



# Building the Learning Analytics Builders Coalition

**April 25, 2025**



# WELCOME

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Suzanne Carbonaro  
1EdTech



Kevin Corcoran  
University of Central Florida

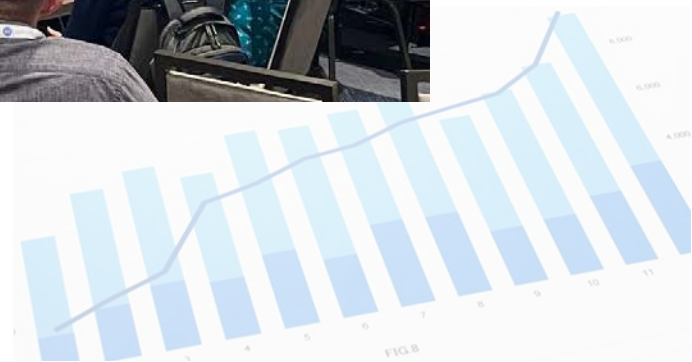


Myk Garn  
Senior Advisor

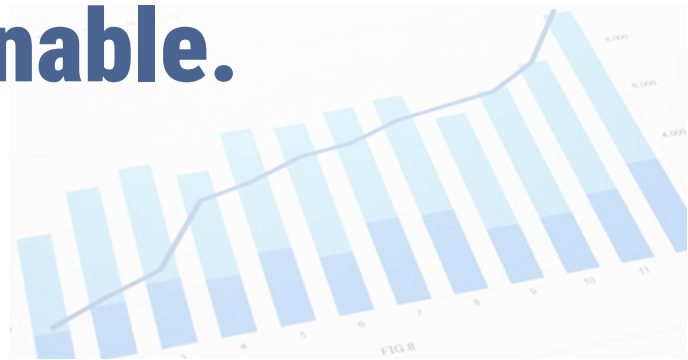




# In the Beginning...



**All higher education using data  
about learners and their learning  
to make student success  
achievable and sustainable.**

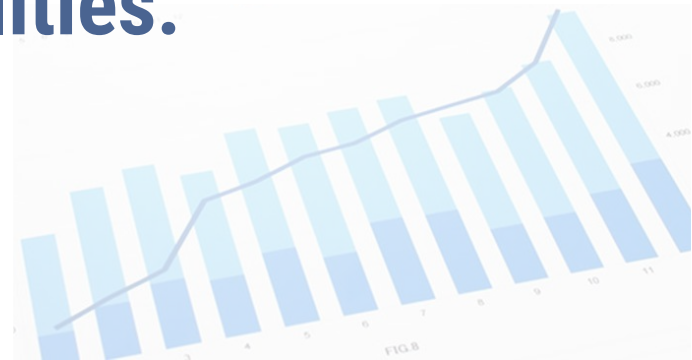




# Become a Convener of Conveners

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**Establish a strong network to guide and connect colleges and universities as they design, implement, and share their learning analytics capacity and capabilities.**

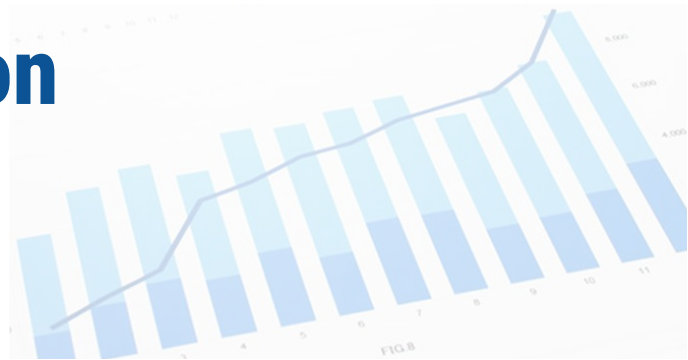




# Builder's GOALS

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**Awareness**  
**Understanding**  
**Ability to Build**  
**A Sharing Coalition**





# SHOWCASE AGENDA

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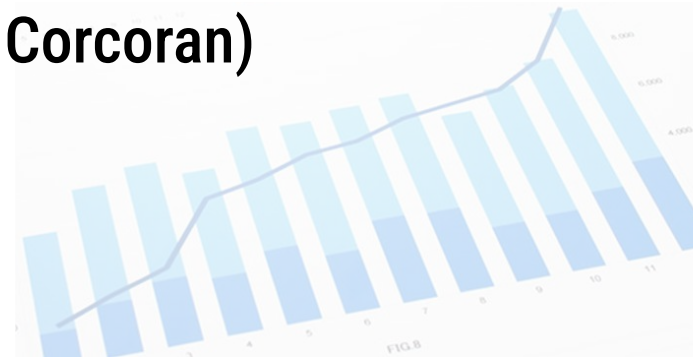
**Building Awareness: (John Fritz, UMBC)**

**Building the Data Structures: (Sanjoosh Akkineni, KSU)**

**Building Understanding: (Ben Hellar, Penn State)**

**Building Ability: (Suzanne Carbonaro, 1EdTech)**

**Building a Coalition: (Myk Garn & Kevin Corcoran)**



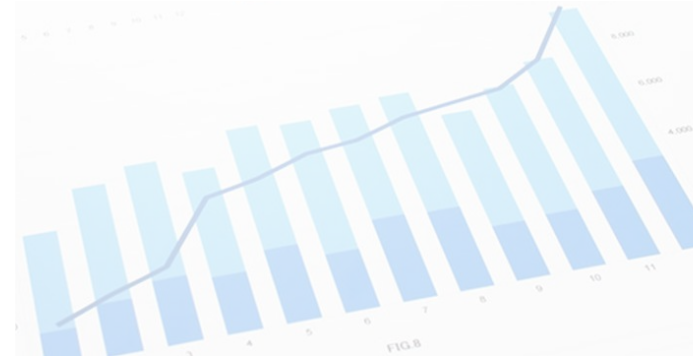




## **The Importance of Community**

John Fritz

University of Maryland, Baltimore County

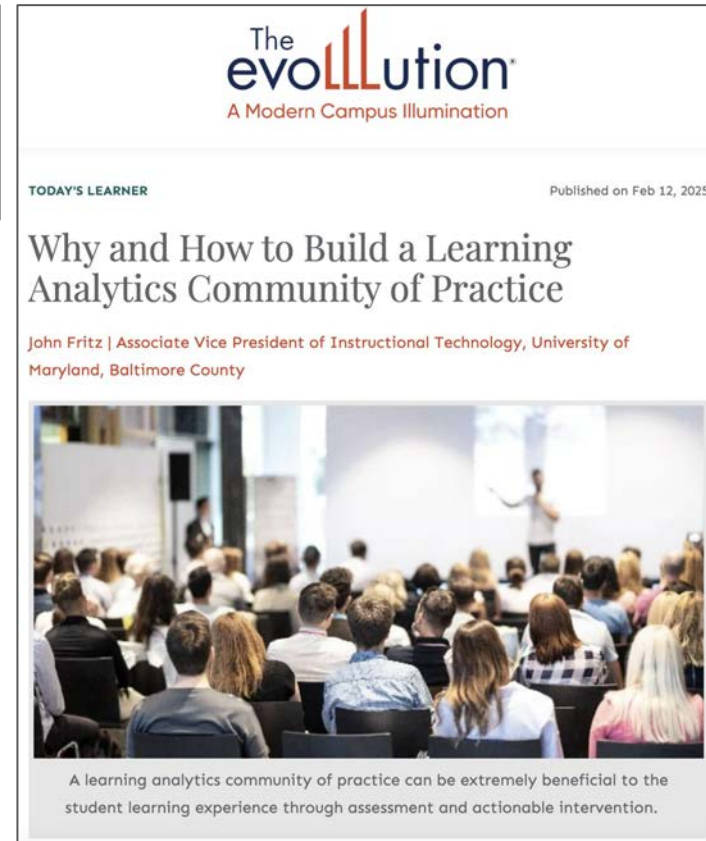




## About Our LA CoP



- Started in 2021
- Modeled after Indiana University's [CLASS](#), [LA Fellows](#)
- ~60 active participants, mostly faculty
- 20+ [LA Fellows](#) to date, awarded \$2k, 1-year, renewable LA [mini-grants](#), to design, assess & report on an LA-based intervention.
- ~25+ LA Community of Practice (CoP) [meetings](#), all with recorded archives & handouts.
- Notably, one LA fellow, Karen Chen (IS), [won UMBC's 50th NSF Career Award](#) based, in part, on her [project](#), "Learning Analytics by Students for Students."



# Why CoPs Matter?

“If you want to change the culture, shine light on success, not failure.”

- *Freeman A. Hrabowski, III*  
*Former President, UMBC*



# How CoPs Matter: Faculty Evolve (Learn) from Peers

## Focus of how faculty beliefs change

1. **Egocentrism**: their role as teachers
2. **Aliocentrism**: the role of learners
3. **Systemocentrism**: shared role of teachers and learners in community.

Robertson, D. L. (1999). Professors' perspectives on their teaching: A new construct and developmental model. *Innovative Higher Education*, 23(4), 271–294.  
<https://doi.org/10.1023/A:1022982907040>

## Telltale signs of change:

1. They bring the **benefits and biases** of the previous stage.
2. Change only occurs when confronted by "**teaching failures**" of the prior stage.
3. **Desire for certainty** either freezes faculty in status quo or motivates evolution into the next stage to avoid . . .

"a familiar teaching routine that they have deemed inappropriate and with nothing to replace it."

# Analytics (aka “Actionable Intelligence”)

At its core, learning analytics (LA) is the collection and analysis of usage data associated with student learning. The purpose of LA is to observe and understand learning behaviors *in order to enable appropriate interventions*.

~[Educause Learning Initiative](#) (ELI), 2011

*Develop and implement an internal information system and analytics **to track and improve student success and establish campus-wide standards/best practices for interventions** to support student success throughout students’ careers at UMBC.*

~[UMBC Strategic Plan](#), 2016, p. 17

## Analytics without Action is Just Analysis

# Moving the Heart and Head?

*Greater attention is needed to the accessibility and presentation of analytics processes and findings so that learning analytics discoveries also have the capacity to surprise and compel, and thus motivate behavioural change. (p. 161).*

Macfadyen, L. P., & Dawson, S. (2012). Numbers Are Not Enough. Why e-Learning Analytics Failed to Inform an Institutional Strategic Plan. *Educational Technology & Society*, 15 (3), 149–163.

## Numbers Are Not Enough. Why e-Learning Analytics Failed to Inform an Institutional Strategic Plan

Leah P. Macfadyen<sup>1\*</sup> and Shane Dawson<sup>1,2</sup>

<sup>1</sup>Arts ISIT, Faculty of Arts, The University of British Columbia, Vancouver, BC, Canada // <sup>2</sup>Faculty of Education, University of Wollongong, Australia // leah.macfadyen@ubc.ca // sdawson@exchange.ubc.ca

\*Corresponding author

### ABSTRACT

Learning analytics offers higher education valuable insights that can inform strategic decision-making regarding resource allocation for educational excellence. Research demonstrates that learning management systems (LMSs) can increase student sense of community, support learning communities and enhance student engagement and success, and LMSs have therefore become core enterprise component in many universities. We were invited to undertake a current state analysis of enterprise LMS use in a large research-intensive university, to provide data to inform and guide an LMS review and strategic planning process. Using a new e-learning analytics platform, combined with data visualization and participant observation, we prepared a detailed snapshot of current LMS use patterns and trends and their relationship to student learning outcomes. This paper presents selected data from this “current state analysis” and comments on what it reveals about the comparative effectiveness of this institution’s LMS integration in the service of learning and teaching. More critically, it discusses the reality that the institutional planning process was nonetheless dominated by technical concerns, and made little use of the intelligence revealed by the analytics process. To explain this phenomenon we consider theories of change management and resistance to innovation, and argue that to have meaningful impact, learning analytics proponents must also delve into the socio-technical sphere to ensure that learning analytics data are presented to those involved in strategic institutional planning in ways that have the power to motivate organizational adoption and cultural change.

### Keywords


Learning management system (LMS), Virtual learning environment (VLE), Learning analytics, Strategic planning, Student engagement, Change management, Institutional culture

<https://www.jstor.org/stable/pdf/jeductechsoci.15.3.149.pdf>



# Takeaways

1. Be open to the use of students' digital footprints as a proxy of their engagement, especially earlier within a term.
2. Use big (SIS?) data for a “bird’s eye view” to study quantitative trends across terms that warrant a deeper dive for qualitative interviews.
3. Look for positive outliers you can study, validate, reverse-engineer, support and promote as effective practices or change over time.



The screenshot shows the UMBC Division of Information Technology website. The header includes the UMBC logo, social media icons, a search bar, and a mobile site toggle. The main navigation bar lists: Home, About, Analytics, Business, Infrastructure, Instruction, Security, Support, and System Status. The left sidebar menu includes: Analytics (About Analytics, Curated Information for Leadership), Community (selected), News, Events, Mini-grants, LA Fellows, Our Staff, and Use of Student Data. The main content area is titled "Community" and contains the following text:

UMBC is fortunate to have a strong and active analytics community where faculty, staff and even students can meet to share ideas, research and results about the use of “actionable intelligence” in the work and life of the university. Opportunities to engage include the following:

- [Report Exchange \(REX\)](#) Developers Meeting (every Thursday from noon to 3 p.m.)
- [Report Exchange \(REX\)](#) Users Group Meeting (every other Friday at noon)
- “Analytics @ UMBC” presentation & discussion (~monthly on Fridays at noon)
- Speaker Series (see our [Events section](#))
- [Learning Analytics \(LA\) Community of Practice \(COP\)](#) Google Group (UMBC login req’d)

The campus analytics community is supported by DoIT’s [Analytics](#) and [Instructional Technology](#) groups, as well as [Institutional Research, Analysis & Decision Support](#) (IRADS).

On the right, there is a diagram titled "THREE REALMS OF STUDENT ANALYTICS" showing three overlapping circles: Institutional, Academic, and Learning. The Institutional circle is described as "Institutional: Institutional and operational data for policy, planning, and resource allocation." The Academic circle is described as "Academic: Academic performance, course completion, and student engagement." The Learning circle is described as "Learning: Learning analytics, course engagement, and student success." The diagram is credited to "Source: Jenn Stringer, CIO, UC Berkeley".

The bottom left sidebar contains contact information:

**Contact**  
 Phone: [410.455.3838](tel:410.455.3838)  
[Contact Us](#)  
[myUMBC](#)

More info: [doit.umbc.edu/analytics/community](https://doit.umbc.edu/analytics/community)

# Building Data



**Sanjoosh Akkineni**  
**Lead Academic Data Scientist**  
**Kennesaw State University**

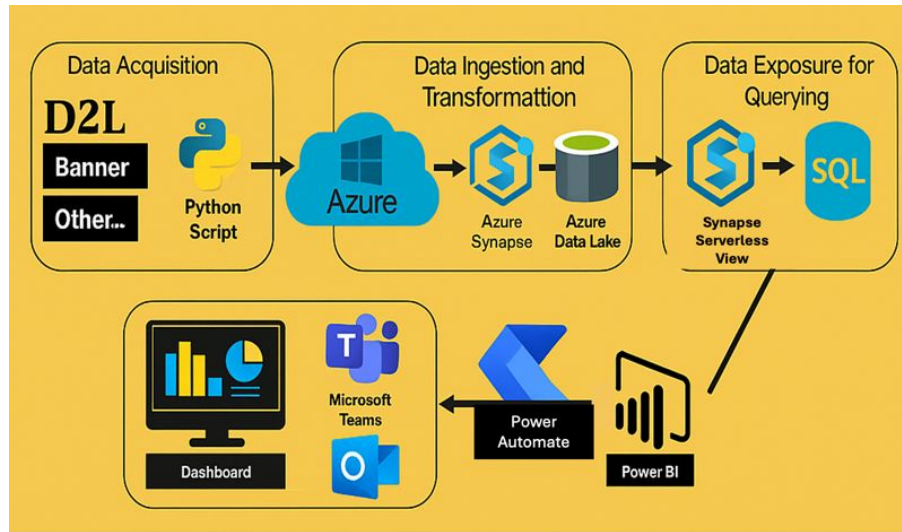


# Centering People, Not Platforms



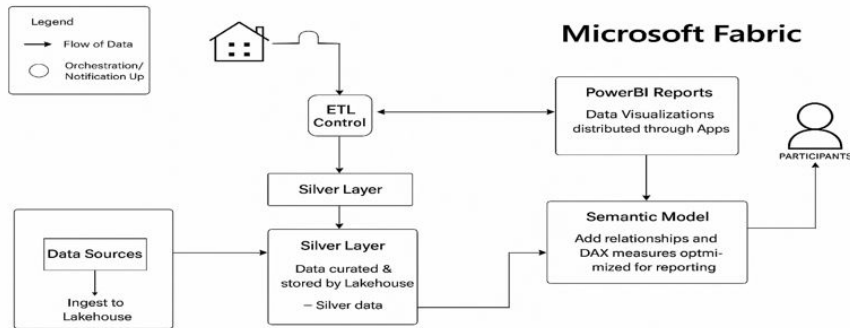
- We began with a question of need, not capability.
- Technology was the enabler, not the driver.
- Trust and purpose shaped the transformation.
- This was a university-led initiative.
- Ownership created impact.





- We started with the end-user in mind not the system.
- The pipeline is elegant, but it's only as good as its trustworthiness.
- We exposed data through layers designed to grow with us.
- Dashboards were built to answer real questions, not to display raw numbers.
- Faculty adoption depends on trust, not tools.
- The shift to Microsoft Fabric reflects our commitment to long-term scale and usability.
- This isn't just infrastructure. It's a people-first data experience.

## SCALING WITH PURPOSE: EVOLVING OUR DATA ARCHITECTURE



This diagram is illustrative and does not represent confidential or proprietary implementation details.

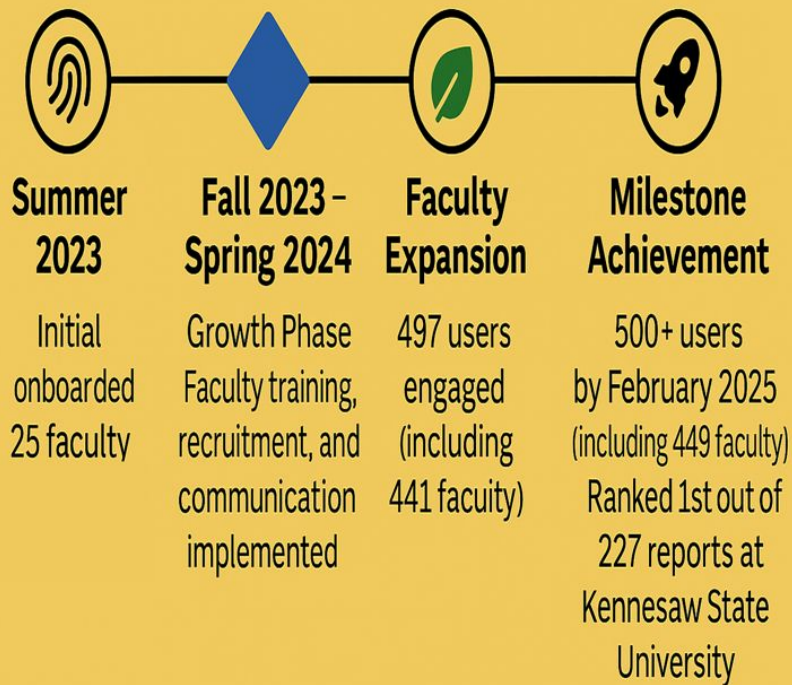
# Building Trust, Not Just Dashboards

- 1 Understand needs 
- 2 Build with users 
- 3 Ensure transparency 
- 4 Support and train 
- 5 Celebrate early wins 

- We didn't assume - we asked.
- We built uHoo *with* faculty, not *for* them.
- Transparency wasn't optional - it was constant.
- We made support a relationship, not a onetime training.
- We recognized and amplified early adopters.
- Trust was never an afterthought - it was intentional.



# TIMELINE OF FACULTY ADOPTION AND GROWTH



- **We started small and intentionally.**
- **Piloting built psychological safety.**
- **This was about relationship-building, not rollouts.**
- **We used feedback loops to evolve quickly.**
- **We prioritized quality over quantity.**
- **Recognition followed relevance.**

# START BUILDING NOW



- ✓ Start with a needs assessment, not a feature wish list
- ✓ Bring users into the process early—build with them, not for them
- ✓ Focus on trust and transparency before diving into analytics
- ✓ See data as a service to people rather than a tool to be managed

**As I like to say:**  
*Technology can scale,  
but it's culture that sustains.*



# Building Understanding

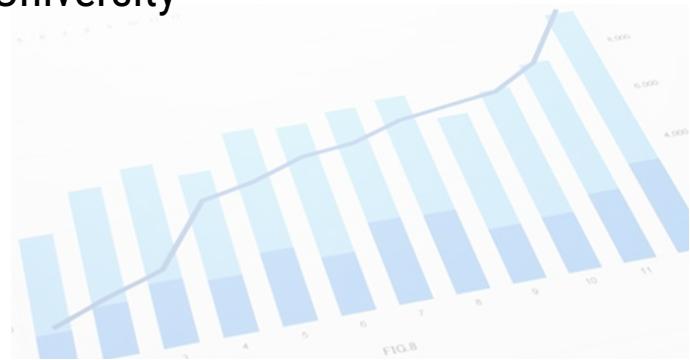


## Building Understanding

Ben Hellar

Manager, Data Empowered Learning

Pennsylvania State University



# A framework for building a data environment to drive action

## Enrollment Analytics



### Forward Looking

- Admissions
- Matriculation
- Course Scheduling
- Learning Spaces

## Institutional Research



### Post-hoc

- Assessment
- Accreditation
- Retention Metrics
- Program Review





# A framework for building a data environment to drive action

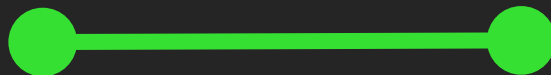
## Enrollment Analytics



### Forward Looking

- Admissions
- Matriculation
- Course Scheduling
- Learning Spaces

## Learning Analytics



### Real-Time

- Student Success
- Intervention Strategies
- Reflective Teaching
- Course Delivery

## Institutional Research



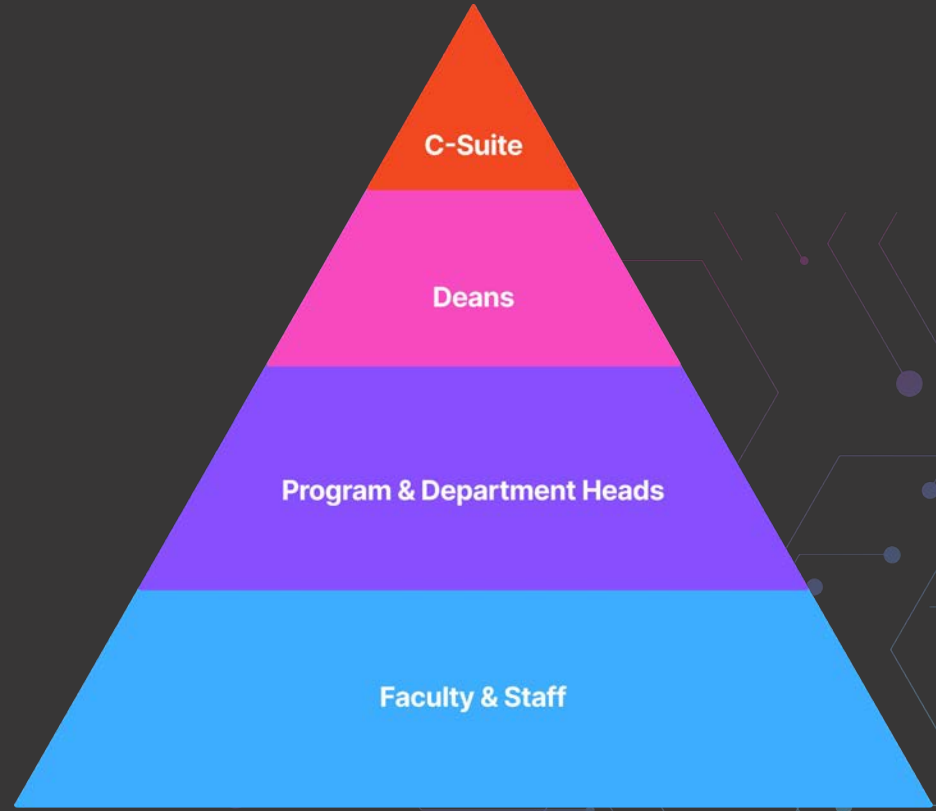
### Post-hoc

- Assessment
- Accreditation
- Retention Metrics
- Program Review



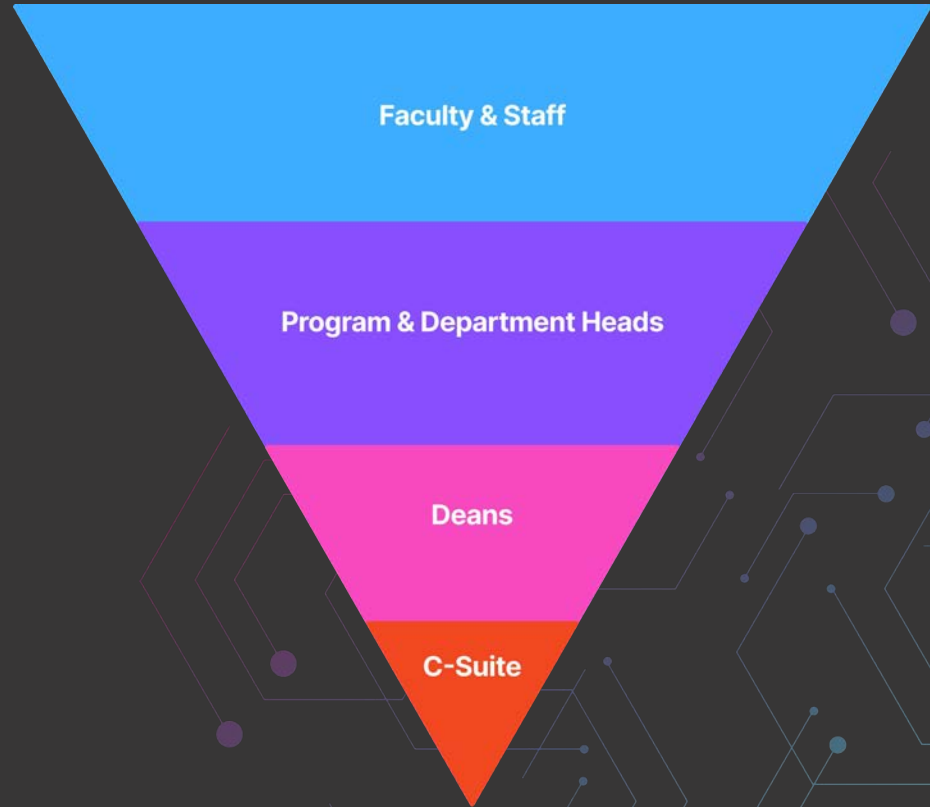
# Traditional Approach

Delivers data to inform high impact and strategic decisions.



# Data Empowered Approach

Provides data to those in the institution that make the most volume and frequency of decisions!





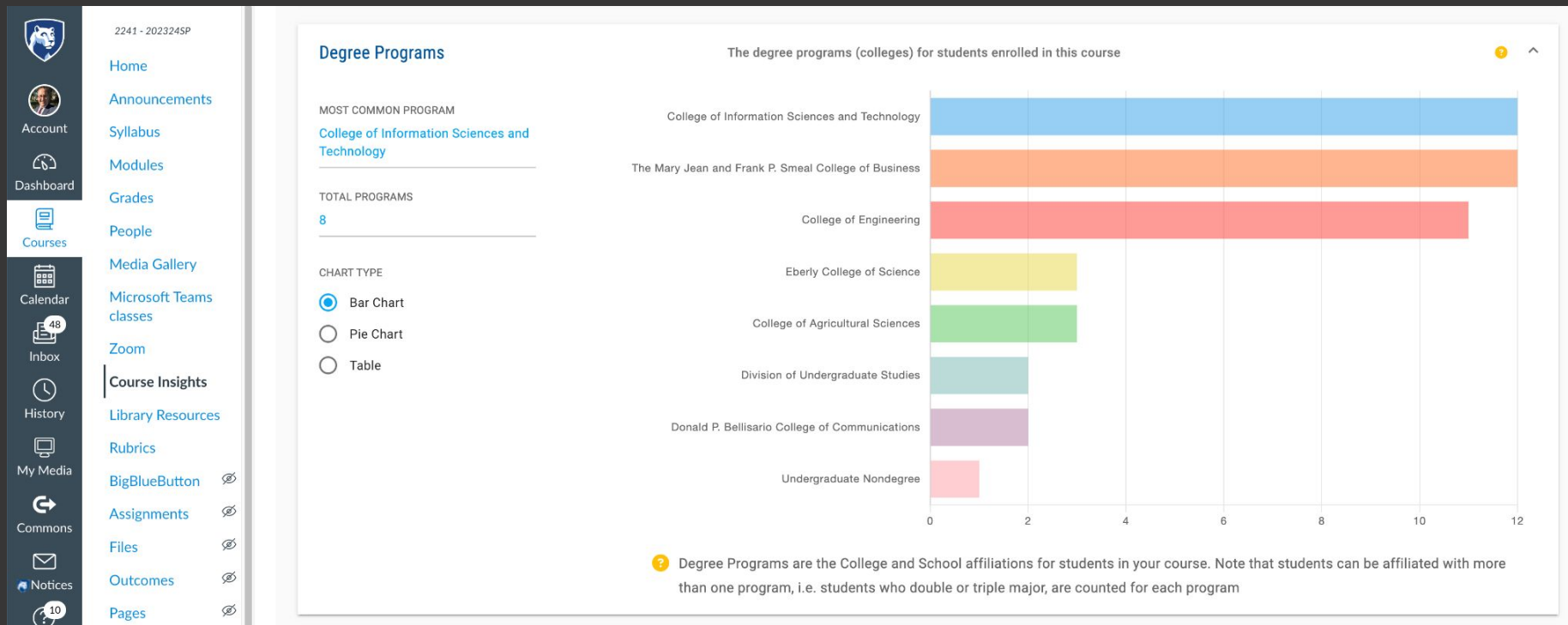
# Having data is not enough...

We want to empower non-technical individuals to make decisions with data at a glance and move the institution **away from data discovery and towards data empowerment.**



**PennState**  
Information Technology

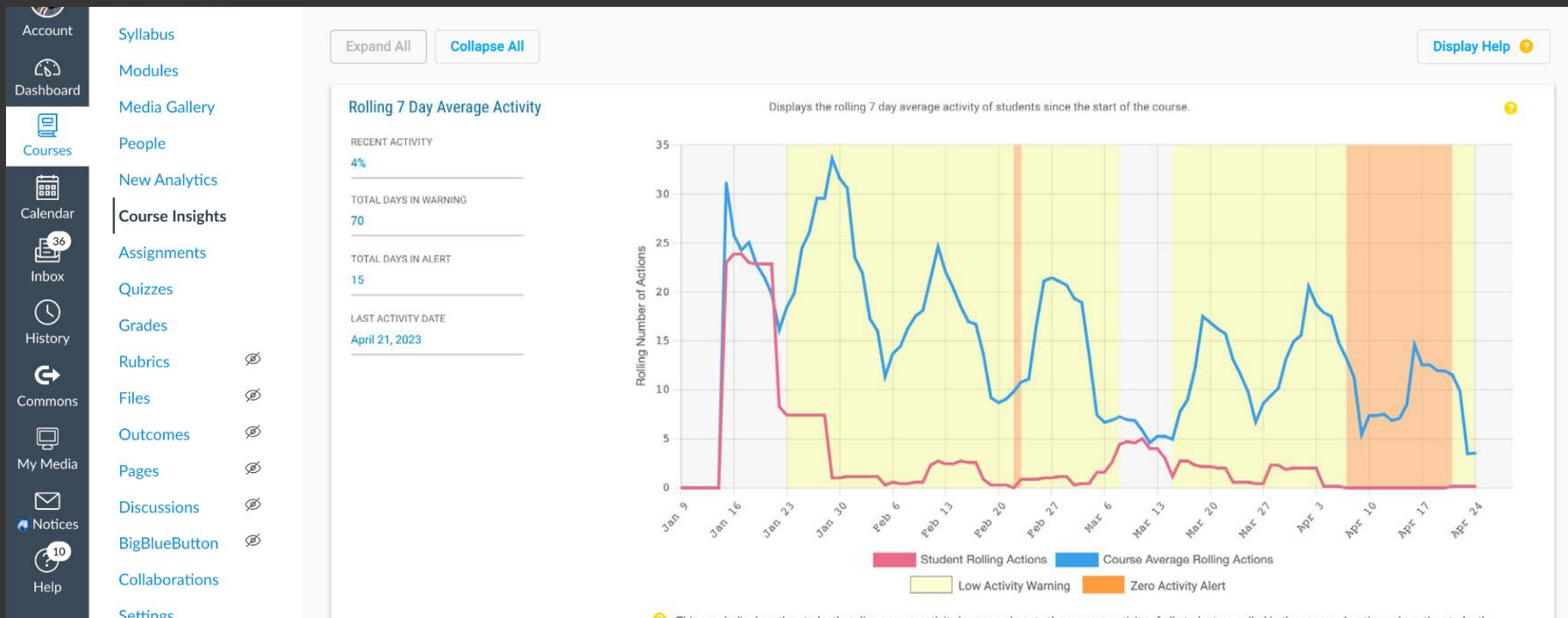
# Democratizing data for all decision makers



**PennState**  
Information Technology

Faculty have access to data, but that data is not always accessible.  
Course Insights enables easy access to their course data from inside Canvas!

# Using data to drive strategy

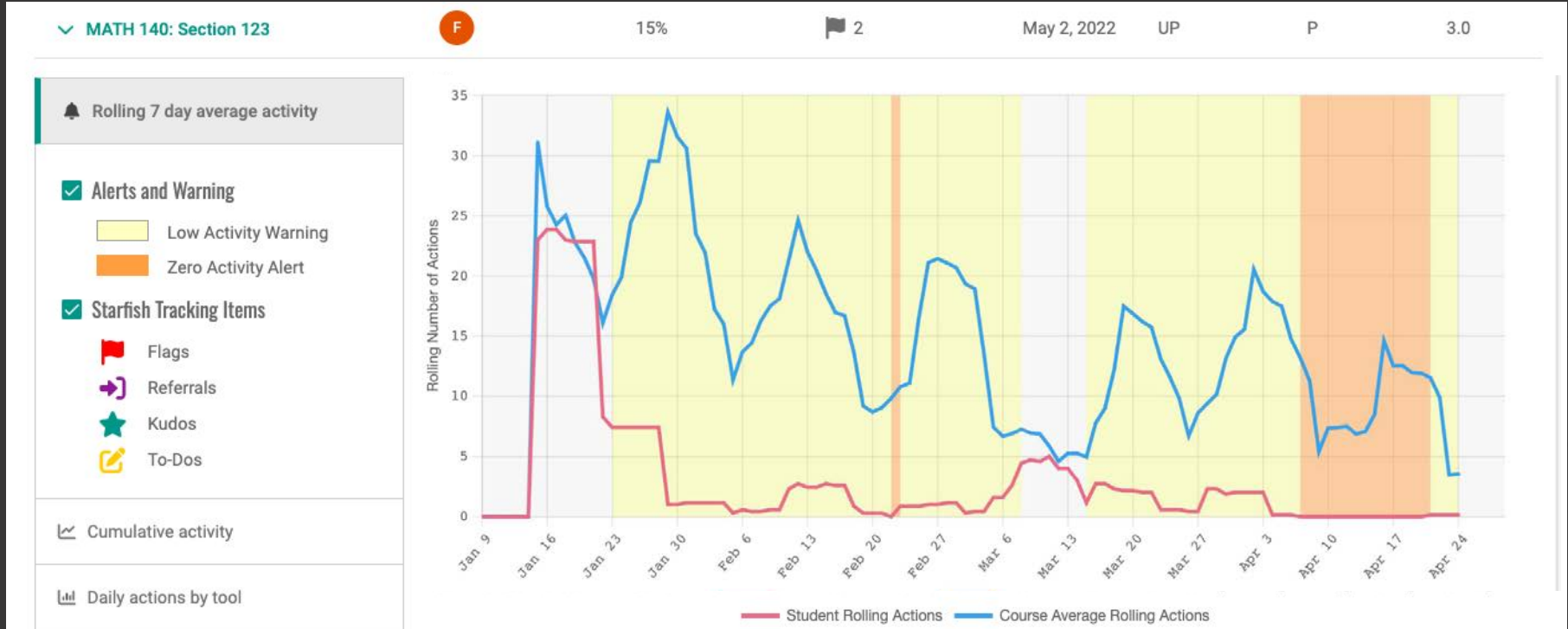


**PennState**  
Information Technology

By making data accessible, we can use learning analytics to shape the types of decisions faculty can make to support their courses



# Creating an environment for shared insights





# Recognizing differences in decision making

## Undergraduate Career

ACADEMIC STANDING CUM GPA TOTAL CREDITS PSU CREDITS SEMESTER STANDING  
Warning 1 1.01 16 13 2nd Sem (14.1-29.0 Credits)

## Active Programs

ADMIT TERM	PROGRAM	PLAN CODE	PLAN	SUBPLAN
<u>Fall 2021</u>	<u>Division of Undergraduate Studies</u>	<u>PMAJ</u>	<u>Division of Undergraduate Studies</u>	<u>-</u>
<u>MAJOR 1 100%</u>	<u>Education (UP)</u>	<u>BS</u>	<u>Secondary Education</u>	<u>Soc Stud Teach (SOCS</u>

Expand All

Collapse All

↓ 📅 Newest to Oldest

### Fall 2023

15 attempted credits for the Fall 2023 semester

Course	Recent Activity ⓘ	Cumulative Activity ⓘ	Starfish Flags ⓘ	Last Activity ⓘ	Location	Mode ⓘ	Credits
> <a href="#">CMPSC 101: Section 001</a>	31% ⓘ	32%		2 days ago	UP	P	3.0
> <a href="#">CMPSC 101: Section 002R</a>	31% ⓘ	32%		2 days ago	UP	P	-
> <a href="#">GEOG 1N: Section 003</a>	16% ⓘ	24%		7 days ago	UP	H2	3.0
> <a href="#">HDFS 239: Section 001</a>	49%	25%		Yesterday	UP	P	3.0
> <a href="#">PSYCH 100: Section 006</a>	28% ⓘ	11%		7 days ago	UP	P	3.0
> <a href="#">SOC 1: Section 004</a>	118%	41%		Yesterday	UP	P	3.0



**PennState**  
Information Technology

Advisers at PSU have no access to in-progress grades and rely on analytics from a student's entire schedule to provide context.




By thinking differently about our usage of the real-time learning data, we are able to create a culture of **proactive student support** and intervention, one that also enables the **differentiated care** of our students.



**PennState**  
Information Technology

# Providing ground truth at an institutional scale

 Ben Heller  
bdh161@psu.edu

Official Courses

Semester  
Spring 2025

Campus Group: University Park

COLLEGE

Liberal Arts (2,697)

Engineering (2,622)

Eberly College of Science (2,011)

Arts And Architecture (1,731)

Health And Human Development (1,216)

Show more

COURSE LEVEL

Undergraduate (1-499) (9,486)


Graduate (500-699) (5,184)

Graduate (800-899) (232)

Law (900-999) (117)

Special/Other (20)

15K Course Sections



Search Table  
All Visible Columns

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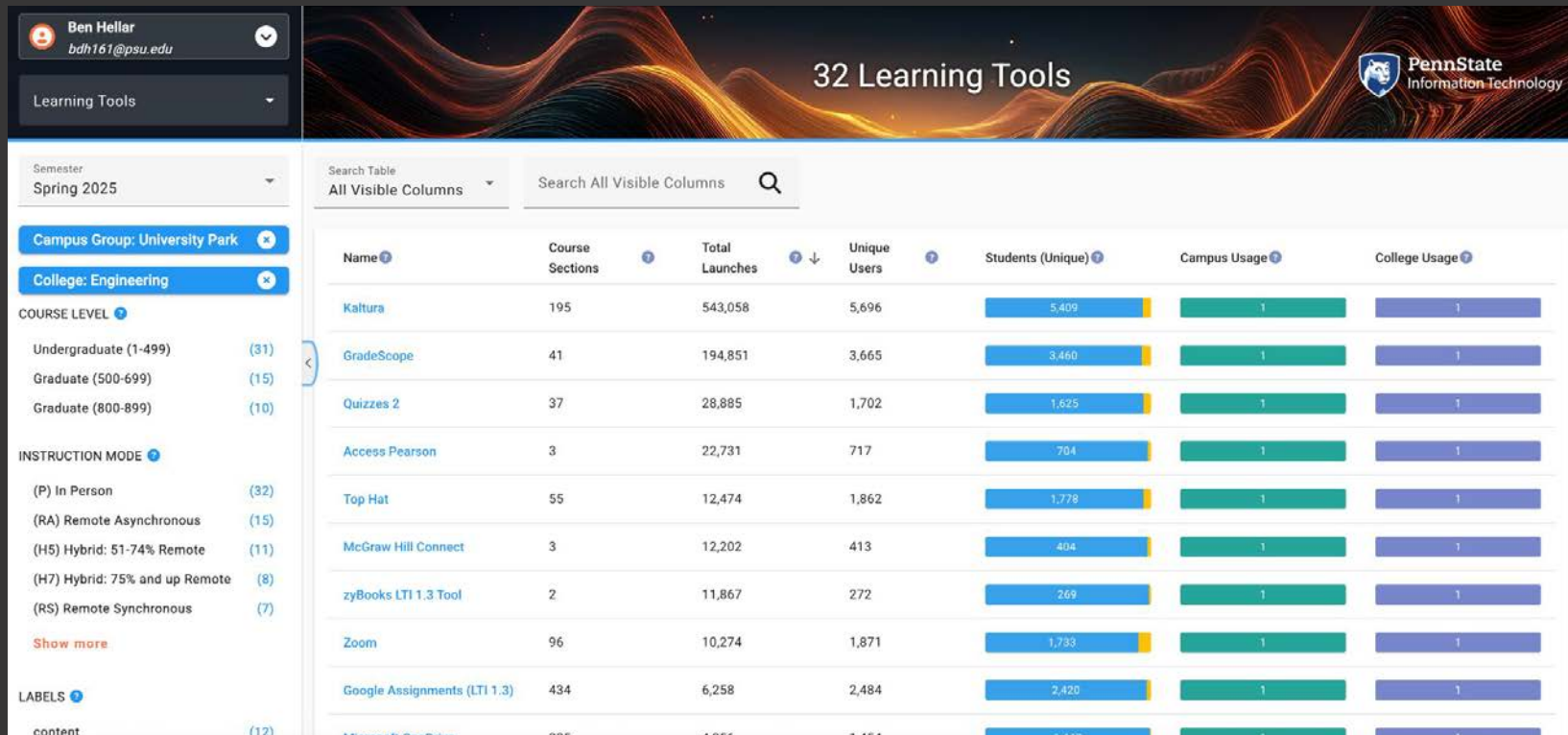
Course Section	Course Description	Instructor	Campus	College	Instruction Mode	Students Enrolled	Published
> EGEE 101: Section 001V	Energy and Envrnmnt	King, Gregory R	UP	Earth And Mineral Sciences	RA	1,295 / 1,300	✓
> ANTH 140: Section 001	Anth of Alcohol	French, Kirk Dow	UP	Liberal Arts	P	718 / 726	✓
> SOC 119N: Section 001	Race Ethnicity and Culture	Richards, Samuel Martell	UP	Liberal Arts	P	709 / 726	✓
> ASTRO 7N: Section 002	Artistic Universe	Charlton, Jane Camilla Pagano, Michael Tr'ehnl, Nahks	UP	Eberly College of Science	H7	703 / 750	✓
> ASTRO 7N: Section 001	Artistic Universe	Charlton, Jane Camilla Pagano, Michael Tr'ehnl, Nahks	UP	Eberly College of Science	H7	702 / 750	✓
> EDAB TEMPI: Section 001	Temp Educ Abrd Reg	Brubaker, Brian K	UP	Penn State University	P	698 / 1,100	✗
> HDFS 129: Section 001	Intro to HDFS	Klutse, Adelaide Delali Counterterme, Molly Backer, Penina Miriam	UP	Health And Human Development	P	698 / 700	✓
> FIN 301: Section 001	CORPORATION FIN	Bundro, Richard Joseph	UP	Smeal College of Business	P	651 / 685	✓



**PennState**  
Information Technology

Instructional Designers and course administrators need an understanding of course delivery beyond what can be found in the SIS alone!

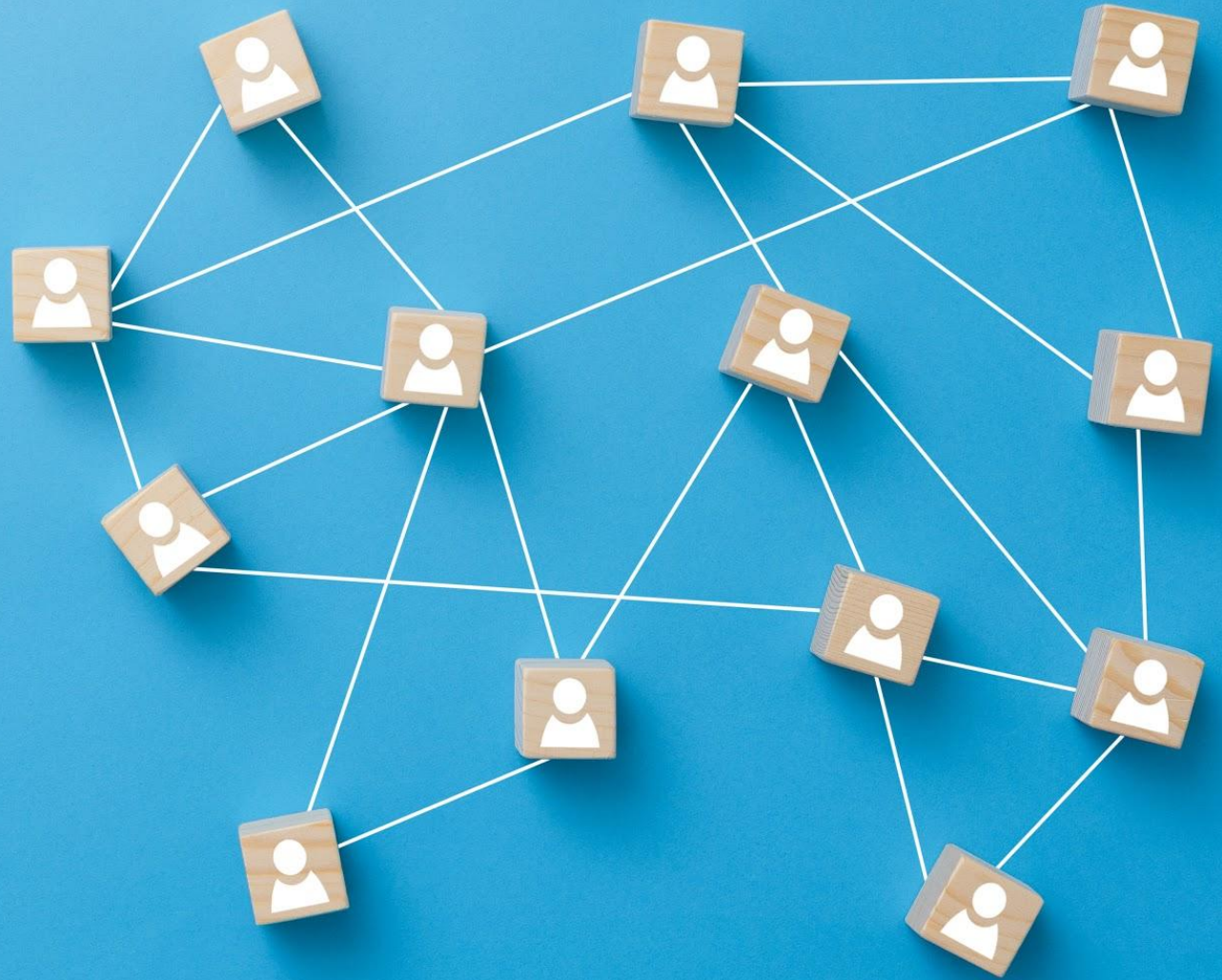
# Breaking down silos and creating transparency





# Data Empowered Institution

...Understands that data can drive strategy, that common insights can be shared to decision makers at any level of the institution.



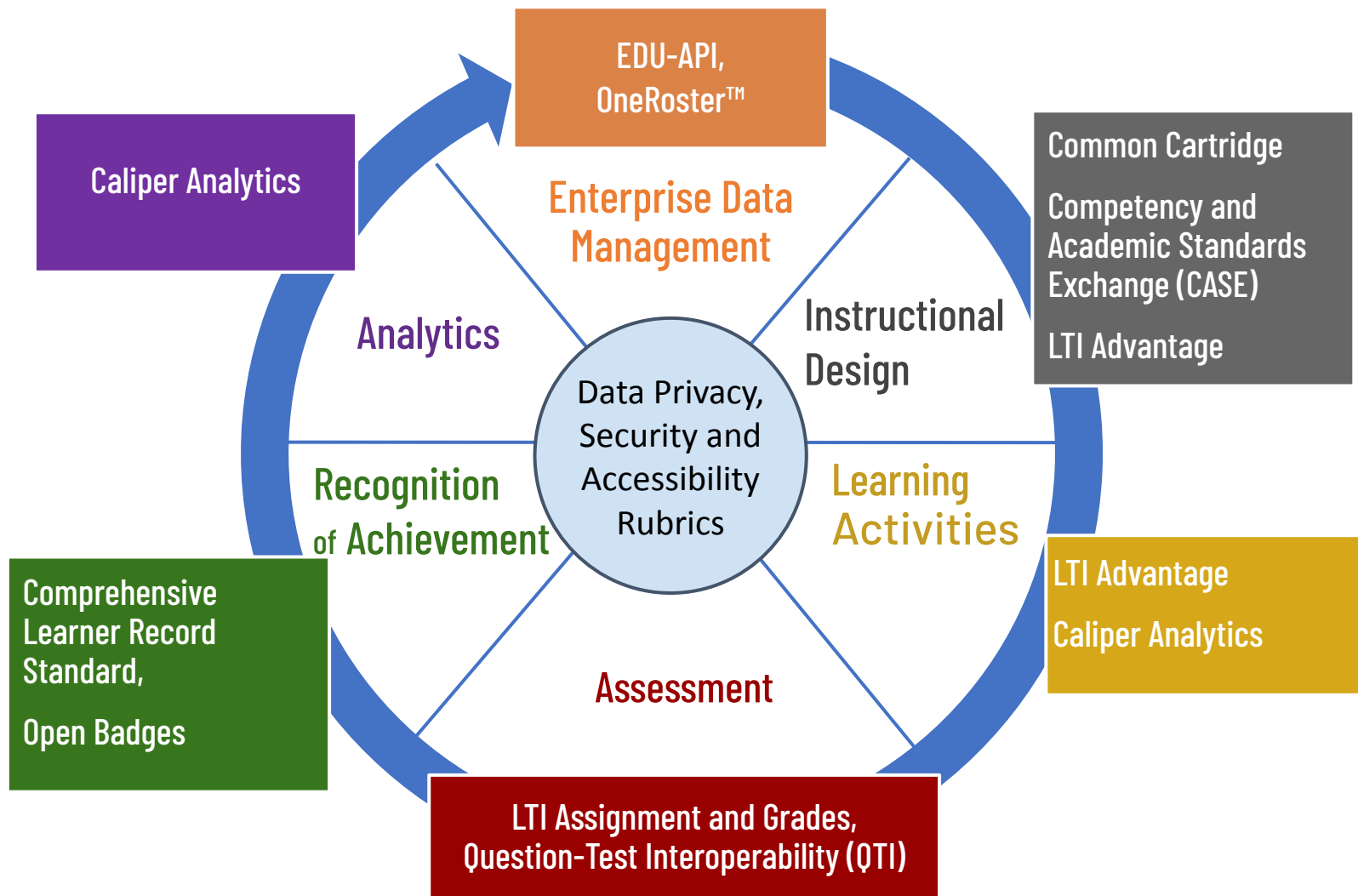
**PennState**  
Information Technology

# Building Ability



Suzanne Carbonaro  
1EdTech

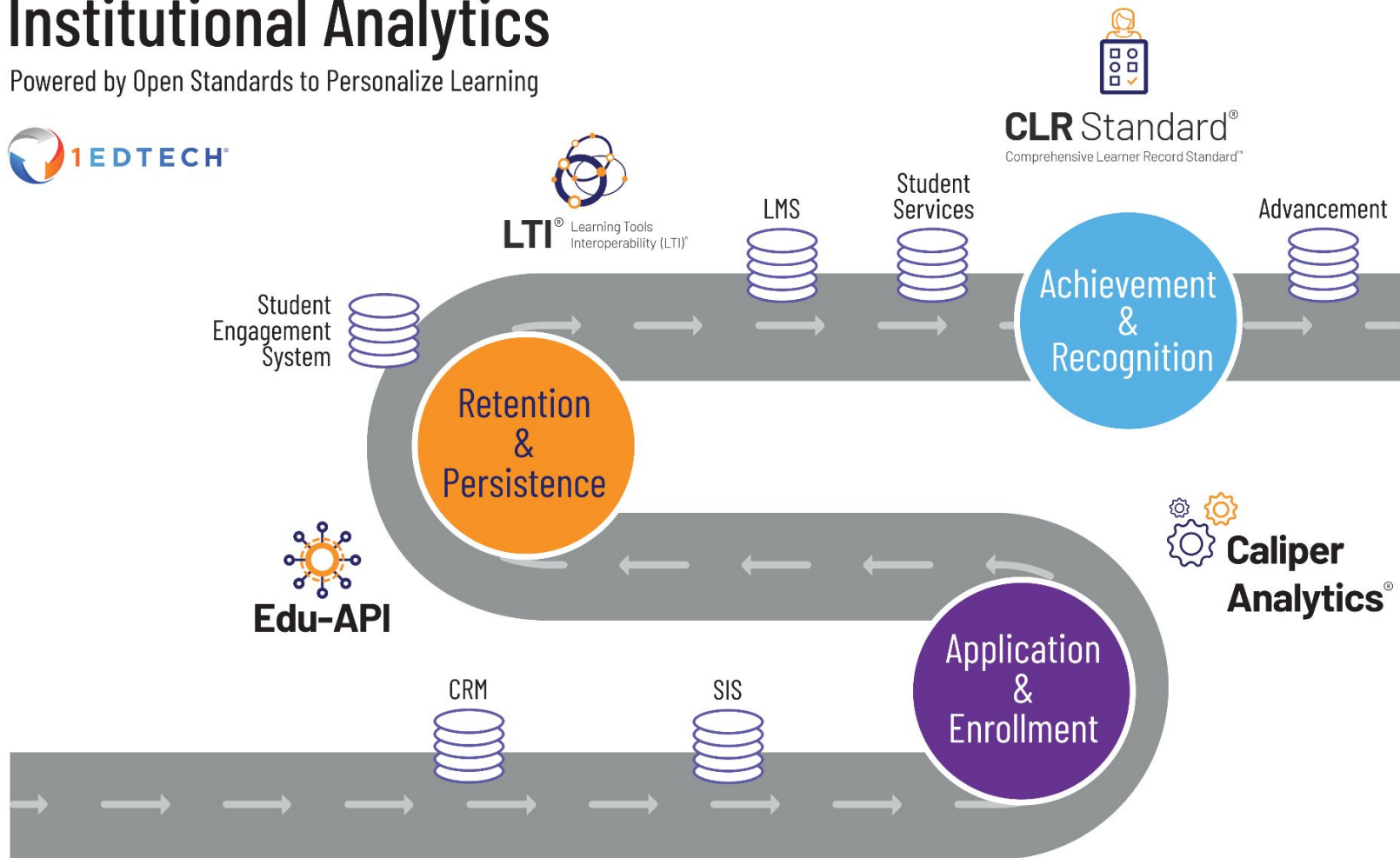
Vice President, Postsecondary  
Education & Workforce Programs



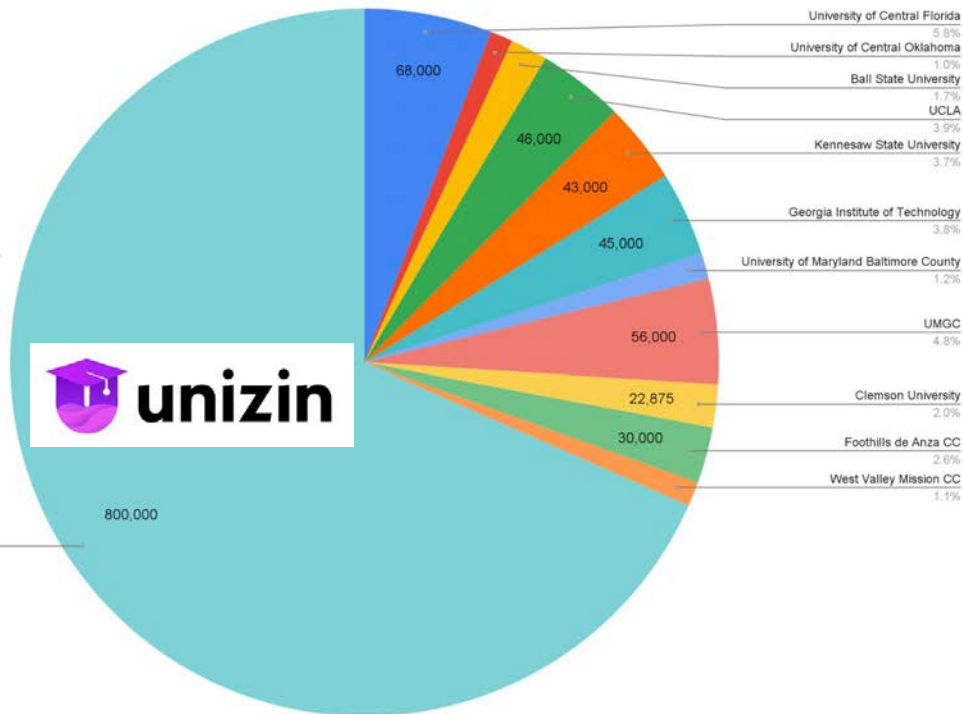


# Institutional Analytics

Powered by Open Standards to Personalize Learning



27 Institutions  
1.5 Million Learners



American Association of Public Land  
Grant Universities: 247 Member  
Institutions (across US, Canada &  
Mexico)

UPCEA: The Online and Professional  
Education Association: Community of  
14,000 educators

## Say Goodbye to Complicated Integrations and Hello to Data Innovation

Webinar panel led by early adopters of Edu-API, May 7, 2025 12 PM

- With more student data available than ever before, the opportunity to drive transformational insights is within reach—but many institutions are held back by the complexity of their data ecosystems.
- Designed to streamline secure and flexible data exchange, Edu-API is rapidly becoming the go-to solution for institutions serious about modernizing their data strategies.



<https://1ed.tech/edu-apipanel>



# Building Ability

## Learning Impact CONFERENCE 2025

— June 2-5 Indianapolis, IN —

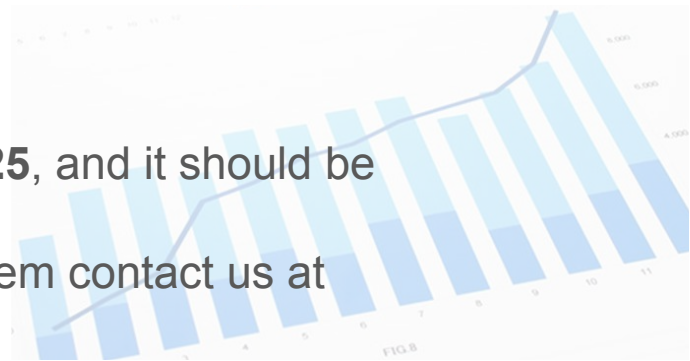


[LAB-C Session](#) on June 3rd right after lunch!

Learn More: <https://1ed.tech/LearningImpact>

LAB-C participants who are not members is **Lab420712LI25**, and it should be applied on the Order Summary page during registration.

If you experience any issues with the code, please have them contact us at [events@1edtech.org](mailto:events@1edtech.org).





# Building Ability

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Join our community!  
And Build with us!



<https://community.1edtech.org>





# Building a Coalition

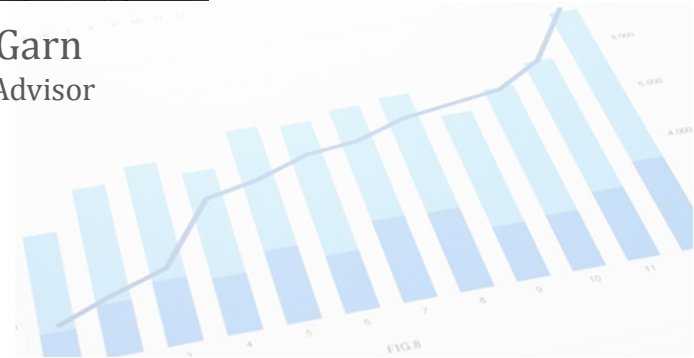
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Kevin Corcoran  
University of Central Florida



Myk Garn  
Senior Advisor

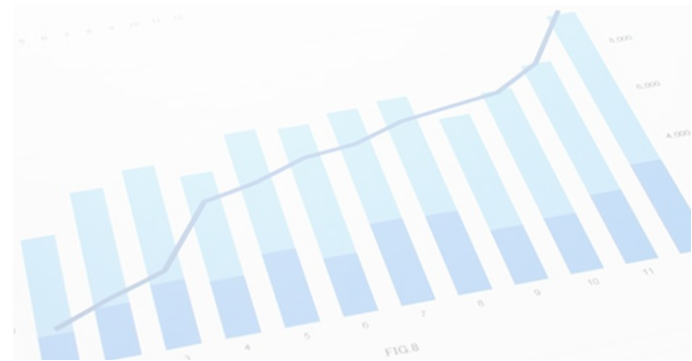




“Universities in particular can benefit from [an] integrated data approach to enhance **student recruitment** , improve **educational outcomes** , and maintain stronger **alumni connections** .”

**Winston Chang**

Global Public Sector CTO, Snowflake, January 2025

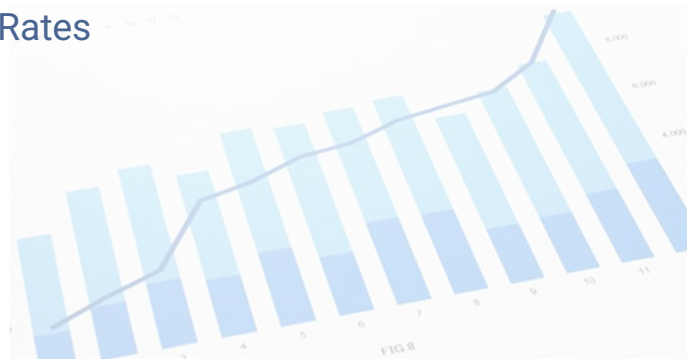


## ON LEARNING

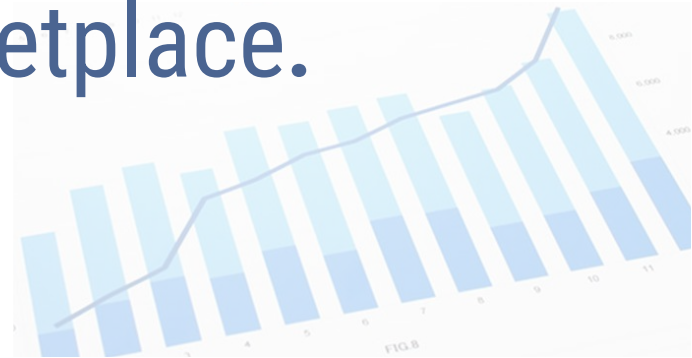
- Personalized Learning Experiences
- Early Identification of At-Risk Students
- Informed and Enhanced Teaching Strategies
- Enhanced Student Engagement
- Increased Student Retention and Graduation Rates
- Preparation for Future Careers

## ON OPERATIONS

- Improved Resource Allocation
- Data-Informed Decision Making
- Continuous Improvement
- Transparency and Accountability
- Increased Student Retention and Graduation Rates

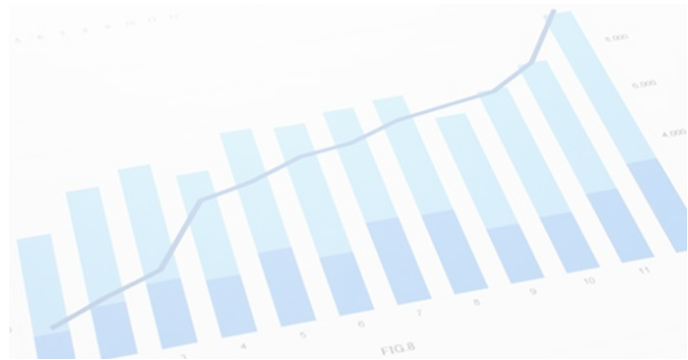


Excelling at these goals is essential to staying relevant and competitive in a rapidly transforming and digitizing academic marketplace.



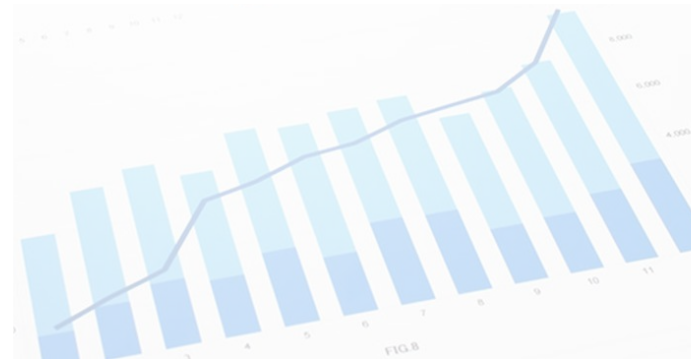
“It's estimated that universities and colleges can produce several terabytes of data each day...totaling billions of data points annually.”

Daniel, B.K. (2017). Big Data in Higher Education: The Big Picture. In: Kei Daniel, B. (eds) Big Data and Learning Analytics in Higher Education. Springer, Cham.  
[https://doi.org/10.1007/978-3-319-06520-5\\_3](https://doi.org/10.1007/978-3-319-06520-5_3)



# ...and Knowledge Poor

“It is common to find 35, 50 or 100 data systems in play - each growing their own data - and “trapping” it there.”

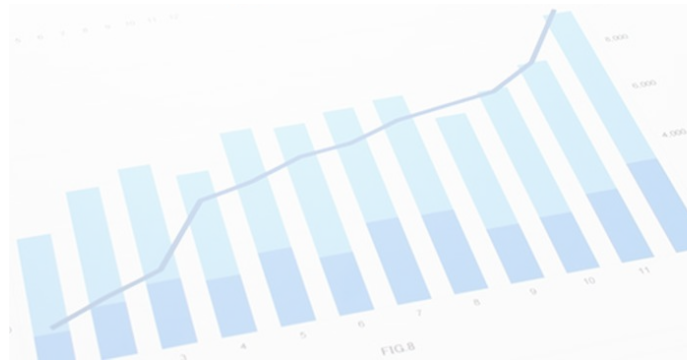


# Building a Coalition



**Solutions are not being shared**

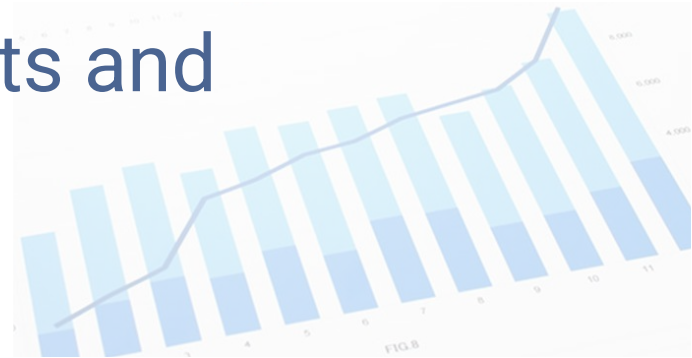
Only 30% overall said they have access to communities of practice.





# How Might We...

Expand the number of colleges and universities engaged in significant learning analytics efforts that increase college completion outcomes while improving success for students and value for institutions?



Establish and grow LAB-C as an impactful and trusted cross-silo coalition catalyzing adoption and use of learner and learning analytics across the education sector.





# Building a Coalition



unizin

BILL & MELINDA  
GATES foundation



## 1EdTech Member Meeting

November, 2024 - Charleston, SC

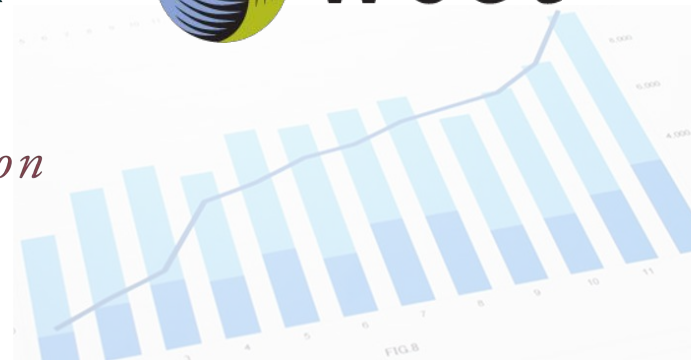


# Building Conversations

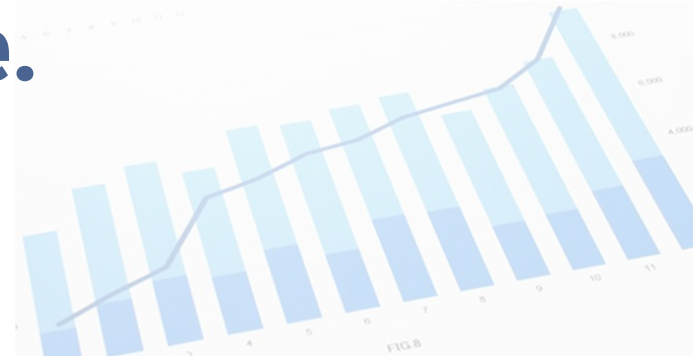
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BILL & MELINDA  
GATES *foundation*



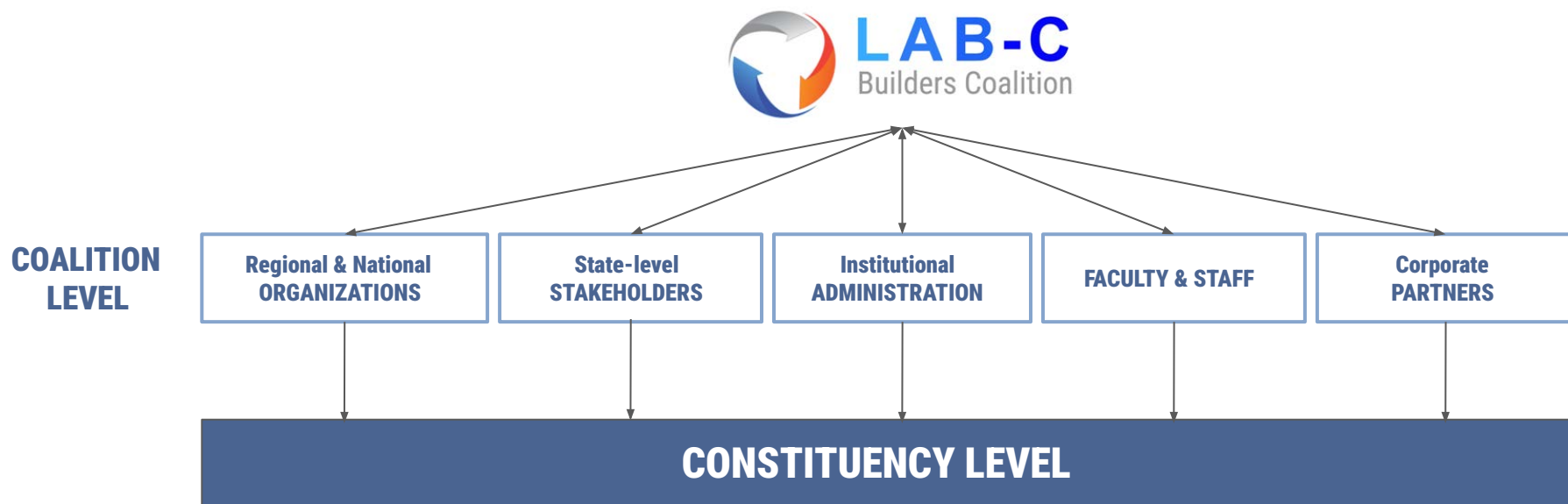
**If information doesn't  
get distributed...  
it doesn't become  
knowledge.**





# A Convener of Conveners

(AKA FORCE Multiplier)







# Join the Coalition

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## Get Involved!

### Ways to contribute:

- Attend Learning Impact 2025
- Advocate for your associations to join the coalition
- Share institutional resources for the benefit of all
- Contribute to LAB-C meetings and working groups
- Provide direction and feedback for LAB-C efforts
- Disseminate LAB-C findings and efforts with others



# Join the Coalition

**LAB-C COMMUNITY**

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## Why and How to Build a Learning Analytics Community of Practice

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1. Why and How to Build a Learning Analytics Community of Practice 0 Recommend

Posted 02-14-2025 11:14:00 AM

**WG**  
Warren Goetzel  
1EdTech Contributing Member  
Actions

Hope all is wel. Just wanted to share in case folks did not see it Why and How to Build a Learning Analytics Community of Practice

Evollution remove preview

Why and How to Build a Learning Analytics Community of Practice  
A learning analytics community of practice can be extremely beneficial to the student learning experience through assessment and actionable intervention.



**Suzanne Carbonaro**  
[scarbonaro@1edtech.org](mailto:scarbonaro@1edtech.org)

**1EdTech Community:**

<https://community.1edtech.org/home/memberhome>



# Join the Coalition

## Learning Impact CONFERENCE 2025

— June 2-5 Indianapolis, IN —

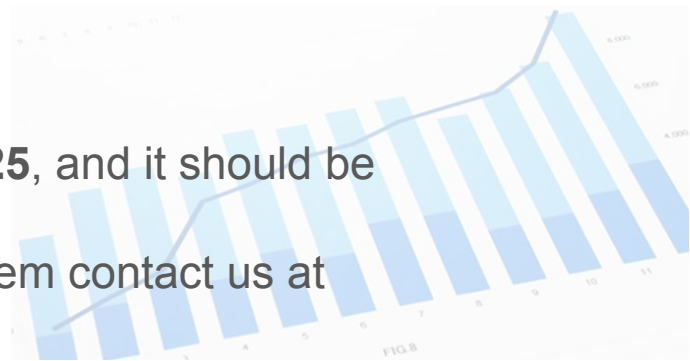


[LAB-C Session](#) on June 3rd right after lunch!

Learn More: <https://1ed.tech/LearningImpact>

LAB-C participants who are not members is **Lab420712LI25**, and it should be applied on the Order Summary page during registration.

If you experience any issues with the code, please have them contact us at [events@1edtech.org](mailto:events@1edtech.org).





# Building the Learning Analytics Builders Coalition

**April 25, 2025**