

A VIEW FROM THE TOP:

Building the 21st Century Campus

A Leadership Survey on the Challenges Facing North American Higher Education

A *successful 21st century university is a student-centered institution, unconstrained by time and place, that operates simultaneously in a local and global context, constantly measuring and communicating its progress, and continually renewing its commitment to students, community and the economic competitiveness of the country.*

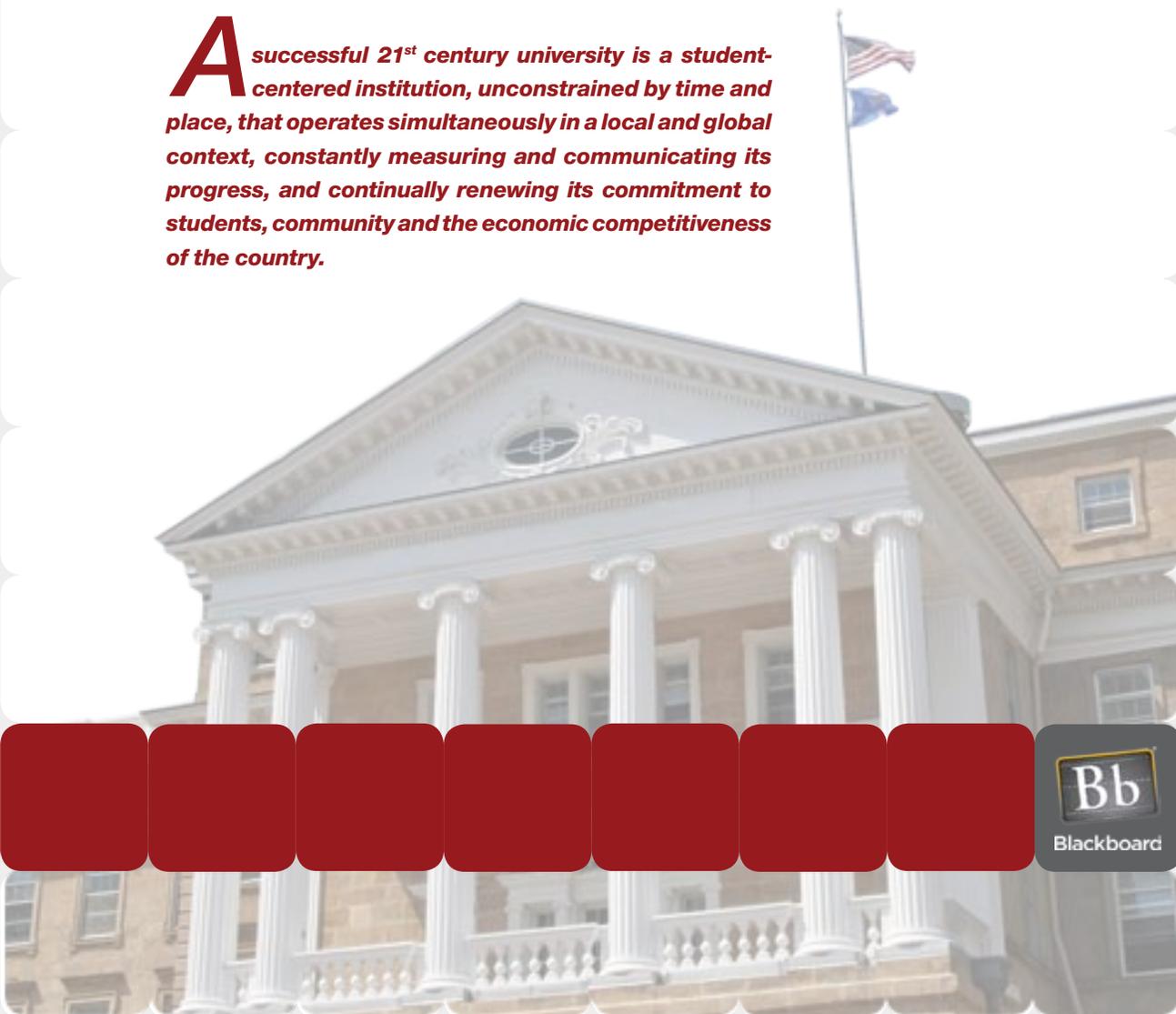


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PROLOGUE

LAST SPRING, WE EMBARKED ON A LIVELY SURVEY IN WHICH WE MET WITH AND INTERVIEWED 50 HIGHER EDUCATION LEADERS (A COMBINATION OF CHANCELLORS, PRESIDENTS, VICE PRESIDENTS, PROVOSTS AND CIOS) IN THE U.S. AND CANADA, HOPING TO LEARN ABOUT THEIR GREATEST CHALLENGES—THE ONES THAT KEPT THEM UP AT NIGHT. WE ALSO ASKED THEM ABOUT THEIR DREAMS FOR HIGHER EDUCATION.

The interviews were warm and candid; the leaders were open and accessible. We put no boundaries on the discussions. Our talks were broadly focused on strategic concerns, not narrowly focused on technology or product issues.

We were surprised by the consistency of the answers and the changes they spelled out for higher education. It became clear to us that higher education is operating in a new environment, perhaps for the first time since the immediate post-World War II era. The ground is shifting. Colleges and universities are confronting new types of students— younger and more technology-driven, as well as older and more career-driven. They are confronting unprecedented competition, aggressive accountability demands and a view of operating in a global context. And they are doing all of this with less direct funding.

We analyzed and synthesized the results into a coherent vision for the future of higher education. As we put together this forward view, we also drew information from some of the larger studies reporting on the same subjects, e.g. the Spellings Commission and the National Survey of Student Engagement; as well as reports and data from EDUCAUSE, Eduventures, the American Council on Education, the National Center for Public Policy and Higher Education, and the State Higher Education Executive Officers (see Bibliography).

Conducting this engaging dialogue and composing this report are part of Blackboard's commitment to address the changing needs of higher education. Blackboard has historically been a strong partner in creating innovative and useful educational technologies that enhance higher education academic study and campus life. Like our counterparts in higher education, we must rise to address the larger challenges, as well as the traditional ones.

In this report we reveal what we learned through the words of the education leaders we interviewed; we also provide a picture of what Blackboard is already doing, and planning to do, to address the challenges faced by the institutions it serves. It is our hope that this document will be useful for stimulating discussion and confronting the challenges faced by higher education.

We are grateful to those who took the time to share their concerns with us.

Peter Segall, President North America Higher Education and Operations

Gordon Freedman, Vice President, Education Strategy

INTRODUCTION

“A View from the Top: Building the 21st Century Campus” is divided into four sections.

In Section I, *View from the Top*, through interviews with institutional leaders—presidents, chancellors, provosts and CFO’s—four major challenges to higher education emerge: Student Engagement, Institutional Accountability, Revenue Generation and Globalization. Additional perspectives from published reports about the state of higher education are also provided in Section I.

In Section II, *The 21st Century Campus*, the authors incorporate the collective viewpoints of education leaders and other commentators into a vision for the future direction of higher education and addressing the needs of core higher education constituencies.

Section III, *Blackboard’s Role on the 21st Century Campus*, features a current update on Blackboard’s products and services focused on meeting the demands of the 21st Century campus.

In Section IV, *Charting the Future: Blackboard “Beyond” and the Development of the Next Generation Platform*, the focus moves to Blackboard’s current and projected development efforts to meet the rapidly evolving needs of students, faculty, administrators and institutions.

I. View from the Top

The Four Greatest Challenges Facing Higher Education Today:

- Student Engagement
- Institutional Accountability
- Revenue Generation
- Globalization

Higher education is facing the demands of a world with new and quickly changing student demographics, an increasingly flat global environment, and tighter funding and accountability constraints. All of the education leaders we interviewed understand the importance of more market-oriented, student-centered and businesslike management and accountability strategies, while preserving their academic mission, focus and values.



I. VIEW FROM THE TOP

FACING THE DEMANDS OF A NEW WORLD

Higher education is facing the demands of a world with new and quickly changing student demographics, an increasingly flat global environment, and tighter funding and accountability constraints. All of the education leaders we interviewed understand the importance of more market-oriented, student-centered and businesslike management and accountability strategies, while preserving their academic mission, focus and values.

For example, David Eisler, President of Ferris State University in Michigan, works diligently on strategic planning and involving the whole campus and the greater community in order to bring together the elements of a successful 21st century university. His student-centered dream for higher education includes providing more flexibility for students to learn, while servicing a wide variety of new student needs and wants. Ferris State University is working at creating a seamless experience for every student, no matter where they are, no matter who they are, by combining virtual, hybrid, physical settings and multiple options for learning, Eisler told us. The institution's strategic plans are centered on the development of a learning core with uniform quality and content for whatever and however a student is studying and learning.

Arizona State University (ASU) President Michael Crow, formerly Executive Vice Provost at Columbia University, sees "A New American University" as the centerpiece of a transformational effort aimed squarely at re-focusing ASU's goals and strategies. Part of the transformation means that, while still offering courses and programs in traditional disciplines, ASU is morphing into an institution balanced by modern programs aimed at solving real-world research issues that meet the current needs of Arizona, as well as providing the best education to the broadest population globally.

Lesley University President Margaret McKenna explains that Lesley University's success can be attributed to its focus on continuously improving its core educational competencies, along with getting constant feedback from students on issues relative to program offerings, schedules and services. For the near future, McKenna sees growth in hybrid learning and international programs, with students spending increased time abroad and enhanced exposure to international issues. In addition, she sees potential dramatic growth in online offerings, along with Lesley University providing more flexible and meaningful educational opportunities for adults who are changing careers.

And Ron D. Wright, President of Cincinnati State, a two-year public institution that is heavily career- and technology-oriented, talks about how enhancing student services is vitally important. "We need to provide the best services we can at the best prices through programs with the greatest integrity," Wright asserts. "This leads to more online programs for students who can handle them. We are finding ways electronically to provide access for more people to do more training."

WHAT KEEPS EDUCATION LEADERS AWAKE AT NIGHT?

In addition to hearing many similar visionary goals and statements, our interviews with education leaders brought to light their biggest concerns (what keeps them awake at night), giving us the wherewithal to set down the four greatest challenges facing higher education today: Student Engagement, Institutional Accountability, Revenue Generation and Globalization

Here are the short definitions of these challenges:

Student Engagement is all about enabling academic achievement and providing high quality student services. It includes the student lifecycle, from choosing and preparing for higher education to student life services, remediation, retention, time to graduation and alumni relations.

Institutional Accountability means being accountable to trustees, state funding entities, legislatures, accrediting bodies, etc., who ultimately represent students, parents and taxpayers. It involves effectively gathering evidence and measuring student learning outcomes, evaluating financial performance, and gauging progress toward meeting institutional strategic goals and objectives.

Revenue Generation entails increasing non-tuition, tuition and state funding sources, primarily through better management of student services, increased development and marketing of distance education courses, and entrepreneurial activities that leverage research and community-development activities. Revenue generation also includes seeking increased research funding and philanthropic support.

Globalization involves developing and enhancing an institution's international efforts through initiatives that establish new global partnerships, helping institutions compete more effectively in the global arena, improving international student recruitment, increasing students' knowledge of global issues and boosting study-abroad programs.

STUDENT ENGAGEMENT

The challenges concerning student engagement involve much more than academics—it's about the overall higher education experience students encounter on a day-to-day basis, from the moment they set foot on campus to commencement (if they get that far). Facing the challenges concerning student engagement requires a keen understanding about remediation issues, retention rates and the expectations of a diverse student population (adults, Millennials, NetGeners and everyone in between); providing timely and efficient student services; getting faculty to modernize from a technology perspective; and making meaningful lifelong learning connections.

"I want to change the California State University system to be more student centered, to be student driven, to be student focused. My perspective is that the current culture is faculty first — not what is best for the student."

Charles Reed, Chancellor
California State University System

When considering some of the amalgamated data and calls-to-action doled out by professional organizations that conduct serious research about higher education, the world of student engagement is an environment with many notable characteristics.

- The U.S. Department of Education reveals that 34 percent of one million first-time-in-college, bachelor-degree-seeking students who enrolled in Fall 1996 graduated from the same college or university in four years or less; 51 percent graduated in five years or less; and 56 percent graduated in six years or less.¹
- 34 percent of undergraduate students are over the age of 25.²

- Higher education enrollments are expected to increase by 20 percent from 2000 to 2015, and the large majority of these students will be low-income minorities, from Latino, Asian/Pacific-Islander and African-American families. Yet this new generation of students is arriving at college at a time of budget retrenchment and cutbacks for higher education.³
- The best indicator of college student satisfaction is their perception of how the environment supports both their academic and social needs.⁴
- Three out of 10 first-year students say that they do only just enough academic work “to get by.”⁵
- “Most colleges and universities don’t accept responsibility for making sure that those they admit actually succeed . . . Over the past decade, literacy among college graduates has actually declined . . . compounding these difficulties is a lack of clear, reliable information about the cost and quality of post secondary institutions, along with a remarkable absence of accountability mechanisms to ensure that colleges succeed in educating students.”⁶

“Arizona State University, unlike other institutions, will define itself by who it includes, not by who it excludes. It will grow because the population in the region is growing, and because we are creating a university that uniquely combines the dual notions of academic excellence and access to all citizens.”

**Michael Crow, President
Arizona State University**

“What makes Baker so successful are multiple delivery systems, academic programs that focus on educating and training students for meaningful employment, and high-quality out-placement services for our graduates. As Baker grew and went from for profit to nonprofit status, it remained true to its mission of preparing students for jobs that are in demand.”

**F. James Cummins, President and Chief Executive Officer
Baker College**

INSTITUTIONAL ACCOUNTABILITY

All of the education leaders we talked with are very intent on providing accrediting agencies with more valid and meaningful data representative of their successful programs. Additionally, it was noted that funding bodies, trustees and accrediting bodies are more deeply concerned than ever about the quality of, and access to, instruction that improves graduation rates and provides students with the necessary skills to compete in today’s workforce on a global scale. Education leaders are also following the development of their institution’s human capital, or lack thereof, to help power state economies.

“We have a long tradition of requiring faculty to define and measure learning outcomes, so this is not new to them, and they feel ready for SACS. Every course and program is required to formally define, measure and report learning outcomes.”

**Bill Cahill,
Vice President Information Technology
St. Edwards University**

Every leader interviewed agreed that technology will play a key role in acquiring, and developing an understanding of, data necessary for reporting to state governments, funding agencies, advisory boards, employers, politicians, accrediting agencies and the general public. In short, managing the nature and quality of student learning outcomes, maintaining continuous improvement and providing a consistent flow of evidence are all vitally important when developing successful institutional strategies.

Concerns about accountability are frequently discussed topics among education leaders and reported in the contemporary literature.

- Accrediting agencies create clear expectations for institutions and programs to “define, collect, interpret and use evidence of student learning outcomes.”⁷
- Higher education needs to be more transparent about cost, price and student success outcomes. Additionally, such information needs to be shared with students and families.⁸
- “Despite increased attention to student learning results by colleges and universities and accreditation agencies, parents and students have no solid evidence, comparable across institutions, of how much students learn in colleges or whether they learn more at one college than another.”⁹
- The top overall strategic objective identified in a survey of higher education presidents, chief academic officers and chief financial officers (464 respondents) was “improving student learning outcomes.”¹⁰ However, as noted by Derek Bok, President Emeritus and Research Professor at Harvard University, less than one-third of higher education institutions in the U.S. conduct comprehensive evaluations that reveal whether or not the purposes of the institution’s general education program are achieved. Furthermore, Bok asserts that, while faculty typically keep the content of courses up to date, they rarely obtain clear evidence of how much their students are learning, especially in large lecture hall classes typically taught to passive audiences.¹¹

“Economic impact studies are part of our public positioning for both local and state economies. We publicize results. Outreach programs into the community through our academic programs are integral parts of the curriculum. We also have regular executive-level contact with local elected officials. We anticipate Blackboard will help further enhance our local relationships.”

Dan Burkey, CFO
Creighton University

“We want to be the school that trains the employees for the manager trained at MIT. Our students can take a concept and make it happen.”

Ron D. Wright, President
Cincinnati State College

- “The Bureau of Labor Statistics estimates that jobs requiring higher education will grow by 22 percent between 2002 and 2012—nearly double the rate of non-college jobs. In addition, the highly educated baby-boom generation is nearing retirement age, and shortages in the scientific- and engineering-related fields will be particularly acute.”¹²
- Government data on higher education does not include adequate numbers on nontraditional students, “and rarely focus on outcomes.”¹³

REVENUE GENERATION

Revenue generation is another great challenge for education leaders. Developing new revenue sources looms large as funding from both state and federal governments flattens, and competition for new students increases. Some revenue-generating solutions include creating new online programs and courses that can both increase enrollments and help facilitate the use of physical space more efficiently. Plus, well-managed student services can both increase the attractiveness of a campus and be a source of additional revenue. Automating services, along with increasing self-service options for students, ultimately prevents costs from growing.

The most acted upon finding across our interviews with education leaders was the use of, or intention to use, online technologies and programs to extend the campus footprint and relieve the physical campus. Additionally, the ability to provide a wider range of services on campus has become a universal need.

“We simply need a more stable and secure level of resources. It is a fact in our state, like most, that Medicare, K-12 and prisons are going to take increasingly larger percentages of the budget, while higher education is seen as being more part of the discretionary budget.”

Harvey Perlman, Chancellor
University of Nebraska Lincoln

“We have an ambitious campus master plan to build more dormitories and colleges. Our goal is to integrate and enrich the student living and learning experience to improve the overall quality of the undergraduate experience. We are moving to reduce the student-to-faculty ratio and to create environments in which students and faculty will socialize and spend more time together.”

**Reagan Ramsower,
VP for Finance and Administration,
Baylor University**

Overall, institutions are always looking for ways to develop innovative, business-oriented, student and community-spirited activities to generate new revenue. This is no surprise, especially when considering much of the data and information reported in relation to funding trends.

- A 2004 State Higher Education Finance (SHEF) study documented a four-year period (2001-04) when state funding did not keep pace with enrollment growth, “leaving per-student state and local funding near their lowest levels nationally in 25 years.”¹⁴

- Between 2001 and 2004, state and local appropriations for higher education remained flat, while enrollment increased 11 percent and cost increased 13 percent.¹⁵

- Alliance agreements to develop projects in which institutions partner with, jointly invest resources with, and jointly retain ownership with, another organization (including institution-vendor partnerships), increased from 14 percent in 2004, to 30 percent in 2005 (in dollar terms). “Increasing prevalence of such contracts indicates that institutions are entering into shared-risk contracts with well-trusted service providers.”¹⁶

- The share of per-capita personal income going to public higher education has dropped 20 percent since 1977.¹⁷

- Public institution tuition has risen 54 percent in the last 10 years in response to increasing costs, without increasing appropriation.¹⁸

“The balance between capital needs and enrollment is a challenge. The campus is spending a high percentage of available capital on creating better and more up-to-date residential facilities. The ROI is not the major factor in this effort; the value to the college in terms of attracting and retaining students is our primary stimulus.”

**Kenneth Levison, Vice President for Administration and Finance
State University of New York at Geneseo**

GLOBALIZATION

Some of the primary globalization issues discussed by education leaders today include finding international partners, developing programs that can be offered internationally and that are enhanced through the creative use of educational technologies, competing globally for international student enrollments, and educating students to be competitive in a growing global economy and multi-national workforce environment.

It's no secret that institutions that forge deeper international partnerships present a more competitive profile for attracting and retaining both faculty and students. Building institutional capacity that has global implications is a matter of pride, as well as practicality, for U.S. institutions to remain competitive worldwide.

Most of the institutions we surveyed have international departments that are expanding through the development of new courses and programs, and by forging new partnerships. In many cases, institutions are moving ahead of student demand out of an understanding that having a global perspective is an essential element for future success and relevancy.

“As we focus on the demand for career education, we are also moving towards internationalizing our students’ experience and boosting our reputation internationally.”

**Michael Roy, CFO
Northern Michigan University**

“As we here in North Carolina have painfully learned, our people are no longer competing for jobs and work with just the citizens of South Carolina, Tennessee or Georgia. In today’s knowledge-based global economy, we’re competing head-to-head with China, India, and dozens of other countries that are making tremendous strategic investments in education and research. The cold hard fact is that if we don’t get more of our own people better educated, we’ll lose the fight—a fight that if we shape up, we can still win, and win big.”

Erskine B. Bowles, President
University of North Carolina, Inaugural Address, April 12, 2006

- There is “no more valuable asset to our country than the friendship of world leaders who have been educated here,” noted Colin Powell.¹⁹
- Our colleges and universities can, and do, contribute to affecting a more positive image of America on the global stage by fostering open debate about global issues and by educating students in ways that “reflect both the nature of contemporary policy problems and the changing global market for public service.”²⁰
- “While U.S. higher education has long been admired internationally, our continued pre-eminence is no longer something we can take for granted. The rest of the world is catching up, and by some measures has already overtaken us. We have slipped to 12th in higher education attainment and 16th in high school graduation rates.”²¹

“We are expanding student exchange programs and formal partnerships with international institutions. Our target countries include China, Germany, India, Japan and Mexico. We hope to expand credit transferability and increase the number of students who study abroad to 10 percent.”

Carl Amrhein, Provost
University of Alberta

METHODS & SOLUTIONS FOR MEETING THE FOUR CHALLENGES

In their day-to-day work at meeting the four challenges, all of the education leaders interviewed were clear about encouraging an overriding framework for driving their institutions to be more market-oriented and businesslike, while preserving their academic integrity and focus on student learning.

Their methods and solutions for accomplishing such a goal tended to fall within three organizational structures: Transformational/Comprehensive, Transitional and Incremental. Depending on factors concerning an institution’s current state of affairs and its levels of mission achievement to date and beyond, many institutions move through all of these organizational structures at different rates and times.

Transformational/Comprehensive: Entails solutions that require the entire campus to come together in a reinvention process guided by a clear vision and strategic planning. ASU’s New American University initiative is a perfect example of how a very large institution can reinvent itself. In addition to proclaiming that it does not measure itself by the academic credentials of its incoming freshmen, the New American University is one “whose researchers, while pursuing their scholarly interests, also consider the public good; one whose students, faculty and staff transcend the concept of community service to accept responsibility for the economic, social, cultural and environmental vitality of the communities they serve.”²²

Ferris State University (FSU) is another example. In recent years FSU has developed a vision for creating a learning-centered university in which students, faculty, staff and administrators work together to become an engaged campus. “We must continue to work toward greater campus engagement,” says FSU President David Eisler. “Most of a student’s day is not spent in class, but rather outside it. To maximize the university experience we must continually work to extend the learning experience beyond the classroom. The world our students will work and live in is increasingly global and more diverse. We must prepare our students for this rapidly changing and evolving society.”²³

Transitional: Requires actions that reorient elements of the institution but stop short of being large-scale reorganization processes. Transitional solutions are common and typically involve one or more aspects of the campus operation attempting to change organizationally and/or procedurally. At Capella University, for instance, President Michael Offerman explains the institution’s economic mindset as one that focuses on making investments as opposed to reducing costs. “For us, technology is not a cost,” he says, “it’s an investment, and we expect a solid return from that investment.” In addition, Capella’s economic models revolve around cost per learner, as opposed to unit operating costs.

Incremental: These are singular solutions designed to address a specific issue or set of challenges in one or more aspects of campus life. A good example can be found at Quinnipiac University, where a Q-CARD program has resulted in generating new revenues. In short, Quinnipiac, like many institutions today, realized that moving its Q-CARD cashless transaction system to include more off-campus businesses results in a dramatic increase in overall transactions. “Quinnipiac can generate significant revenue incurring little expense while adding a great service to students, and requiring minimal staff resources,” says Jonathan Terry, Quinnipiac’s Facilities Administrative Coordinator.

LEADERSHIP & PROGRESS

Of course, none of these methods and solutions could have been accomplished without innovative and competent leadership. Our research and interviews also reveal that there are tough barriers to consider when moving an institution from discussion, to agreement, and to action. As one community college vice president of administrative services notes, “at our campus we are always five years behind. This needs to be changed, but it will take a major cultural shift in attitudes to make it happen.”

Many of the education leaders we interviewed say that they have some percentage of faculty and staff who oppose, and are threatened by, change. Others are disconnected with the mindset and behaviors of students. Our survey reveals that, to prevail under such circumstances, many leaders tend to follow a three-stage pattern of progress: rethink, engage and adapt.

Rethink

In almost every case where top-down change occurs, a rethinking or study process is implemented in which old methodologies are catalogued, new problems are defined, a re-conceptualization of issues is created and a change-implementation process is initiated. Such processes may be led by the president or provost and typically involve the appropriate campus constituencies, driven by a committee or group appointed to survey the issues at hand.

Engage

Change will not happen without engaging faculty, staff, administrators, and outside assistance in a process driven by campus constituencies and not dictated by campus leadership. To engage people at this level requires the development of an environment where faculty, staff and administrators see change as an absolute necessity. Education leaders who have implemented such a process report campus-wide ownership of change.

“Faculty must become more comfortable rethinking their teaching methods and embracing technology. The successful faculty of the future will be very comfortable teaching in a blended environment, with much done online, and with continuous improvement of the teaching process enabled through technology.”

James Rosser, President
California State University-Los Angeles

“The campus is facing some significant challenges in the future based on the demographics in the region. We are excited about our new President and the impact she will have on funding, retention and overall awareness of BHSU.”

Kathy Johnson, Vice President of Finance and
Administration, Black Hills State University

Adapt

Institutions need to be flexible, nimble, adaptive to the ongoing process of organizational change, and capable of refocusing efforts to achieve qualitative and quantitative results. Without these capabilities, change is only tactical and difficult to achieve. With an adaptive capability and process to support it, change is part of the mission of the institution and is an expected part of improving campus life.

“We have to grow 2.5 percent each year; that’s 10,000 students over five years. In order to do this, we must be more efficient and productive, and we must watch quality. How do we increase quality and efficiency? The only way we can do this is through technology. This is critical to our future.”

Charles Reed, Chancellor
California State University System

EMBRACING CHANGE WITH TECHNOLOGY

It became very clear that education leaders fully embrace the notion that change must occur along the lines of financial, organizational, service, and education improvement and accountability. To enact change requires bold action and a clear vision that entails using technology and organizational change wisely. All of the education leaders expect to increasingly rely on technology solutions to help solve problems, create greater levels of engagement, and to become more efficient, as well as more performance- and evidence-oriented.

ONLINE SURVEY REPORT—CONDUCTED BY DRC GROUP, INC.

FOLLOW-UP STUDY OF HIGHER EDUCATION LEADERS ECHOES FINDINGS FROM IN-PERSON INTERVIEWS

Blackboard commissioned a follow-up study to accompany the in-depth interviews of higher education leaders that have been synthesized in “View from the Top: Building the 21st Century Campus.” The follow-up study employed online surveys conducted by an independent research organization, the DRC GROUP, in October/November 2006. The study participants consisted of more than 500 leaders from a wide cross-section of institutions, both in size and educational profile. These leaders comprised a balanced group of presidents, chancellors, provosts, academic vice presidents, deans, directors of institutional research, student services leaders and selected faculty chairpersons. This larger sample echoed the key findings from the in-depth interview study described in this “View from the Top” report.

Complementary highlights are referenced below. A full executive summary of the follow-up study, including a more detailed review of student service leadership issues, is also available.

ON CORE MISSIONS

One of every three leaders stated that improving academic quality, revamping curriculum or adding new academic programs was a top priority.

IMPORTANT POINT OF AGREEMENT

Enhancing the quality of student life was high on everyone’s list, regardless of role.

THE MOST COMPLEX ISSUE

Student engagement has the broadest ownership and deepest layers of composition of any theme.

“IVORY TOWER” NO LONGER

From a base of over 1,200 top issues volunteered by campus and system leaders, fully one-in-four reflected external forces with which they were confronted.

TOP CHALLENGES

The fifth and sixth most mentioned top priorities out of 1,200 offered were Enrollment and Student Retention.

ADMINISTRATIVE VIEW

Presidents and chancellors are particularly concerned with funding issues, capital project needs and community partnering.

PROGRESS REPORT

The vast majority of leaders say they are well along in their planning or already implementing plans when it comes to strengthening assessment processes across the institution.

FACULTY FIRST?

Faculty issues, from development to succession, and technology adoption to workload, represented one out of every five key priorities for leadership. This was more evident with provosts and deans.

TECHNOLOGY

Twelve percent of all issues raised specifically focused on technology, generated by campus and academic leaders, not technologists.

ROI MEANS PERFORMANCE BUDGETING

Establishing a culture of measurement to support performance-based budgeting is one area in which many institutions have yet to take formal steps.

STRATEGIC ASSET

Half of senior leadership described e-Learning systems as a strategic asset that benefits their students and faculty.

ACCOUNTABILITY #1

Our survey ranked accountability and assessment issues at the top of 33 themes developed by leaders.

II. The 21st Century Campus

An Emerging Vision:

- Institutional Flexibility
- Student Mobility
- Pervasive Technology
- Return on Investment

Listening carefully to the leaders, and analyzing what they and others are saying, led us to four variables that we think help define the shift in higher education thinking: Institutional Flexibility, Student Mobility, Pervasive Technology and Return on Investment. These four variables are part of the 21st century higher education mindset for the entire campus culture, not just for leaders, but for faculty, staff, alumni and students.



II. THE 21ST CENTURY CAMPUS

AN EMERGING VISION FOR THE 21ST CENTURY CAMPUS

As expressed throughout this synthesis of the interactions we had with 50 educational leaders and the reviewed literature, a new vision to match the new realities of our times is emerging and moving forward.

A successful 21st century university is a student-centered institution, unconstrained by time and place, that operates simultaneously, in a local and global context, constantly measuring and communicating its progress, and continually renewing its commitment to students, community, and the economic competitiveness of the country.

A NEW INSTITUTIONAL MINDSET ACROSS THE CULTURE

Listening carefully to the leaders, and analyzing what they and others are saying, led us to four variables that we think help define the shift in higher education thinking: Institutional Flexibility, Student Mobility, Pervasive Technology and Return on Investment. These four variables are part of the 21st century higher education mindset for the entire campus culture, not just for leaders, but for faculty, staff, alumni and students:

Institutional Flexibility: Higher education is less fixed in time, place, and offerings than it was in the past, and it is more opportunistic, positive about measurement and confident. While this is laudable, it is also necessary for surviving in a world with less funding and more demands.

What's Changed: An institution is no longer simply a set of buildings, a rigid organizational hierarchy and physical property. Institutions can be thought of as less tangible now but more focused on creating value for communities, engaging students and building intellectual property.

Student Mobility: The era of students attending one institution, being loyal to the brand and learning through a single set of offerings is over. Students surf life and options in the real world just as they do virtually.

What's Changed: Students vote with their minds, fingers and feet. They move around, assemble their own education solutions, follow their own leads or consult with peers, and rarely complain to authorities. Harnessing this, not ignoring it or missing the point, is critical.

Pervasive Technology: Technology is not optional at any level. It is here to stay and will grow and become more diverse as students continue to create their own communication, interaction and transaction modes. Faculty, staff and administration need to meet students where they are. New faculty have to come into the institution ready to engage as students do, and current faculty might need incentives to conform.

What's Changed: Students have been relying on a variety of personal technologies, and campuses are always catching up. Administrations need to make it clear to faculty and staff that communicating, interacting with, and providing services to students are cultural variables critical to faculty success.

Return on Investment: The institution as a cost center will give way to the institution as an investment and ROI center. Institutions often look at the costs of technologies, reorganizations and planning, as opposed to perceiving such expenditures as investments whose returns (or losses) can be charted.

What's Changed: Business models and business planning are becoming staples of campus redesign. By looking at investment strategies, return and loss can be monitored and used to guide later improvement, instead of simply appointing committees and hoping for the best.

WHAT IF?

What contributes to a successful 21st Century Campus? We compiled these “what if” propositions through a review of the literature and case studies related to how we educate, assess, house, service and retain today’s student body. Our interviews with higher education leaders also helped us formulate the “what-ifs”.

WHAT IF STUDENTS COULD . . .

- access engaging, interactive activities and assessments that support course and personal learning goals, anywhere, anytime?
- receive individualized instruction and attention, even in the largest of classes?
- access a variety of student life services on campus, off campus and online 24/7?
- complete self-directed remediation activities on a prerequisite or as-needed basis?
- be notified, and offered support, when they fall behind schedule or below expectations?
- participate in a strong network of peers, mentors, and instructors for learning and living?
- be offered a range of ways to engage in the life of the community based on their interests and expectations?
- easily demonstrate their accomplishments to peers, instructors and potential employers?
- be shown where they stand within their program and personal learning goals based on class benchmarks and professional standards?
- experience the team-based, global, virtual, 24/7 world they will work in while they are still in school?

WHAT IF FACULTY COULD . . .

- spend less time on administration and more time on research, teaching and community?
- easily transform their content and delivery to meet the new demands of students, institutional standards and employers?
- access a wealth of high-quality, interactive course content and assessments from inside and outside the university?
- more easily collaborate and share resources with local faculty, partner institutions and the global community of practice?
- demonstrate learning outcomes tied to professional requirements and institutional goals as a part of their normal workflow?
- be notified when students are performing below expectations and have a range of support options to offer them?

WHAT IF ADMINISTRATORS COULD . . .

- continuously improve student engagement in learning and campus life?
- have confidence in the success and cost-containment of new and innovative programs and services?
- understand, track, and report on the complex factors and interactions that result in student success for use in institutional decision-making and resource allocation?
- demonstrate the attainment of learning outcomes tied to institutional goals and professional requirements?
- provide required remediation more economically?
- ensure business continuity for students in the face of natural disasters, terrorism, or quarantine resulting from pandemic disease or other catastrophes?
- build alumni loyalty and provide students with high-quality, branded, customized, service-oriented learning and living experiences that they will want to return to throughout their careers as learners?

III. Products and Services

Blackboard's Role on the 21st Century Campus:

- Student Achievement
- Campus Life
- Institutional Accountability
- e-Commerce

Our online learning and e-commerce resources are unparalleled in the education industry. As more campuses come to rely on course management software and networked transaction systems, Blackboard will continue to lead the way with products and services that meet the evolving needs of today's students, faculty, staff and administrators. In short, Blackboard provides numerous institutions worldwide with the right tools to tackle the four challenges outlined in this paper.



Blackboard
Academic Suite™



III. PRODUCTS AND SERVICES

BLACKBOARD'S ROLE ON THE 21ST CENTURY CAMPUS

With Blackboard's merger with WebCT, Inc., the company expanded its client base to approximately 3,500 globally. Blackboard is a leading provider of enterprise software and services solutions that help enable dramatic improvements in student achievement in higher education. This vision creates opportunities for institutions to improve student engagement and student life, to enhance institutional accountability, to respond to demands of a global economy, and to strengthen the management of institutional cost and funding strategies.

Our online learning and e-Commerce resources are unparalleled in the education industry. As more campuses come to rely on course management software and networked transaction systems, Blackboard will continue to lead the way with products and services that meet the evolving needs of today's students, faculty, staff and administrators. In short, Blackboard provides numerous institutions worldwide with the right tools to tackle the four challenges outlined in this paper.

Blackboard's long history of innovation and investment has resulted in a base of experience and expertise to help the education industry take the next steps. Blackboard sits at the center of what education is all about—enabling effective educational interactions.

Our products and services are integrated with institutional back-office systems that handle such functions as student registration, financial aid, human resources management, enrollment management and university advancement.

It is also important to note that Blackboard solutions are increasingly being deployed in the K-12 sector, helping to facilitate more higher-education/K-12 collaborations. State agencies and corporations are also seeing the value of Blackboard products and services, enabling solutions across all of the state's public education and workforce segments. Such growth and expansion has brought Blackboard to a level in which it sees a day in the future when academic and service infrastructures will expand across state lines into national initiatives for enhancing the capabilities of today's knowledge society.

True to its vision, Blackboard is improving both the educational and life services for students, faculty, staff and administrators. This vision is accomplished through our two primary product suites, the *Blackboard Academic Suite* and the *Blackboard Commerce Suite*; as well as through our Blackboard ASP Services offering, and Consulting and Training services.

The Blackboard Academic Suite™ is our flagship product that includes the Course Management System (CMS) that put Blackboard on the map, the *Blackboard Learning System™*. Four other core applications, the *Blackboard Community System™*, the *Blackboard Portfolio System™*, the *Blackboard Content System™* and the *Blackboard Outcomes System* seamlessly extend the *Blackboard Learning System's* capabilities. You can begin an e-Learning journey with the *Blackboard Learning System* or adopt the entire suite.

The Blackboard Outcomes System supports academic and administrative assessment processes conducted across an institution's many departments. The platform focuses on planning, measuring and improving institutional outcomes with a specific emphasis on learning outcomes. It provides a comprehensive set of instruments for student and departmental assessment, creates broad performance visibility and supports best practice sharing across departments.

The Blackboard Commerce Suite is all about improving student life on campus. It supports student tracking, privilege management, and all forms of commerce, whether online, off-campus, at point-of-sale, or at unattended locations, such as copiers and printers, vending machines and laundry facilities. We've been implementing transaction systems for more than 20 years. With its enterprise-wide approach, the *Blackboard Commerce Suite* is redefining student-to-institution and student-to-merchant interactions.

Blackboard's Application Service Provider (ASP) offering ensures that your Blackboard installation is stable, secure and scalable. This comprehensive hosting solution is designed to offer you the benefits of financial flexibility, operational freedom and reduced risk.

Blackboard Consulting services are available for the *Blackboard Academic Suite* and the *Blackboard Commerce Suite*. Blackboard Consulting provides you with certified industry and technology experts who understand your institution's specific needs. They have the necessary skills to make your e-Education and e-Commerce initiatives successful. From strategy to implementation to maintenance; on a per project basis or as a full-time member of your team; regardless of your needs, Blackboard consultants can help you throughout your full project lifecycle.

Blackboard Training is also available for the *Blackboard Academic Suite* and the *Blackboard Commerce Suite*. With Blackboard Training we share best practices and enable you to grow adoption while simultaneously decreasing your support and administration costs. We also understand that when you spend scarce resources on enterprise technology like ours, you'll want your users to fully leverage its features and functions. An investment in training lays the foundation for achieving your goals. To this end, we offer flexible training formats to meet the needs of our user community.

IV. Charting the Future

Blackboard Beyond and the Development of a Next Generation Platform:

- The Blackboard Beyond Initiative
- Next Generation Platform
- Servicing Tomorrow

Higher education is in more demand and plays a more significant role in society today than it has in any other period of history. As globalization brings communities of people around the world into the 21st century, the landscape for work, recreation, preservation and education is radically changing. Clearly, enterprise technology in the academic arena must evolve to meet the challenges presented by the trends reported in this paper.



IV. CHARTING THE FUTURE: BLACKBOARD BEYOND AND THE DEVELOPMENT OF A NEXT GENERATION PLATFORM

Blackboard has the benefit of nearly a decade of innovation in education technology and a client base including academic institutions and other education providers from which to gather feedback and refine products to fit the current and future needs of education. By conducting this leadership survey, reviewing the current literature on change, and analyzing what we learn on an on-going basis from both our users and their leaders, we look to a future that services 21st century learning needs.

Two efforts are pertinent to the leadership and innovation that Blackboard plans to bring to market: the Blackboard Beyond Initiative and the development of a next generation platform. Both are significant in servicing 21st century students and institutions. The Blackboard Beyond Initiative will take advantage of the social networking aspects of the Web to advance learning, scholarship and administration in new ways. The next generation platform development effort is a natural outcome of the merger of Blackboard and WebCT. It will lead the way into the full promise of Learning 2.0.

Together, these efforts forge the way to a single outcome—enabling student achievement, the goal that every institutional leader agrees is paramount.

THE BLACKBOARD BEYOND INITIATIVE

In recognizing that no campus is an island and that higher education is, in fact, a sea of ideas, individuals, resources and interactions that routinely cross institutional and geographic boundaries, Blackboard has committed to developing social networking technology for deepening interaction and facilitating academic improvement inside the worldwide Blackboard client base.

The Blackboard Beyond Initiative is developed by Blackboard, but shaped by its community. The initiative is committed to the development of a series of Web properties that connect the institutions, faculty, and students who use Blackboard worldwide, across education segments and disciplines, leveraging the wisdom of the community for teaching and learning.

The Blackboard Beyond Initiative will move education technology outside of the confines of a single campus and into the world of academic communities. It will bring extra value to Blackboard users globally.

Built on the principles of Web 2.0, the Blackboard Beyond Initiative will be a series of innovative, centrally hosted Web properties, delivering rich, user-driven tools. Using the latest Web technologies and Blackboard's deep understanding of education, the Blackboard Beyond Initiative will be designed to improve student engagement and outcomes evaluation through unique community-based teaching and learning tools.

In collaboration with our clients, the Blackboard Beyond Initiative will initially focus on three major initiatives that will help shape Blackboard's development and evolution:

Scholar.com extends the Blackboard platform to enable a range of community collaborations designed to enable student-centered learning. Starting with social bookmarking, now available at scholar.com, the services will be fully integrated into Blackboard's products, with students and faculty on one campus



having the ability to easily share resources, learning objects, and knowledge with faculty on another campus or multiple campuses. Social networking will be the connective tissue that opens up access to collaboration in a much more efficient manner.

Collaborative Outcomes Benchmarking is a joint effort that facilitates visibility into sanitized data across many institutions. It allows institutional leaders to survey what is working or not working, and draw their own conclusions to move forward institutional strategies. Collaborative Benchmarking focuses on outcomes management and a more holistic conception of a networked learning environment. As common metrics are developed, services will emerge to allow clients to anonymously share relevant data and gain better insight into best practices.

Lifelong Learning services are needed as students go back to school more often, and transition in and out of academic institutions over many years. The Blackboard Beyond Initiative can assist students at these points of transition through centralized services. For example, with ePortfolios-for-life, the effective management of artifacts related to one's academic life and career accomplishments will become a reality.

The first project of the Blackboard Beyond Initiative is a social bookmarking service that works directly within Scholar.com and is customized for the academic community. This free service is available to all Blackboard users—administrators, faculty and students—and can be integrated with the *Blackboard Learning System*. It provides an exciting new way for students and faculty to find educationally valuable resources on the Web. Using the knowledge and power of our network of educational users, it provides more information about each of these resources, so that you can better evaluate them.

The mission of the Blackboard Beyond Initiative is to make the power of the Blackboard client network useful to faculty, students and administrators in their everyday teaching, learning and research. Using innovative Web technologies, this global network of scholars will help pioneer the next generation in learning.

DEVELOPING A NEXT GENERATION PLATFORM

When Blackboard announced the merger with WebCT, the company committed to a long-term strategy to create a next generation platform that would be the natural evolution of developments made to both the *Blackboard Academic Suite* and the *WebCT CE™* and *Vista™* product lines. The first step in that process was creating interoperability between best-of-breed components from Blackboard to operate within the WebCT environment. That first step is well underway.

At EDUCAUSE 2006, it was noted that a next generation platform would answer the call for a number of changes asked for by user communities. This next generation platform will incorporate the best practices and solutions already established by Blackboard and WebCT products and communities. These changes will enable legacy Blackboard and legacy WebCT clients to adopt the next generation platform.

The next generation platform development effort is designed to address issues reported to Blackboard by its client base and reiterated in countless focus groups, meetings, and surveys with students, campus administrators, and information and academic technology officers.

Three core challenges, similar to those reported by campus leadership, motivate the next generation platform development.

Student Engagement: A more expansive student population is bringing new education expectations and different needs to the post-secondary experience. Millennial students and their parents have higher expectations about service levels and the use of technology. There are more students with remedial, developmental and other special needs. Adult learners and college-aged learners with jobs require education to fit into their lives, not vice-versa. The next generation development will take into consideration the needs to boost student achievement and provide high-quality student campus life services.

Institutional Accountability: An external and internal focus on accountability for institutional effectiveness and student outcomes needs to be managed more effectively and more centrally. There are few systems to comprehensively manage accountability issues at all levels of an institution or that address the diverse practices across disciplines. The next generation development will focus heavily on outcomes management as a method to monitor and improve student achievement and campus service delivery.

Faculty Adoption: The use of Blackboard tools has been steadily growing, and many students and administrators wish to see the rate of adoption increase substantially. Some classes are enhanced with technology while others are not, and the number and diversity of education technology-related solutions is rapidly expanding, creating more complexity for instructors and students. The next generation development will concentrate on making instructor adoption and use easier, while being more powerfully aimed at greater student engagement and achievement.

Along with engaging these three core challenges, the principal goals of the next generation platform across all functionality are to place students first, to exploit academic social networks, to create desktop-like experiences and to extend open-ended Application Programming Interfaces (APIs).

Placing students first means transitioning from a “course management system” to a “learning management system.” There will be an increased focus on fully supporting students’ academic and campus lives, with a more personalized experience for students; better remediation, effective advising, mentoring, and tutoring; more meaningful, self-directed learning, and more engaging learning activities.

Exploiting social networks in academics entails taking the existing power of human relationships on campus, in the classroom, in research and in the broader communities of practice to drive value into the use of Blackboard by all users.

Creating a desktop-like experience means taking the latest technologies available today and tomorrow to make the Web experience more intuitive, simpler and better integrated. This entails the incorporation of Web 2.0 technologies and use cases into more solutions for student achievement.

Open APIs are the foundation of Blackboard’s technical architecture and power our *Blackboard Building Blocks*[®] program. The *Blackboard Building Blocks* program enables third-party products to interoperate with Blackboard products, many of which are open source and developed by higher education. The Open APIs of *Blackboard Building Blocks* are used by institutions and independent software vendors to develop, contribute and share innovation. The next generation solution will deepen our commitment to openness and the use of industry standards to enable interoperability and innovation.

As Blackboard technology is more widely adopted on campus, as it becomes more mission critical, it has the potential of not only making users more efficient and effective, but impacting student achievement holistically. Blackboard is committed to working with its clients and partners to drive this result.

SERVICING TOMORROW

Higher education is in more demand and plays a more significant role in society today than it has in any other period in history. As globalization brings communities of people around the world into the 21st century, the landscape for work, recreation, preservation and education is radically changing. Clearly, enterprise technology in the academic arena must evolve to meet the challenges presented by the trends reported in this paper.

Truly, a new student has emerged in both temperament and expectations. That student is operating in a new world. Higher education institutions, often slow to change, are confronting the realities of students who are technologically advanced, are likely to be in the workforce and who do not follow traditional educational paths. The same institutions that face this student, face a rapidly changing world. They do so in a funding climate that provides less direct funding than previously provided, and that demands that higher education do a better job of accounting for its successes and failures.

At this critical junction, Blackboard is committed to working closely with institutions to move from shared visions to the reality of building 21st century campuses.

V. INTERVIEWEES

Carl Amrhein, Provost, University of Alberta

Erskine Bowles, President, University of North Carolina

Dan Burkey, Chief Financial Officer, Creighton University

Bill Cahill, Vice President Information Technology, St. Edwards University

Geoffrey Cox, President, Alliant International University

Michael Crow, President, Arizona State University

F. James Cummins, President and Chief Executive Officer, Baker College

Reed Dasenbrock, Provost, University of New Mexico

Barbara Dixon, President, Truman State College

Tim Donovan, President, Community College of Vermont

David Eisler, President, Ferris State University

Jean Floten, President, Bellevue Community College

Jack Freid, Provost, Santa Barbara City College

Rufus Glasper, Chancellor, Maricopa Community Colleges

John Haeger, President, Northern Arizona University

Sharon D. Herzberger, President, Whittier College

Truell Hyde, Vice President, Research, Baylor University

Kathy Johnson, Vice President of Finance and Administration, Black Hills State University

Jim Jones, President, Trinity College

Martin Lancaster, President, North Carolina Community College System

Kenneth Levison, Vice President for Administration and Finance, State University of New York at Geneseo

Tim Logan, Director, Electronic Libraries, Baylor University

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VI. END NOTES

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