# Six Steps for Effective Learning Analytics Implementation

in Postsecondary Education

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## Overview

The adoption of learning analytics in postsecondary education has surged in recent years as institutions strive to improve student success, retention, and instructional quality through data-informed decisions.

Learning Analytics Builders Coalition (LAB-C) emerged from the 1EdTech Learning Impact conference in 2024. At this convening, several institutions recognized the untapped potential of learning analytics and the need for a collective approach.

Over the next several months leading up to Learning Impact 2025, a committed set of stakeholders engaged in learning analytics discussions and pilots, working collaboratively with impact agencies to advance the culture and ability to scale the use of learning analytics to impact personalized learning and student achievement.

## Six Steps Guide

Drawing from best practices across successful implementations and insights from innovators in LAB-C, this guide outlines six foundational steps institutions can follow to ensure their learning analytics programs are strategic, sustainable, and student-centered.

The guidance document is informed by case studies, 1EdTech community insights, and LAB-C initiative, which underscores the importance of building coalitions, fostering collaboration, and sharing actionable intelligence to drive student success.

1. **Create an Internal Committee or Council**
2. **Involve External Stakeholders**
3. **Create a Taxonomy**
4. **Start Small**
5. **Focus on Ideation and Continuous Improvement**
6. **Choose a Platform That Aligns with Standards**

# Step 1:
# Create an Internal Committee or Council

## Establishing a Cross-Functional Analytics Governance Team Is Critical

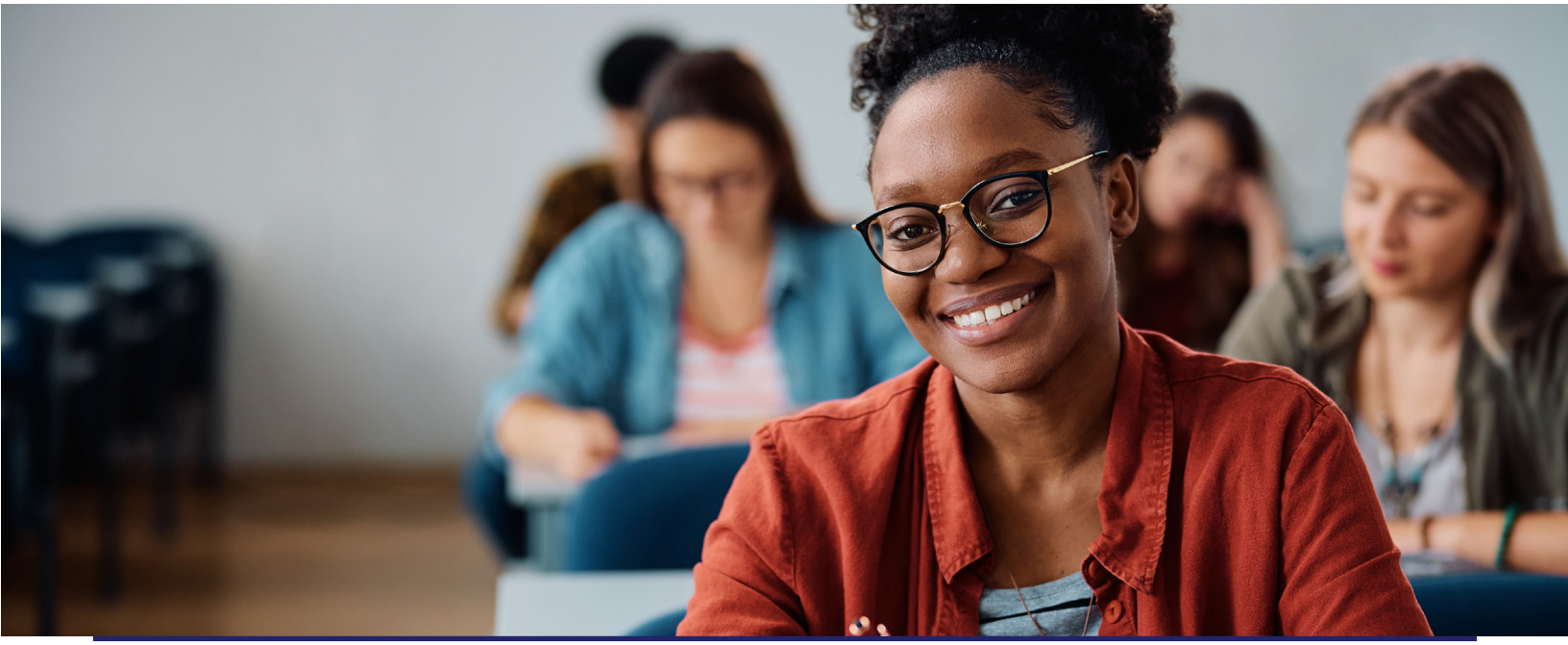
This group should include faculty, institutional researchers, instructional designers, academic advisors, IT staff, and student success leaders. Their role is to:

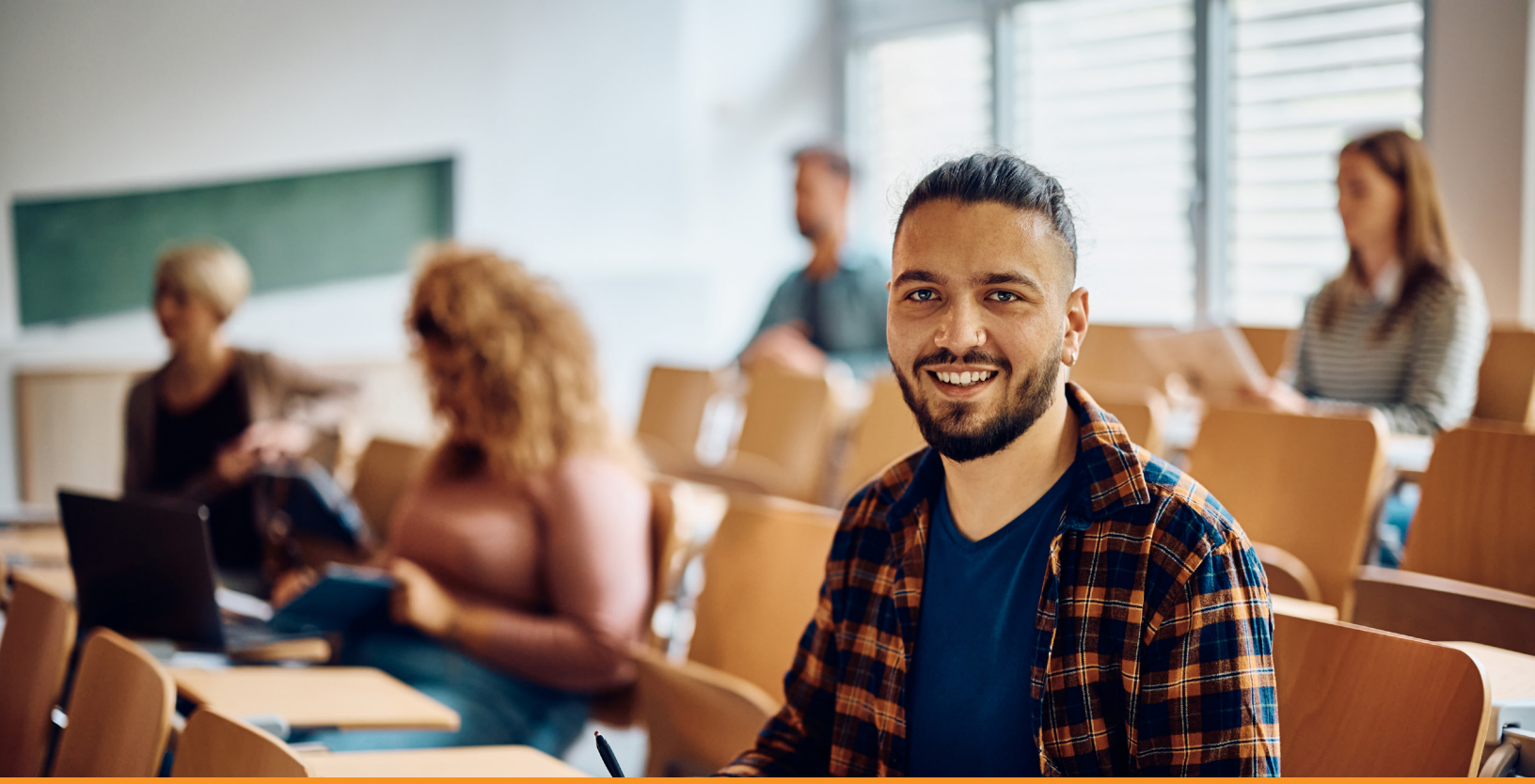
- **Define institutional goals for learning analytics** (e.g., improving retention, early alerts, course redesign).
- **Set data governance policies to address privacy, ethics, and responsible data use.**
- **Ensure alignment between analytics initiatives and institutional mission and accreditation requirements.**

## Spotlight: University of Maryland, Baltimore County's Learning Analytics Fellows Program

UMBC

John Fritz from the University of Maryland, Baltimore County (UMBC) highlights the transformative impact of the Learning Analytics Fellows Program. Initiated in 2021, this program offers $2,000 grants for faculty to propose and implement targeted interventions. These interventions focus on identifying and addressing student learning gaps, testing predictive analytics models, and creating early alert systems. Faculty participate in community of practice meetings where they present findings, fostering a cycle of continuous learning and sharing across departments. This program has not only enhanced data-driven decision-making but also encouraged faculty to adopt a reflective, evidence-based approach to teaching.





# Step 2:
# Involve External Stakeholders

## Expand Analytics Impact Through External Partnerships.

Engage external partners such as accreditation bodies, edtech providers, and employers to broaden the impact and credibility of analytics initiatives. These partnerships:

- **Help ensure that analytics platforms and metrics are interoperable with external systems.**
- **Provide insight into workforce-aligned competencies that can guide curriculum refinement.**
- **Foster opportunities for collaborative research and benchmarking.**

## Spotlight: Pennsylvania State University's External Partnerships

Ben Hellar from Pennsylvania State University describes a series of collaborations with external edtech vendors that led to the creation of a comprehensive analytics ecosystem. By integrating third-party platforms with existing learning management and student information systems, Penn State was able to centralize data collection and analysis to support student success. This approach allowed the institution to implement predictive analytics to identify at-risk students and develop targeted interventions. Additionally, external partnerships facilitated benchmarking initiatives that compared course delivery and learning management system usage across peer institutions, providing valuable insights for refining instructional strategies.

# Step 3: Create a Taxonomy

## Define Clear Data Taxonomies to Ensure Consistency Across Analytics.

A clear taxonomy of learning data elements (e.g., engagement metrics, course-level outcomes, demographic factors) ensures consistency and clarity across analytics dashboards and reports. This taxonomy should:

- **Be tied to institutional goals** (e.g., equity in student achievement, academic progression).
- **Align with open standards such as xAPI, CASE®, Caliper Analytics®, and Edu-API for interoperability.**
- **Include definitions for key indicators, such as course success, participation, and at-risk status.**

## Spotlight: Defining Data Taxonomies at Kennesaw State University

KENNESAW STATE UNIVERSITY

Kennesaw State emphasizes the development of a standardized taxonomy that categorizes student engagement metrics, course completion rates, and learning outcomes. The initiative included extensive faculty training sessions to align data collection methods across departments. By establishing consistent data definitions, Kennesaw State improved the accuracy of its analytics dashboards and facilitated cross-departmental data sharing, leading to more cohesive student success strategies.

# Step 4: Start Small

## Start With Pilot Projects in One Department or a Few Courses.

Rather than launching a university-wide initiative immediately, Focus on a defined goal—such as improving DFW (Drop-Fail-Withdraw) rates in gateway courses or enhancing engagement in online learning.

## Spotlight: Pilot Projects at Kennesaw State University

At Kennesaw State, a targeted pilot project was conducted in high-enrollment courses with historically high DFW rates. By implementing an adaptive learning platform that tracked student engagement and performance, faculty could identify struggling students early and provide timely interventions. The pilot also included focus groups with faculty and students to gather feedback on the platform's usability and effectiveness, resulting in refinements before scaling up the initiative.

# Step 5:
# Focus on Ideation and Continuous Improvement

## Learning Analytics Is a Continuous Cycle of Reflection and Improvement

Learning analytics is not a one-time implementation—it's a continuous cycle of reflection and improvement. Teams should:

- **Regularly analyze data and iterate on interventions** (e.g., revising early alert thresholds).
- **Solicit feedback from students and instructors on the usefulness and impact of analytics tools.**
- **Use results to inform strategic decision-making, such as reallocating advising resources or redesigning assessments.**

## Spotlight: Faculty Evolution at University of Maryland, Baltimore County

John Fritz elaborates on the iterative nature of the Learning Analytics Fellows Program at UMBC, where faculty members are encouraged to present their intervention findings at community of practice meetings.

This practice not only fosters peer learning but also encourages faculty to reassess their instructional approaches based on data. For instance, one fellow identified a misalignment between course content and student assessments, leading to a course redesign that improved student performance by 15% in subsequent semesters.

# Step 6:
# Choose a Platform That Aligns with Standards

## Pick Smart Platforms That Play Nice, Stay Fair, and Work for All

Select analytics platforms that support interoperability, accessibility, and ethical data use. Look for tools that:

- **Comply with standards such as LTI®, Caliper, and GDPR.**
- **Allow integration with your Learning Management System (LMS), Student Information System (SIS), advising platforms and other relevant tangential platforms**
- **Enable customizable dashboards for different users** (e.g., faculty, advisors, students).

## Spotlight: Penn State's Platform Selection

Ben Hellar describes Penn State's data ecosystem, which integrates multiple data sources, including LMS, SIS, and CRM systems. By adopting a platform that supports Caliper Analytics and LTI standards, Penn State ensured data consistency across systems. The platform also provided customizable dashboards for faculty, advisors, and students, each tailored to specific data access needs. This approach enabled targeted interventions based on student risk profiles and facilitated more personalized advising strategies.

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# Conclusion

## Build a Robust and Ethical Learning Analytics Ecosystem

- **Create internal governance to guide analytics strategy and policy.**
- **Engage stakeholders to align with broader educational and career goals.**
- **Develop a taxonomy to ensure consistency and interoperability.**
- **Start small with focused pilot projects to demonstrate value.**
- **Emphasize continuous improvement through feedback and intervention cycles.**
- **Choose platforms that are standards-aligned, transparent, and learner-centered.**

Learn More!

By following these steps and integrating insights from initiatives like LAB-C, institutions can leverage learning analytics not just to track student success but to transform it into actionable, impactful educational practices. LAB-C's work demonstrates how coalition-building and shared learning can accelerate progress in analytics, fostering a data-informed culture that benefits both faculty and students.

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