







The Joint Statement on Analytics

Analytics is the use of data, statistical analysis, and explanatory and predictive models to gain insight and act on complex issues.

The Association for Institutional Research (AIR), EDUCAUSE, and the National Association of College and University Business Officers (NACUBO) stand together with a strong sense of urgency to reaffirm higher education's commitment to the use of data and analytics to make better strategic decisions.

As the leaders of three national associations collectively serving nearly 2,500 institutions and representing over 80 percent of postsecondary students in the U.S. (22 million students), we believe higher education must re-energize its efforts and unleash the power of data and analytics across higher education to support students and institutions.

We strongly believe that using data to better understand our students and our own operations paves the way to developing new, innovative approaches for improved student recruiting, better student outcomes, greater institutional efficiency and cost-containment, and much more. Data are an institutional strategic asset and should be used as such.¹

The change-making capacity of analytics should compel institutions to harness the power of these new tools with a sense of obligation and responsibility. The COVID-19 pandemic proved a need for better, data-informed decisions with a focused mindfulness for students, personnel, and others within our communities. However, so far higher education is still struggling to take decisive action on analytics.

Data analytics initiatives are most effective when they target clear, measurable outcomes...

A renewed commitment by higher education's leaders to the use of analytics can help colleges and universities advance institutional goals, improve quality and efficiency, strengthen student outcomes, and enhance teaching, learning, and advising. The thoughtful application of the six principles that follow will accelerate the meaningful use of analytics and take advantage of the power of data to make crucial decisions to better serve students and communities and ensure institutional longevity.

¹ See the research report <u>Analytics in Higher Education: Benefits, Barriers, Progress, and Recommendations</u>, a collaboration between EDUCAUSE and AIR.



Make your approach to data analytics transformational and connected to the institutional mission for real results that matter to your students, faculty, and staff. Don't look for a one-size-fits all approach – each institution's mission, culture, organizational structure, and analytics maturity will dictate specific next steps. However, the incremental approach used so often in higher education won't be enough. Tweaks won't deliver the change we need in time to make a difference in the lives of the students enrolled in our institutions today.

Data analytics initiatives are most effective when they target clear, measurable outcomes, so determine which critical institutional goals call for this approach, and let these efforts lead the way to the broader use of analytics across the institution.

Fundamentally, data must be recognized as an institutional strategic asset, not the property of individual offices.



ANALYTICS IS A TEAM SPORT—BUILD YOUR DREAM TEAM.

Data analytics can be a catalyst to solve institutional problems, but not when silos stand in the way. Establish a team approach with an unrelenting expectation for collaboration across colleges, departments, and divisions of all kinds. Give faculty and staff leaders throughout the institution the broad latitude to clear the way for teamwork. Fundamentally, data must be recognized as an institutional strategic asset, not the property of individual offices. Analytic data and tools help senior administrators lead institutions effectively but must also be accessible for faculty and staff, empowering those on the front lines who are directly educating and supporting students.

Most data and analytics success stories include a foundational commitment with strong buy-in from the top. Recognizing that presidents and chancellors are critical to this comprehensive approach to data and analytics, we encourage all institutional leaders to provide the critical leadership that expands "pockets of excellence" into an institutional culture that embraces innovation, change, and continuous evaluation for improvement.²



PREPARE FOR SOME DETOURS ON THE ROAD TO SUCCESS.

For analytics to have a measurable impact on decisions and behaviors at all levels of an institution, authentic and sustained change is necessary. Faculty, staff, and senior leaders will all need to see analytics as a long-term commitment, a core part of their day-to-day functions, and a driver for institutional decision making. This means each person at your institution—from the cabinet to the bursar's office and from students to deans—will likely find some aspect of your analytics transformation jarring. Expectations must be managed: Aim high, but plan for setbacks, with the understanding that it is okay for some efforts to miss the mark. Learn from the mistakes and move on.

This balancing act will be a challenge demanding skillful leadership and intentional change management across the institution. Despite the difficulties in the journey, the goals you are working toward—serving your students and strengthening your institution—are worth it.

Each person at your institution...will likely find some aspect of your analytics transformation jarring. Expectations must be managed.

² See the American Council on Education's report The Data-Enabled Executive: Using Analytics for Student Success and Sustainability.



Get ready to make substantial investments in time, talent, and money. The necessary investment goes far beyond buying technology. First, make sure the considerable data you already collect are available, shared, and used appropriately. Then, if you want to move hard-to-nudge needles like retention and graduation rates, you need to invest in a broader strategy to get the appropriate information in the hands of faculty, staff, and students and to develop the data literacy skills needed to use the information to make smart decisions.

Helping students successfully achieve their academic goals is fundamental to mission, but it also can positively affect the bottom line. The math is compelling. According to rpk GROUP, technology-enabled initiatives like these may generate net revenue averaging \$1 million annually³. Advancing analytics can be expensive, but the return on investment can also be sizable and extends to long-term reputational returns far beyond adding revenue that would otherwise have been lost when students leave early⁴.

Sophisticated new technologies and predictive algorithms may reinforce pernicious discrimination and bias if not carefully applied with knowledge of the underlying methods and data.



Responsible use of data is a non-negotiable priority. Inside and outside higher education, we've seen too many examples of the inappropriate sharing and use of data, while inadvertent data breaches have impacted literally billions of individuals. Moreover, sophisticated new technologies and predictive algorithms may reinforce pernicious discrimination and bias if not carefully applied with knowledge of the underlying methods and data. Critical to integrating the use of analytics into institutional culture is ongoing attention to the protection of sensitive data and a deep understanding of the assumptions underlying the analytic methodologies.

³ Donna M. Desrochers and Richard L. Staisloff, "<u>Technology-enabled Advising and the Creation of Sustainable Innovation: Early Learnings from iPASS</u>," rpk GROUP, n.d. [accessed September 19, 2018].

⁴ See Return on Investment Toolkit which was created by rpk Group for EDUCAUSE to enable institutions to predict their likely return on these investments.

To ensure ethical use of data, investments in analytics tools must be coupled with an institution-wide program of awareness, transparency, and training that focuses on and empowers data users as well as the people who the data represent.

For every year we fail to use data effectively...we threaten the financial sustainability of our institutions. The stakes are too high.



A sense of urgency is critical as institutions commit to using data analytics. This urgency needs to come from the institution's leaders. You can honor higher education's long tradition of moving carefully, but not be immobilized. The stakes are too high. It's possible to move forward decisively while also listening, collaborating, and building trust along the way.

For every semester we don't do everything we can to ensure student success—including using analytics to increase student progress and completion—students leave our institutions without graduating, discouraged, and more in debt than when they entered. For every year we fail to use data effectively to improve operations or to make better financial and business decisions, we threaten the financial sustainability of our institutions.

Whether you are encouraged by the significant opportunities or driven by the need to solve critical problems, it's time to take a big step forward.

For resources and more information, please visit www.changewithanalytics.com

AIR: The Association for Institutional Research (AIR) represents a worldwide community of institutional research, institutional effectiveness, and other decision-support professionals. Incorporated in 1966, AIR empowers higher education professionals to effectively and ethically use data for better decisions through education and professional development, research, and collective action. For more information, visit www.airweb.org.

EDUCAUSE: A community of IT leaders and professionals working together to tackle challenges and leverage opportunities that are constantly evolving within higher education. EDUCAUSE welcomes diversity, in viewpoints and experience, and believes in the transformative power of uncommon thinking for the common good. Learn more at www.educause.edu.

NACUBO: Founded in 1962, NACUBO is a nonprofit professional organization representing chief administrative and financial officers at more than 1,700 colleges and universities across the country. NACUBO works to advance the economic vitality, business practices, and support of higher education institutions in pursuit of their missions. For more information, visit www.nacubo.org.