Seven Strategies for Trustees in the Data-Literate Community
College boards have the power to transform institutions.
LEVERAGING ANALYTICS TO OPTIMIZE STUDENT success is an institutional strategy whose time has come. It has the potential to dramatically improve learning and graduation rates, reduce the total cost of completion of certificates and degrees, enhance the full spectrum development of learners, enable greater career connections, and serve as a differentiator for institutions that acquire this organizational capacity.

What are analytics and why are they important to you? Analytics are the extensive use of data, statistical and quantitative analysis, explanatory and predictive models, and fact-based management to drive decisions and actions. In order to improve student persistence, completion, and student success, higher education is beginning to utilize data in more advanced ways. While every institution is responsible for basic descriptive reports, traditional reporting basically serves to show what happened in the past. To improve student success in the present and in the future, it is necessary for institutions to move to more real-time and diagnostic analytics to understand what barriers students face and what actions can be taken to move them along more productive pathways. Moreover, institutions can then use these analytics to power apps that support the daily work of faculty, advisors, and students.

What we offer here is a simple framework for trustees to consider as you frame policy and support practice that makes the best of use of analytics to inform, instrument, and assess the impact of innovations, initiatives, outreach, and more.
TO IMPROVE STUDENT SUCCESS IN THE PRESENT AND IN THE FUTURE, IT IS NECESSARY FOR INSTITUTIONS TO MOVE TO MORE REAL-TIME AND DIAGNOSTIC ANALYTICS TO UNDERSTAND WHAT BARRIERS STUDENTS FACE AND WHAT ACTIONS CAN BE TAKEN TO MOVE THEM ALONG MORE PRODUCTIVE PATHWAYS. MOREOVER, INSTITUTIONS CAN THEN USE THESE ANALYTICS TO POWER APPS THAT SUPPORT THE DAILY WORK OF FACULTY, ADVISORS, AND STUDENTS.

1. TURN ON YOUR LIGHTS
Anchor Your Student Success Innovation in Your Institution’s Data
Anchoring your efforts to real-time, predictive data is essential to helping students learn well and finish strong. Trustees should encourage their institutions to learn from, but not simply accept, one-size-fits-all recommendations from outside organizations. Instead, your college needs a rich understanding of your students, their pathways, and how successfully they are engaging with your policies and practices.

While it would be nice, our work clearly shows that there is no grand über model. Basing innovation, interventions, or inspirational outreach on other people’s data is not only imprecise, it can cause real challenges for your students. External data and best practices might be directional and informational; however, turning on your own lights is a must.

2. ADOPT A TRY-AND-TEST MENTALITY
Predictive Models Are Powerful, but Only a Predicate
Once the lights are on and your institutional hindsight, insight, and foresight are more clear, the hard work begins. The work of trying and testing with policy and practice across the institution — the heart of student success science and artistry — is the path to progress. This is the opposite of seeking a silver bullet. A try-and-test mentality says that we are going to continually tune and test our student learning and success work, and we’re going to leverage data as an asset, not as the answer. As trustees, you should be encouraging the development of policies, organizational structures, and supports that encourage — and maybe even require — try-and-test work along with student success innovation. Simple questions about what impact your innovations or interventions are seeing will go a long way to starting this process.

3. ACCEPT THAT ANALYTICS ARE CRITICAL TO YOUR COLLEGE
Analytics Infrastructures Are Moving from Nice-to-Have to Mission-Critical
More institutions are developing infrastructures and teams to drive an educational analytics strategy. Moving beyond reporting, accreditation, and planning, these efforts are becoming central to how the organization operates on an ongoing basis. From student success analytics platforms to early warning systems, from advanced planning tools to weekly stat-chats, analytics are becoming mission-critical resources used every day.

The move is similar to the transitions in educational infrastructures that took place as integrated enterprise resource planning (ERP) systems — the technology tools that undergird our finance, human resources, student information, financial aid functions — entered education in full force in the ’70s, ’80s, and ’90s. It also mirrors how learning management systems (LMSes) moved from a side-note innovation in our distance-learning departments to a core instructional delivery platform for on-ground, blended, and online courses over the course of the last 20 years. As the shift happens, trustees need to be intentional about how they guide their institutions to develop and leverage this mission-critical function and infrastructure across the institution.

4. ASK THE RIGHT QUESTIONS ABOUT THE RIGHT STRATEGIES
You Can Be Right with Data and Still Lose Badly
As the use of analytics has taken shape over the last three years, the rule of the “four rights” has been a core conversation. Put simply: you have to build the right infrastructure, to get the right data, to the right people, in the right way. All four rights
matter; however, the work of identifying the right people and ensuring we are bringing our best thinking and careful testing to the right way is imperative. Indeed, a flashing red light that tells an at-risk student they’ve been flagged by your predictive model might be the signal that actually ends their education journey, not enables it.

Used well, these data and tools can inform and empower students. Used poorly, they could result in dangerous tracking and sorting. Moreover, used poorly, these tools could train dependence, rather than create more active, informed, and inspired students with greater agency over their learning journey. Put simply, trustees should ask good questions about the strategies to bring data to the front lines to ensure they are well thought through and sync well with your strategies and goals.

5. CATALYZE CONVERSATIONS ABOUT AND WITH ANALYTICS

Be Willing to Engage, Catalyze, and Keep Conversations about Analytics in Education Going

From important topics such as student privacy and data breaches to broader dialogues on how you make the most of the data you already have, our partners have shown us that you have to be willing to dive into the dialogue. Students, for example, have consistently told us that they are okay with institutions using their data if the data can be used to help them — e.g., to make a better choice, choose the right course, understand their options more clearly, connect with the right support, or master a key concept. Faculty have been open to data collection if the information is used to enable instruction and improve learning, rather than focus on simplistic data points that have little to do with their goals.

Next-level conversations about exciting new directions and innovations in educational analytics are taking shape, including avoiding "data jail" in vendor contracts; the impact of non-cognitive factors and student agency; combining adaptive pathways with adaptive learning; and course scheduling based on graduation pathway optimization. Trustees can help lead and catalyze these and other important conversations on analytics.

6. SYNCHRONIZE SYSTEMS WITH CULTURE

Analytics can be Catalyzed or Crushed by Systems and Culture

The best analytics systems need to work well within the operational and social context in which they are deployed. At best, they reflect and assist the systems and culture as they strive to improve. At worst, they can be thwarted by restrictive policy or active cultural immune systems.

From our experience, for analytics efforts to take off, two core cultural issues have to be tackled:

1. Moving from a primary focus on accountability analytics — where data efforts mostly serve the needs of administrators, accreditors, trustees, and legislators — to, at minimum, an equal focus, if not greater focus, on action analytics. Action analytics leverage data to help teachers, advisors, support services, and learners on the front lines of our institutions.

2. Moving from a culture of blame — where when discouraging data come up, the first move is to find and shame who is to "blame" for it — to a culture of wonder. A culture of wonder is open to deeply exploring the data, including determining if there are incorrect correlation/ causation assumptions being made, and staying away from personal attacks.

Trustees are key to helping support these cultural and operational changes.

7. LEADING IN THE AGE OF ANALYTICS

Leadership and Learning Shifts in the Age of Analytics

Trustees and presidents are feeling the pressure to become literate in analytics, just as they had to develop technology literacy over the course of the last two decades. But learning goes deeper than just trustees and presidents, and even deeper than the traditional bastions of data work in institutional research, information technology, and institutional planning.

Among our partners, we are seeing a focus on embedding the skill and will to use analytics across their institutions. Better tools, lighter apps, and engaging strategies will certainly make this easier. However, there is core work to be done to enable the current and next generation of leaders to begin to make the most of analytics in their efforts to help students on their journeys. There are implications for leaders in academics, advising, career counseling, student life, housing, finance, financial aid, and other core areas. Faculty in particular will need to lead in this work, as there are so many ways these analytics tools can be used to empower them as learning and research professionals.

Regardless of role, it’s fast becoming clear from our work that helping create a broad leadership culture that understands, appreciates, and is careful with data will be a must for those looking to make the most of analytics on the road ahead. Trustees will be essential in driving this leadership transition.