The Future of Higher Education: A View from CHEMA

A Report from The Council of Higher Education Management Associations

August 2006



CHEMA, the Council of Higher Education Management Associations, is an organization of nonprofit associations representing the administrative functions of colleges and universities. By sharing information, comparing experiences, and working collectively on projects related to higher education, CHEMA members maximize their resources and create substantial benefits for the colleges and universities they represent.

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The Future of Higher Education: A View from CHEMA

I. Introduction

redicting the future is never easy. Higher education scholar Howard Bowen studied post-World War II education and concluded that none of the ten major changes that shaped higher education during this period had been predicted. Despite the inherent challenges of prediction, much is being discussed and written about the future of higher education. Scholars, federal commissions, and individual campus leaders are all weighing in on how and why higher education should change. Undeniably significant forces for change are growing. Changing demographics, the rise of global competition, technological change, and constrained budgets have already become significant forces for change. Some view these forces as dark clouds on the horizon that threaten higher education. Others view them as agents of change that will enable higher education to reinvent itself in positive ways.

The Council of Higher Education Management Associations (CHEMA) approaches the task of looking at the future with great humility. It is not our intent to use this study to predict the future. Rather, CHEMA's interest is to identify the forces for change that are building and to understand their potential implications for higher education. Our goal is to add the voice of higher education's administrative leadership to those who are seeking to understand and shape the future of higher education. We seek to join the dialogue about the future of our institutions and to create a conversation within administrative functions about how they can change to support that future. We take to heart Alan Kay's advice that "the best way to predict the future is to invent it." Or, as that other great futurist Yogi Berra advises, "If you don't know where you are going, you will wind up somewhere else."

Study Scope and Objectives

CHEMA is an informal, voluntary assembly of 30 management-oriented higher education associations in the United States and Canada. By sharing information, comparing experiences, and working collectively on projects of shared interest, CHEMA members

maximize their resources and create substantial benefits for the colleges and universities they represent. Periodically, CHEMA sponsors broad studies and analyses that are of interest to the memberships of its associations.

In sponsoring this study, CHEMA set out to meet three objectives:

- Examine how administrators and officials who are engaged in college and university support functions, and who are leaders within their respective CHEMA member organizations, anticipate that higher education will change over the next ten years.
- Identify the drivers of change and discuss the types of opportunities and threats these leaders foresee for higher education, their institutions, and their functional areas.
- Understand how prepared institutions are to manage change, and identify areas in which these leaders believe higher education can act to shape its own future.

This project is jointly sponsored by 22 CHEMA member associations. A complete list of project participants appears in appendix A.

Research Methods

CHEMA asked the EDUCAUSE Center for Applied Research (ECAR) to design this study and perform the analysis. ECAR brings experience with both quantitative and qualitative research methods. ECAR's efforts were directed by a volunteer steering committee from CHEMA. The steering committee guided the development of research questions and reviewed the results of the analysis.

The research included two major activities. First, a quantitative survey was distributed to the members of the boards of directors of each association. Second, qualitative interviews were conducted with multiple representatives of each participating association. Interviewees were nominated by their associations for the breadth and depth of their perspective on the issues that will shape higher education's future. A complete list of interview participants appears in appendix B.

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Survey responses were received from 190 individuals representing 22 associations. Table 1 displays the number of responses received by association.

Table 1. Respondents, by Association

Table 3. Associations, by Proximity to the Cabinet

Below VP	At or Near Cabinet (VP)
ACCED-I ACHA ACRL ACUI ACUTA AHECTA IACLEA NACA NACCU NACS NACUFS NAEP NIRSA	ACUA APPA CUPA-HR EDUCAUSE NACAS NACUA NACUBO SCUP

II. Change and Change Drivers

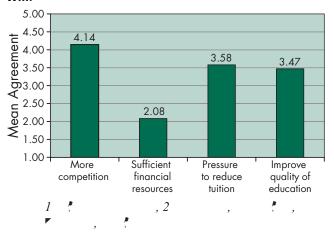
How substantially will higher education change in the future? Will some segments change more dramatically than others? What factors are creating pressures for change? These are the range of questions that we asked project participants. We wanted to gain a sense of how individuals view the coming ten years for higher education. Will it be a period of unprecedented and accelerated change or an era of incremental differences?

Change, but How Much?

In a 1997 interview with magazine, Peter Drucker, speaking about the impact of technological change on higher education, predicted, "Thirty years

from now 0(uclbTJETBT/T13 1ears)25(w h)o/T13 1earsw hw lT6 2camu71e7b3eTm(A8 Tm5rcAic[(oh6M 1e1 Tm(it9Uo/T13 1earsw hw lT6 2camu71e7b3eTm(A8 Tm5rcAic[(oh6M 1e1 Tm6rcAic[(oh6M 1e1 Tm6rcAic[(oh

Figure 2. In the next ten years, higher education will:



As figure 2 illustrates, respondents on average agree that higher education will face more competition and be under greater pressure to reduce tuition, and will make strides in improving the quality of education. Again, respondents were not uniform in their view of the future. The strongest response came to the question regarding sufficiency of future resources. Respondents disagree that institutions will have sufficient financial resources to meet future strategic objectives. As we will see in the following sections, financial constraints are anticipated to be a significant factor in defining the future of higher education.

There were no significant differences among respondents based on the type of association they represent, the type of institution they are from, or even

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The Change Drivers

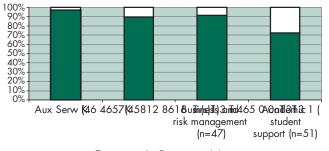
To better understand the forces that will shape the future, we asked respondents to indicate which factors they felt would be the most significant drivers of future changes. Respondents were asked to select their top-three change drivers for higher education. More than half of respondents (60.5 percent) see financial constraints as the most significant driver of change. The next two most frequently selected factors were technological change (32.6 percent) and changing student demographics (23.7 percent). Financial resources and technological change were also seen by respondents as the most significant change drivers for their respective functional areas. Table 4 lists the percentage of respondents who selected each factor for both higher education as a whole and for the respondent's function.

Their view is captured by Doug Christensen, Office of Administrative Solutions – Physical Facilities

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Changes in demographics and student consumer behaviors have significant implications for many administrative services of an institution. This is especially true, of course, for those with a primary mission in student services. Figure 4 illustrates the proportion of respondents that identified changing student demographics as a top-three change driver for their area by the primary mission of their function.

Figure 4. Student demographics will drive change for my function



Function's Primary Mission

■ No □ Yes

Table 6. Dimensions of Competition in Higher Education

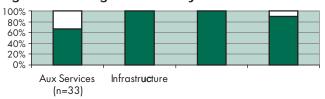
Competition	Examples
Among traditional	Community colleges offering four-year degrees
institutions	More intense competition for students in regions with declining populations
	 Greater competition for research funding as the rate of growth of federal and industry research spending declines
With new entrants	Increased global competition for international students
	Global competition for industry research spending
	For-profit providers for adult learning and, increasingly, traditional students
Between	Online stores
campus services and external providers	Greater mobility of students between campus and local community
	Increased number of working students, reducing hours on campus

Many participants felt that more direct and intense competition is already changing higher education. Mary Kennard, vice president and general counsel at American University, already sees an impact from global and for-profit competition. "There is greater competition coming from a lot of different places, including other countries. U.S. higher education is not the only game in town. New competition from for-profit institutions and corporate training programs is already changing higher education. Short courses, weekend programs, certificate programs, and changing instructional methods are being spurred by for-profit and international competition." Jonathan Alger echoes the theme of the growing presence of global competition. "Institutions will need to become more international in their outlook and focus, and to fight harder for better international students."

Lynette Willett of Coastal Carolina University anticipates that technology will foster greater competition, which could threaten higher education's traditional market. "We will face competition from entrepreneurs that are ten steps ahead of us. They will be able to use technology to connect with populations across the age spectrum. They will capture populations that, before, had hung tightly to traditional education."

Competition is already felt intensely by many of the functional areas represented in this study. Campus stores, and dining and conference services, for example, have always faced some degree of competition. These and other areas anticipate that their competition will grow. Figure 5 illustrates survey respondents' views of the importance of competition as a change driver for their function based on their predominant mission.

Figure 5. Increased competition will be a significant change driver in my area



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Respondents from organizations with a predominant mission of auxiliary services are very focused on competition. These entities find themselves competing with both local and national firms. Technological change has further altered competition for some auxiliary services functions. The Internet has enabled students to shop off-campus without leaving their residence halls. Student demographics are also changing competition. As more students both attend school and work, they are spending less time on campus. This leaves them with less time to spend money on campus. Steve Styers at the University of Cincinnati describes the heightened competition faced by campus services. "I have to be even more cost-conscious because competition is even keener. I have to offer the tools and technologies that students expect and remain cost competitive. This is impacting everything from the cost of meals to phone service and wireless connectivity."

From a societal point of view, several project participants spoke of a growing concern about the loss of U.S. competitiveness if the excellence of higher education is not sustained. They expressed concern that there did not appear to be a national agenda promoting the importance of higher education to the country's economic prosperity. Several cited the incredible investments being made by China and India in the quality of science and technology education in their institutions of higher education. In the short run, these developments may decrease the number of international students who choose to study in the United States. However, when coupled with the decline in the number of U.S. students who pursue science or technology education, it represents a long-term threat to our economic growth.

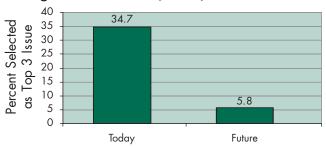
Jonathan Alger of Rutgers University sees a potential silver lining for higher education if political and business leaders grow more concerned with the coun-

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higher education. Even fewer (8.9 percent) identified it as a top-three change driver for their functional area. There were no significant differences in respondents' views by their institutional background or the primary mission of their functional area.

On the other hand, respondents do report that personnel management takes up much of their time. As figure 6 illustrates, nearly 35 percent of respondents identified personnel management as one of the three biggest issues commanding their attention today. This trailed only improving service, which was selected by about 45 percent of respondents.

Figure 6. Personnel Management Commands Management Attention (n=190)



While personnel management is commanding attention today, relatively few respondents saw it as an issue that would be likely to command more of their attention in the future. Only 5.8 percent of respondents—the fewest in number—identified personnel management as one of the three issues that had the potential to command more of their attention in the future. Instead, respondents focused on securing resources, containing costs, and improving service as issues that would likely command more of their focus in the future.

Respondents also did not consider lack of a skilled workforce as a significant threat to the future success of higher education. It was ranked last among a list of 14 potential threats by respondents. It appears that respondents do not see recruiting a skilled workforce in the future as a significantly different challenge than it is today. Or, it may be that the anticipated effects of changes in workforce demographics show up in other variables, such as cost containment and service improvement. It makes sense that these factors would be linked to changes in the supply of skilled workers. We should also note that we asked about the workforce in general and did not differentiate between staff and faculty. It is possible that we would have seen

different levels of concern had we asked separately about the availability of skilled faculty.

Interview participants were more focused on the challenges of recruiting and retaining a skilled workforce. They raised concerns about both the graying leadership of their functional areas and the challenge of competing with the private sector to recruit skilled staff. For example, Daniel Maxwell, director of student activities at Western Illinois University, sees higher education's compensation structure as a significant disadvantage. He explains, "How many years can you go with a 1 percent salary increase? How do I get people to come to a rural town, with poor pay as well?"

Ralph Maier, director of purchasing services at the University of Pennsylvania, sees an even broader challenge. He sees a need to completely rethink what higher education offers its employees. "Higher education needs a different approach to hiring. We are competing with private industry for the required skills and experience. The historical view of superior quality of life in higher education is a fallacy. Staff hires are not looking for 25-year jobs any longer. Market-competitive compensation and health benefits are the top concerns." If in fact compensation and health benefits are increasingly the factors that count in recruiting staff, it will create a further upward pressure on higher education's costs.

The graying of the profession was viewed as both an opportunity and a threat by interviewees. Within their institutions, several expressed concern at the prospect of losing so much experience and institutional memory at a time of great change and challenge. From a national perspective, several inter

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backgrounds to lead both institutions and individual functions. Project participants who shared this view feel that higher education as a whole and individual functions can benefit from new thinking.

Demographics alone suggest that higher education is likely to need to recruit more individuals with corporate work experience. However, this trend raises its own set of questions. Would higher education be receptive to an influx of more leaders with corporate backgrounds? Will these leaders be effective? Could higher education be competitive in recruiting individuals with corporate backgrounds? Robert Mindrum, director of the Purdue Memorial Union at Purdue University, raises a cautionary note that as higher education becomes more corporate, it risks alienating another portion of its workforce. "If we become too much like the private sector, there will be less reason for people to work in higher education for lower salaries."

Clearly, there is a complex set of issues and questions surrounding the future workforce for higher education that warrants close attention — a closer focus, perhaps, than many project participants anticipate. Doug Christensen of BYU summed it up for us this way: "The biggest innovation that higher education can make is to nurture those who work and support the university. We have a tendency to only look externally, while ignoring the internal support staffs and faculty that are integral to the institution."

5. How will technology continue to transform the academy?

In his book *, Thomas L. Friedman quotes Carly Fiorina, former CEO of Hewlett Packard, as describing the dot-com boom and bust as the end of the beginning of the technology revolution.⁴ Friedman goes on to argue that only now are we beginning to see the effects of the true technology revolution in industry and society. Project participants appear to have a similar sense of technology's role in higher education. Mary Daniels of Ohio State University offers her own version of Carly Fiorina's view of technology. "We are at the end of the first wave of technology implementations, where we learned how IT can change the way we do business. The second wave will transform the learning experience. It is just aking higher education longer to translate technology enhancements to education."

Project participants expect technology to be a significant force for change, although the specific

types of technologically driven changes that will occur and how fast they will come about still feels elusive. Among survey respondents, technological change was the second most selected change driver for higher education as a whole and individual functional areas. The anticipated impact of technology did not differ significantly by either a respondent's institutional perspective or primary mission of the functional area that they represent.

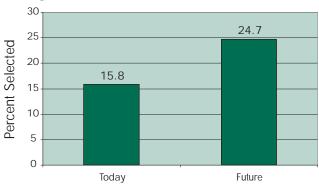
Many participants shared examples of how they believe that technology already was transforming higher education at all levels. They see how technology has enabled students, faculty, and staff to adopt significantly different ways to communicate, access

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Johnson of the University of Washington reminds us, an institution can be high-tech and high-touch. He said, "The students I interact with are very much into their computers. On the other hand, most can step away and realize it's good to have a high-touch piece as well." So, institutions like traditional residential colleges may not see much of an impact. But as Ron Bleed of Maricopa Community Colleges reminds us, these institutions are not the majority. "Residential colleges command much of our mind share, but they really serve a minority of students."

Participants also saw consequences to technological gain. For one thing, it consumes the time and attention of management. As figure 7 illustrates, more than 15 percent of respondents identified integrating new technology as one of the top three issues that commands their attention today. Nearly a quarter of respondents anticipate that it will become a more significant issue in the future.

Figure 7. Integrating New Technology Commands Management Attention



Participants also saw some unintended and potentially undesirable side effects of greater access to technology. Some fear that too much technology is actually reducing the effectiveness of staff. Georgia Yuan, Smith College general counsel, told us, "Technology is speeding up the expectations for responding to requests for services. This has quickened the pace of administration to a dangerous level. Thoughtfulness is sacrificed in favor of acting and responding quickly." Others see technology or, more specifically, access to information presenting significant challenges to the traditional culture of higher education. Lynette Willett of Coastal Carolina University explains, "The increasing access to information and the speed at which it comes at us is challenging higher education's more deliberative and collaborative tendency."

So opinions vary as to how much and how fast technology will enable change in higher education. In reality, it is likely that the availability of technology in and of itself will not drive widespread change. But technology in concert with the other issues described in this section — a shortage of skilled workers, pressure to enhance service and contain cost, the need to appeal to new markets, and new competition — could be a recipe for significant change. Many of the individuals we spoke with are certainly preparing for that eventuality, both within their institutions and within their functional areas.

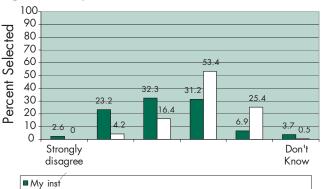
IV. Are We Ready for the Future?

How prepared is higher education to shape its own future? Can we leverage the forces for change to the advantage of our institutions? We asked participants to assess how well prepared their institutions and their own functions were to respond to the challenges of the future. We also asked respondents to evaluate how well important levers for successfully managing change were performing.

The Future — An Opportunity or Threat?

Despite the many challenges and changes that participants foresee for higher education, they are optimistic about the future. Interestingly, they appear more confident about the future of higher education than about the future of their own institution. More than three-quarters of survey respondents are optimistic about the future of higher education. However, a smaller number of respondents (38.1 percent) felt that their own institution was well positioned to take advantage of the changes that the next ten years will bring (see figure 8).

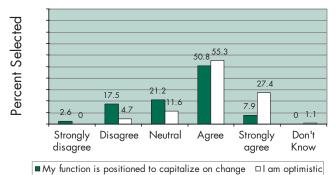
Figure 8. Respondents' Views of the Future (n=190)



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Respondents were even more confident in the future of their individual functional areas. As figure 9 illustrates, the majority of respondents feel that they are well positioned to capitalize on change and are generally optimistic about the future.

Figure 9. The Future of My Functional Area



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Table 9. Strengths for and Threats to Future Success

Threats to Future Success	Percent Selected	Strengths That Will Enable Success	Percent Selected
Resistance to change	55.8	Ability to innovate	58.9
Lack of resources	43.7	Sense of mission	49.5
Increased cost of an education	34.7	Executive leadership	42.6
Decreased government funding	28.9	Reputation for quality	35.3
Complacency	21.1	Public support	25.3
Inability to control costs	18.9	Financial resources	23.2
Insufficient leadership	17.9	Strong traditions	20.5
Organizational silos	15.8	Faculty capability	14.7
Keep pace with technology change	14.7	Staff capability	13.2
Government regulation	12.1	Government support	4.7
Increased competition	11.6		
Insufficient facilities	10		
Complex governance structures	6.8		
Lack of skilled workers	1.6		

In terms of threats, respondents see resistance to change and the forces that are reshaping higher education's finances, such as decreased government funding and increased costs of tuition, as the most significant threats to the future. On the other hand, respondents see higher education's strong sense of its mission and purpose, its ability to innovate, and the capabilities of its leaders as the strengths that are most likely to enable its future success.

Respondents' concerns about resistance to change and confidence in leadership capability seem to be the central issue in determining how effectively and how

quickly higher education will change as its environment changes. It has become an accepted belief that higher education is resistant to change. Clearly, there are some real obstacles. Higher education's historic success is one. It is difficult for individuals and institutions to want to reinvent themselves when what was done in the past worked so well. Shared governance is another. While the participative decision making of higher education can enrich the quality of decisions, it can also reduce the efficiency of decision making. A third is the individualized, entrepreneurial culture of the academy. Some have referred to faculty as the last true entrepreneurs. They are expected to be individual players seeking ways to develop and disseminate new knowledge within specific areas of discipline. They are sources of innovation (witness the significant number of respondents who see this as a strength), but are asked to drive innovation within their research or teaching, not on behalf of their institution.

So there are some true sources of resistance to change. One can imagine that many of these sources of resistance could be found in any large enterprise in any industry. Others may be somewhat unique to higher education. To better understand the true nature of resistance to change and the degree of an impediment it poses to future success, we spent considerable time in our qualitative interviews discussing this issue. The majority of individuals we spoke with feel

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need for this institution to change. There is a broad communication plan that expresses and articulates the need. Faculty and staff have been engaged in the process of visualizing the future."

Others point out that leaders need to embrace a broad set of tactics and strategies to prepare their institutions or individual functions for the changes of the future. Lizabeth Wilson, dean of university libraries at the University of Washington, describes how planning, staff skills, and culture all play a role in change. "You need to engage in meaningful planning and envisioning processes. This enables staff to look beyond their local situation. It is also critical that institutions invest in staff and organizational development, especially during periods of enormous amounts of change. If people know that they have the opportunity to continuously learn and change skills, retool, and stretch their brains, then they are less resistant to change. Culture also enables us to be nimble and facile. We are fortunate to be located in an area [Seattle] that draws people who want to be innovative."

Lizabeth sets a fairly high bar for institutions and individual functions. Higher education has often fallen short in its ability to invest in staff skill development and engage them effectively in planning the future. However, as she and others pointed out, we can't expect staff to change unless we take these steps. Lizabeth went on to add, "Change is difficult, but if you have an agreement of where we are going, why we're going there, and how we'll know when we get there, people are pretty amazing and resilient."

Help Wanted — Leaders

Participants identified leadership as a key ingredient that will ensure higher education's future success and help mitigate its threats. Given leadership's importance, we also asked study participants how well they feel today's leaders are performing and what challenges higher education faces to recruit the leaders of tomorrow. We asked respondents to indicate the extent of their agreement that leaders understand how higher education will change, that the community's leadership capability positions it well for the future, and that leaders are effectively engaging their constituents in discussions about the future. As table 10 illustrates, respondents on average agreed that higher education's leadership is ready for the future.

Table 10. Respondents' Views of Higher Education Leadership

Statement	Mean	Std. Deviation
Leaders understand how HE will change	3.54	1.135
Leadership capability positions us well	3.52	0.956
Leaders effectively engage in discussion about the future	3.36	1.096
Leaders understand how my function will change	2.81	1.19
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However, it is important to note that there are fairly significant standard deviations (between 0.95 and 1.2) for each of these questions. This would suggest that respondents are not uniform in their views of these statements. The distribution of responses suggests that significant numbers of respondents are neutral or in slight disagreement with each statement, while significant numbers of respondents agree. Interestingly, there are no apparent relationships between respondents' views of these statements and their proximity to the cabinet, institutional characteristics, or primary mission of their functional area. In fact, we did not find any variable in the survey that appears to explain the distribution of responses.

Respondents do not believe, on average, that higher education's leaders understand how their individual functional areas will change in the future. However, respondents are divided in their view of this statement as well. Differences in functional area's primary mission do not appear to explain respondents' views of leadership's understanding of their function. Nor does proximity to the cabinet explain the distribution of responses. Our qualitative interviews suggest that the onus is on the functional leaders to educate their institution's leadership. Those who do this well may achieve greater degrees of understanding. Several described communications efforts they undertook to establish how their function was changing and the steps they were taking to align its future with the future of the institution.

While survey respondents seem somewhat confident in higher education's overall leadership,

qualitative interviewees expressed concern that institutions would be hard pressed to find future leaders. Many fear that the job of campus leader has grown too broad and too demanding. They see presidents increasingly torn between their external and internal foci. Balancing these demands and having the skills to effectively lead changing institutions in more turbulent times is seen as a tall order for most leaders.

Some respondents predict that higher education will increasingly see the internal and external leadership roles split at institutions. Ira Fink, president of Ira Fink and Associates, University Planning Consultants, supports this view. He told us, "Institutions will do the best if they have an external leader focused on fundraising, community relations, and promotion of the institution, and an internal leader focused on academic and administrative operations. The jobs are different, and the skills and preparation of the individuals who fill them are different."

Mary Daniels of Ohio State University sees the challenge as choosing between competing visions of the kinds of presidents higher education needs. "The choice is a president as a CEO or a president as a scholar. On the one hand, institutions have become as complex as business enterprises, and we need leaders who are business-minded. The downside is the loss of understanding about the educational nature of our enterprise. We need business-minded leaders who understand change, who are change agents, and who can demonstrate their ability to take an institution's culture and history and make it relevant for the future."

The leadership challenge of the future will also stretch the personal skills required from presidents and vice presidents. Paul Oliaro, vice president for student affairs and dean of students at California State University–Fresno, describes his view of future leaders. "Leaders have to be in touch, have good analytical skills, be good listeners, and have a sense of the impact they have on the people around them. They have to be willing to take risks and take responsibility for mistakes."

Is it possible to find leaders who possess all these qualities? Many participants think it will be possible to find the leaders of the future if higher education is open to recruiting them from broader pools of experience. However, higher education will need to be open to leaders at many levels coming from broader backgrounds, including from outside of

higher education. Many participants believe higher education will be willing to bring in new kinds of leaders and will benefit from their perspectives.

The real concern seems to center around higher education's ability to recruit these leaders. Participants expressed concern that committee-driven search processes and uncompetitive compensation practices will make higher education appear inhospitable to leaders from diverse backgrounds. This would impact searches not only for future presidents, but future vice presidents and functional area leaders as well. Paul Oliaro fears that compensation practices, especially at public institutions, will hold higher education back. He told us, "Institutions are multihundred million organizations with CEOs (presidents) who are paid like mid-level investment brokers. The ability of higher education to recruit the best and the brightest isn't going to happen without competitive pay."

V. Conclusions

As noted at the outset, we never expected this study to produce a definitive picture of the future of higher education. To expect that would have been unreasonable. This study does point toward a set of interconnected forces that are buffeting higher education as it moves to the future. At a macro level, heightened competition, changing revenue streams, demographics, technology, and altered public perceptions are all creating serious threats and opportunities for higher education. These 11 6.1733oreóts and opphsVu0 0 116011

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- 4. In a time of constrained resources, have we done enough to demonstrate how our functions can be supportive of the broader mission and strategies of our institutions?
- 5. Are we prepared to recruit and retain the workforce of the future?
- 6. Are we developing or finding the next generation of leaders of our functions and our institutions?

Perhaps, by confronting the right questions we can rise to Alan Kay's challenge and create our own futures.

Notes

¹Robert Lenzner and Stephen Johnson. "Seeing things as they really are,", March 10, 1997.
²Robert Suro and Richard Fry. "Leaving the newcomers behind," in Declaration, edited by Richard Hersh and John Merrow. pp. 170–171.
³Source is a Greystone Group presentation to the White House Preconference on Aging, July 12, 2005.
⁴Thomas Friedman.

Appendix A - Participating Associations

ACUTA: Association for Communications Technology Professionals in Higher Education

American College Health Association

American College Personnel Association

APPA – Serving Educational Facilities Professionals

Association of College and Research Libraries

Association of College and University Auditors

Association of College Unions International

Association of Collegiate Conference Events Directors-International

Association of Higher Education Cable Television Administrators

College and University Professional Association for Human Resources

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Appendix B - Individuals Interviewed

Lowell Adkins	NACCU	
Jonathan Alger	Rutgers, the State University of New Jersey	Vice President and General Counsel
Nancy H. Allen	University of Denver	Dean and Director
Bruce Barnard	Colby College	Director, Colby College Bookstore
Jeffrey V. Bialik	Golden Gate University	Vice President of Operations and Enrollment Services
Ron Bleed	Maricopa Community College District	Vice Chancellor Emeritus
Ned Britt	Towson University	Director of Campus Recreation Services
Nancy Brooks	Iowa State University	Associate Director of Purchasing
Douglas (Doug) Christensen	Brigham Young University	Office of Administrative Solutions – Physical Facilities
Lynn C. Coleman	Howard Community College	Vice President, Administration & Finance
Sharon Coulson	University of California-Davis	Director of Dining Services
William (Bill) Daigneau	University of Texas M.D. Anderson Cancer Center	Vice President & Chief Facilities Officer
Mary A. Daniels	Ohio State University	Consultant
Thomas W. Dison	University of Texas at Austin	Director & Associate Vice President
Patricia A. Eldred	University of Vermont	Director of AFS Auxiliary Services
Charles A. Figari	University of Texas-Houston	Vice President & Chief Auxiliary Enterprises Officer
Ira Fink	Ira Fink and Associates, University Planning Consultants	President
Tom Flynn	University of Maryland, College Park	Associate Director
Richard Gartrell	University of Denver	Director of Human Resources
Janet C. Gong	University of California-Davis	Assistant Vice Chancellor of Student Affairs
William Hardiman	George Mason University	Director of Purchasing
Robert (Bob) Hascall	Emory University	Vice President, Campus Services
Colleen Hegranes	College of St. Catherine	Senior Vice President
Jeffrey Hoffman	California State Polytechnic University-Pomona	Associate Director for Marketing and Programs
Dallas L. Holmes	Utah State University	Associate Professor, Extension & Continuing Education
Kathy Humphrey	University of Pittsburgh	Vice Provost for Student Affairs
Lincoln Johnson	University of Washington	Director
Phil Johnson	University of Notre Dame	
Mary Kennard	American University	Vice President and General Counsel
Justin Lawhead	University of Memphis	Associate Dean, Student Leadership and Involvement
Ralph Maier	University of Pennsylvania	Director, Purchasing Services
Peter Martel	Bridgewater State College	Associate Vice President for Human Resources
Daniel Maxwell	Western Illinois University	Director of Student Activities
Ted Mayer	Harvard University	Executive Director of Dining Services

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Jack McCredie	University of California–Berkeley	Senior ECAR Fellow Associate Vice Chancellor & CIO, Emeritus
Lorelei Meeker	Indiana University	Director, Purchasing
Russ Meyer	University of Nevada, Reno	Associate Director, Housing Operations & Dining Services
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