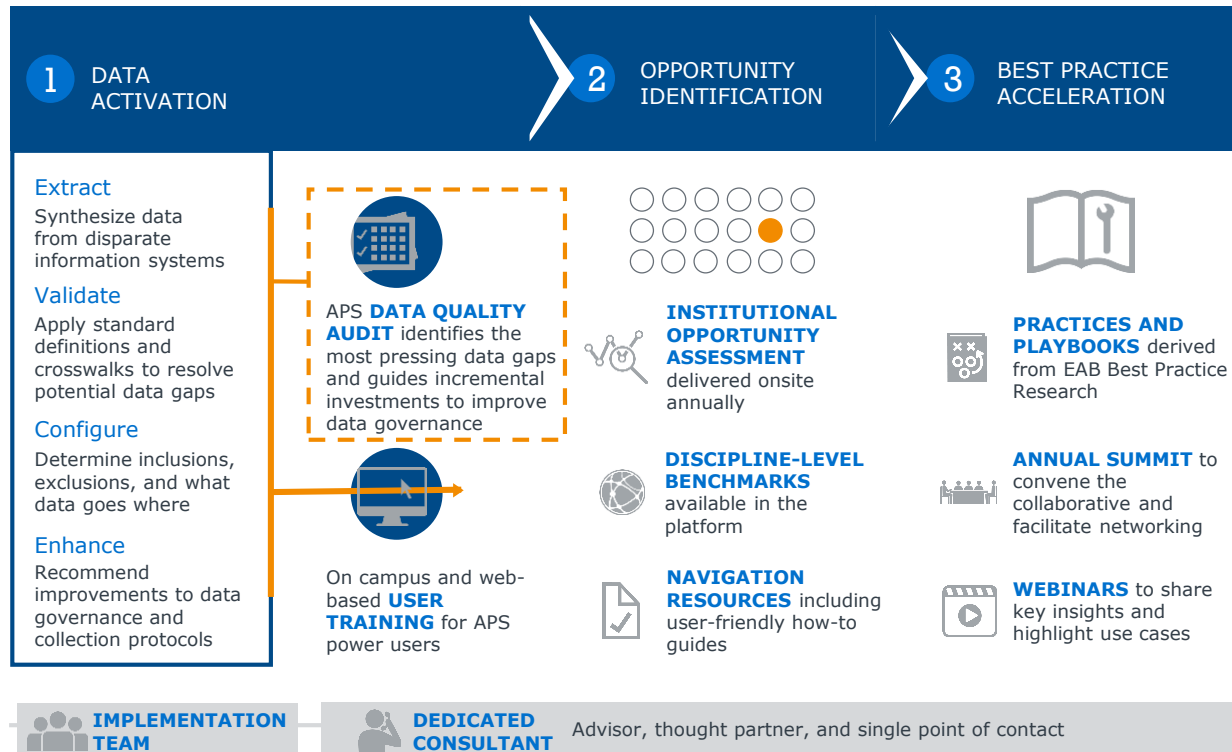
UNIVERSITY OPERATIONS



How can we identify opportunities for resource reallocation and program growth?

- Assess demand-capacity mismatches across all departments
- Inform faculty line allocation decisions with peer benchmarks on teaching loads
- Compare enrollment trends to peer benchmarks

Data Clean Up the First of Many Gains



APS Data Quality Audit

Illuminating Opportunities for Data Quality Improvement

● Report of Priority Data Gaps

Important data fields used to calculate APS analyses that are not currently being tracked or are not tracked consistently at your institution

● Analysis of Data Quality Implications

APS analyses that may not be as impactful with your institution's current data practices and potential negative impacts

● Targeted Guidance on Quality Improvement

Gaps your institution should prioritize, immediate actions you can take, and the potential impact of your internal efforts

Top 5 Data Challenges Identified Across APS Collaborative

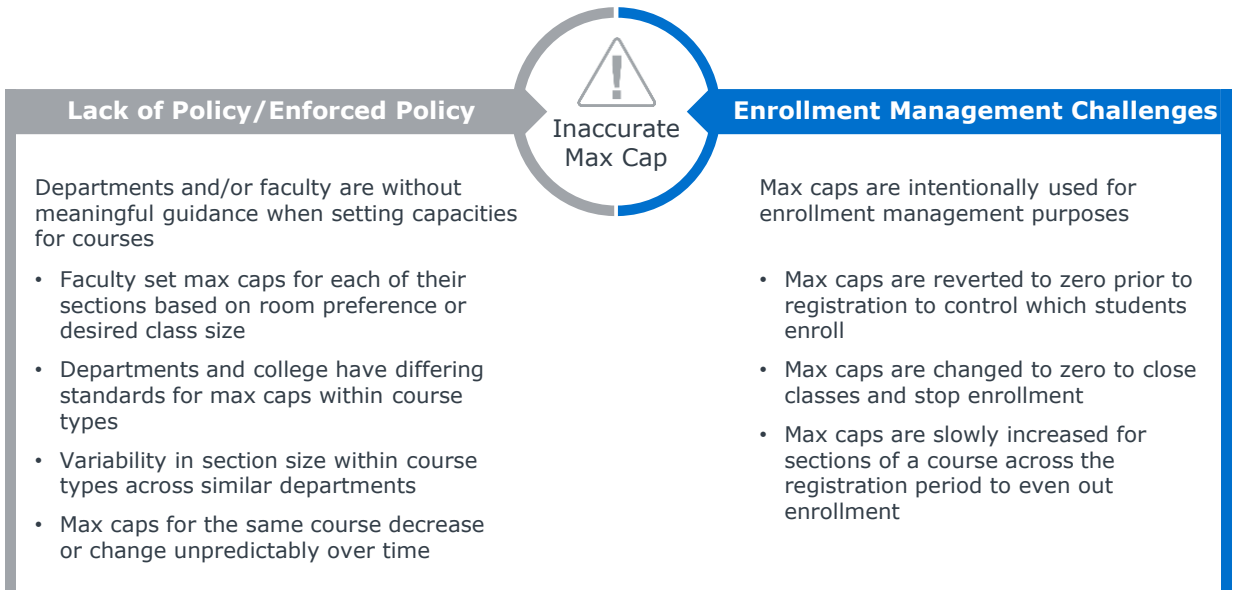
1. Inconsistent faculty percent responsibility
2. **Enrollment caps set to 'zero' or inaccurate**
3. Inconsistent or inaccurate course type assignments
4. Cross-listed courses not connected
5. Inaccurate or missing tenure and rank codes

33% APS members have identified max cap documentation improvement as a first step

17% Members have max caps of zero for more than 10% of their sections

37% Courses have variable max caps among sections

Two Root Causes of Unreliable Max Caps





Data Quality Audit the Impetus for Action

- JCU's consultant presented key findings from Data Quality Audit
- Revealed unrealized data gaps, in addition to confirming known priorities



Determined next steps for improvement



1 Address Max Cap Variation

- Inconsistent max caps discovered across departments
- No insight into actual fill rates and instructional capacity



2 Standardize Course Types

- Proliferation of course types identified across the institution
- Difficult to obtain accurate snapshot across departments

Tackling Max Cap Variation

Unregulated Process



The “Wild West”

In the absence of a formal process, a variety of individuals set max caps for a variety of reasons

- Not informed pedagogically or by course attributes
- Some caps were legacy-based and had not been revisited or reassessed

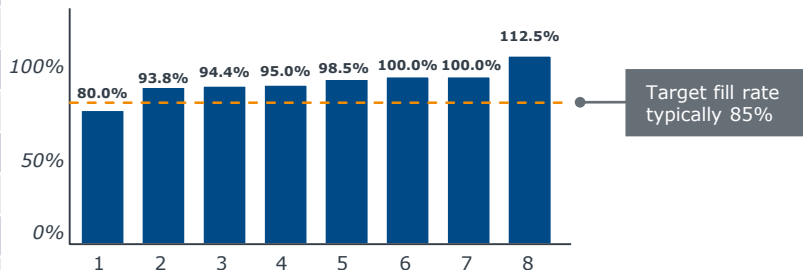
14% Sections with enrollments that were greater than the set max cap

Variability Obscures “Real” Fill Rates

Biology course with fill rates from 80.0% to 112.5%

Section	Max Cap	Fill Rate
1	32	93.8%
2	18	94.4%
3	32	103.1%
4	20	80.0%
5	32	100.0%
6	15	100.0%
7	20	95.0%
8	32	112.5%

Fill Rates for Sections of BIO155



Leveraging APS to Establish Max Cap Policy

Goals of Creating a Max Cap Policy

- Better manage course schedule, space utilization, and faculty work load
- Assess efficiency and reduce academic costs where possible

The Path to Appropriately Setting Max Caps

1

Pinpoint Opportunities

Identified areas with greatest mismatch

- ▶ Large opportunity identified in JCU's College of Arts and Sciences

2

Drilldown into Data

Held data review meeting with academic stakeholders – for deep data dive and opportunity analysis

3

Establish Formal Process

Agreed on enrollment caps for all departments and submitted to enrollment and registrar's office

Reducing Course Type Proliferation

Course Type Creation Went Unmonitored



A variety of people typically contacted registrar's office and requested new course type be created



No Formal Approval Process

Registrar typically complied with requests.



Registrar granted requests as they were submitted

Better Course Management with APS Data

Uncovered Proliferation

Data Quality Audit revealed over **23 distinct course types** in JCU's system

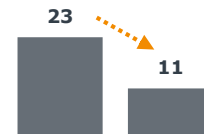
Identified Consolidation Opportunities

Determined which course types overlapped or were no longer relevant

- ▶ There were at least **five** distinct course types that all referred to **internships**

Closely Managed Course Types

Reduced number of course types down **from 23 to 11** – making course analysis easier and more manageable



An Accelerated Journey With APS

Collaborating to Achieve Goals and Transform Culture



Build vs. Buy?

Before partnering with APS, John Carroll was in the process of building a performance insights platform on their own.

They wondered, "can we get there ourselves?"

JCU Got Further, Faster By Partnering with APS

IT Resources



Relieved IT staff of heavy manual analysis and technical build by partnering with APS Technical Team

Confidence in Data



Gained buy-in for democratization of data from previous skeptics through improved transparency and access to data

"Spillover" Benefits



Data clean up has subsequently bolstered other initiatives on campus related to student persistence and completion

National Collaborative

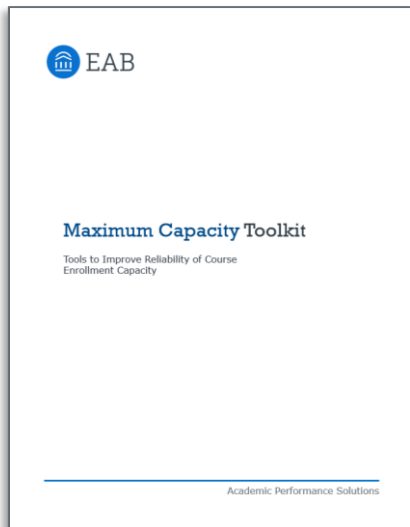


EAB best practice research, APS toolkits, and other resources available through partnership have proved value beyond the analytics platform

New Member Resource: Maximum Capacity Toolkit



14



1 Diagnosing Max Caps

Complete diagnostic to assess max cap data issues and pinpoint causes of inaccurate max caps.

2 Building a Max Cap Policy

Use diagnostic to craft core components of a new policy, such as goals, guidelines, and exceptions.

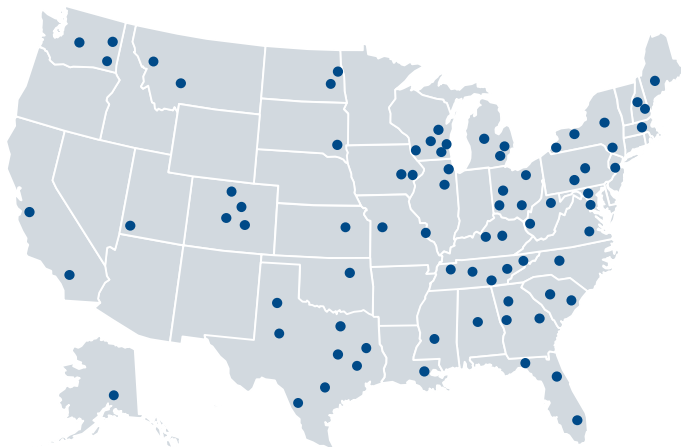
3 Implementing Policy and Solutions

Leverage suggestions on how to gain buy-in for new policy, how to communicate policy, and how to evaluate policy's impact.

Academic Performance Solutions

Helping Colleges and Universities Elevate Academic Decision-Making

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

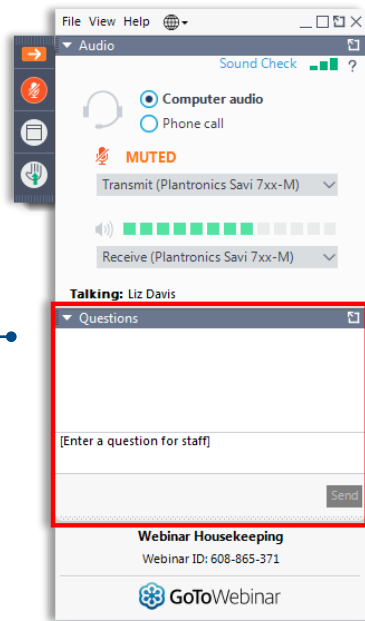
*Accelerating
Implementation of
High-Impact
Practices and Policies*

Questions?



To Ask a Question

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