California State University Northridge

Focusing Forward for Another Fabulous Fifty¹ 2009 Faculty Retreat Address

Jolene Koester, President California State University, Northridge Monday, January 12, 2009

(Prepared text for delivered remarks. Note that some of the comments made in person at the beginning of her address are not reflected in the text below.)

I. The planning committee for this year's faculty retreat was particularly creative in shaping the theme – Fifty and Fabulous: Foundations for the Future. Their creativity in defining the theme allows us to look to the future as well as review the past.

The committee's charge to me has two main elements, the first of which is relatively easy, and that is to describe the foundations of this University established 50 years ago and then speculate on how those foundations will evolve over the next 50 years. The other is how I envision the future 50 years from now and describe what I think will be the role of faculty. The latter is, of course, daunting to the point of impossibility. Nevertheless, I said I would try, so here it goes.

I am going to start with a short description of this University's foundational attributes. Next, I will speculate on the future of our world 50 years hence, setting the context for the next set of comments about changes I anticipate at Cal State Northridge and for universities in general. Finally, throwing all caution to the wind, I will offer some thoughts about the University's faculty 50 years from now.

The qualifier with which I bracket this set of observations and projections was offered by Erik Peterson of the Center for Strategic and International Studies, who opined that "it is not possible to predict with any level of granularity the future."

¹ Portions of this speech are taken from the 2007 and 2008 President's Convocation addresses.

² Erik R. Peterson is Senior Vice President, Center for Strategic and International Studies, William A. Schreyer Chair in Global Analysis, and Director, Global Strategy Institute. This comment is from his Keynote address at the Annual Meeting of the American Association for State Colleges and Universities (AASCU), November 23-25, 2008. For more information see http://csis.org (accessed December 15, 2008).

II. So, let me begin with our foundations and identify five features that have been part of the Cal State Northridge story from its founding as San Fernando Valley State College. I discussed these in my 2007 Convocation address, emphasizing the remarkable constancy of these attributes. Note, however, that while I present these five to you as constants, within each there have been substantial changes over the first 50 fabulous years.

First, we have always been an institution committed to stewardship of place. In other words, we have been regionally focused. We are located in and serve the people of the San Fernando Valley and the greater Los Angeles area. Our academic programs have always reflected the needs of this region.

Second, we have always been, and remain, distinguished by our excellent faculty. From the early years to the present, the excellence of the Cal State Northridge faculty has been a defining characteristic. Across the California State University system, colleagues describe our faculty as "quietly outstanding." And they always can identify a couple of disciplines to support this statement of praise.

A third ingredient from our past and in our present is absolutely essential to our future – a strong commitment among faculty and staff to students and to quality academic programs. Even in the aftermath of the devastating 1994 earthquake, Cal State Northridge never ceased to deliver its full academic programs. For the past decade or longer, we have collectively re-dedicated ourselves to student success with initiatives to improve student achievement and graduation rates.

Another integral feature of our University has been developed more fully in the past 15 years. Not only is our mission linked to the region in terms of the academic programs we provide, but our pedagogy and scholarly research are now highly interactive with the region. Faculty members apply their intellectual prowess and disciplinary expertise to regional concerns; and many of our students, as part of their formal education, are in the community, sharpening their knowledge and skills while improving the quality of life in the region.

Finally, we emerged from earthquake reconstruction with a praised and appreciated characteristic – a planned approach to buildings, landscaping, pedestrian walkways, and green spaces.

Stewardship of place, a distinguished faculty, a commitment to academic quality, partnerships with our region, and a carefully planned approach to our physical campus – these are trademark attributes over the past 50 years that have brought us into the present.

III. Let me turn now to the part of this presentation that I am least qualified to speculate about – changes underway for the future of the world at large. I will focus on those that are most relevant to higher education. It will be important for us, as we move into a consideration of the future, to

keep in mind science fiction writer William Gibson's observation that, "The future is already here – it is just unevenly distributed."

I am going to turn to one of the numerous experts who make it their business to predict elements of the world's future, Erik Peterson from the Center for Strategic and International Studies, and a presentation I recently heard him make. Peterson describes our world as on "hyper-drive," and identifies seven dimensions or revolutions as molding the world of 2025. These are population dynamics, resources, global economic integration, conflict, governance, and two of obvious relevance to our world in the University – technology and information. There are certainly other frameworks we could use to look to the future, but there is remarkable similarity in the basic dimensions that experts are using to draw pictures of our future world.

Let's begin with the revolution in technology. Erik Peterson predicts convergence of technology in several key areas — computation (and he specifically cites deep computing and pervasive computing), robotics and artificial intelligence, biotechnology, and nanotechnology. These will greatly increase our capacity to collect and process data.

There is a widely distributed video titled "Did You Know?" which has been passed around through email. Perhaps you have seen it. It cites some interesting statistics and makes some fascinating predictions with regard to technology. According to this video, it is predicted that by 2013, a supercomputer will be built that exceeds the computational capabilities of the human brain, and by 2049, a \$1000 computer will exceed the computational capabilities of the entire human species.⁴

Another revolution identified by Peterson with obvious implications for education is in the area of knowledge and information. Distance is no longer important. Information is communicated instantly across the globe, and the amount of information is increasing exponentially. Again, according to the video, "Did You Know?"⁵

- There are now 540,000 words in the English language; five times more than during Shakespeare's time.
- A week's worth of the *New York Times* contains more information than a person was likely to come across in a lifetime in the 18th century.

³ Erik R. Peterson is Senior Vice President, Center for Strategic and International Studies, William A. Schreyer Chair in Global Analysis, and Director, Global Strategy Institute. These comments are from his Keynote address at the Annual Meeting of the American Association for State Colleges and Universities (AASCU), November 23-25, 2008. For more information see http://csis.org (accessed December 15, 2008).

⁴ Available at http://www.teachertube.com/view_video.php?viewkey=6f2c2eba77f39993d118 (accessed December 12, 2008). Research by Karl Fisch, Scott McLood, and Jeff Bronman.

⁵ Ibid.

And, some consequences of these revolutions have dramatic implications for the University:

- The quantity of new technical information is doubling every two years. This means that for students starting a technical degree, half of what they learn in their first year of study will be outdated by their third year of study.
- The top ten in-demand jobs for the year 2010 did not exist in 2004.
- We are currently preparing students for jobs that don't yet exist, using technologies that haven't yet been invented, in order to solve problems we don't even know yet are problems.
- The U.S. Department of Labor predicts that today's learner will have 10-14 jobs by the age of 38.

IV. What does our future hold at Cal State Northridge?

As I said in my 2008 Convocation address, to attempt to predict the University's future in 50 years is a risky endeavor! Our world has seen dramatic changes, and the past decade has brought about powerful forces that are reshaping the terrain of U.S. higher education. I mentioned some of these in my 2008 Convocation address – accountability, demands for efficiency and productivity, erosion of funding, enrollment pressures, charges that students aren't prepared to compete in a global world, and for-profit competitors.

Let me remind you of the William Gibson quote, "The future is already here – it is just unevenly distributed."

My predictions for the future Cal State Northridge begin with the declaration that, first and foremost, we will continue to be a university with a regional mission. The excellence of our academic programs will be the bulwark, allowing Cal State Northridge to remain indispensable to the region we serve. What will be different in the future is that Cal State Northridge will be well recognized across the nation for the excellence with which we fulfill our regional mission.

Another hallmark of our future, embedded within the present, will be a clear focus on student success and, yes, graduation. David Brooks, the *New York Times* columnist, in a recent presentation, observed that in the U.S. and in higher education, we have done a good job of getting people into college, but we have not done a good job of graduating them.⁶ It is our challenge to remedy that.

Third, as we peer into the future, we can predict that our increased knowledge of the science of learning, coupled with advances in technology, will reshape curriculum and pedagogy.

Anticipating the continuation of current trends, we can forecast that the future university will

⁶ Presentation at the Annual Meeting of the American Association for State Colleges and Universities (AASCU), November23-25, 2008. For more information see, http://www.aascu.org/meetings/08annual/

define learning objectives that are more targeted, with focused components linked to problem solving, analytic reasoning, written and oral communication skills, and information processing.

We know already that the digital age shapes brain circuitry and affects learning in ways that challenge traditional curricula and pedagogy. And so, we have already begun to envision courses as defined, not by credit hours, but rather by skill- and knowledge-sets that students may tackle at different paces. We must, and will, readjust the ways we teach to the ways that students learn, building on new understandings of learning that scholars have identified. I would venture that our University in the future will find obsolete or completely redefine the concepts of class size and student faculty ratio.

Fourth, as we continue to imagine our future University, we know that evidence will be used to indicate what students must learn, and what they have learned. As a learning-organization, we will develop robust data systems that allow us to substantiate our successes and adjust our practices based on evidence. We will use evidence to make decisions about learning.

And lastly, as knowledge becomes more specialized and applied, the region we serve will demand more applied master's and applied doctorate degrees. Such practical courses of study will be a standard part of our curriculum at Cal State Northridge.

V. Finally, what will be the role of faculty and the nature of faculty work in the Cal State Northridge of the future?

Let me begin with I what believe will *not* be different in the future, and that is the motivation for choosing the profession. Then, as now, faculty will choose this profession because they are driven by intellectual curiosity, a love of learning, and a love of their discipline; then smitten by the interaction with students and satisfaction and joy of helping others learn. The pursuit and sharing of learning is what defines the scholar and educator.

Another driver for those of us committed to this work will remain the same. We are drawn to the academy because scholarship and creative activity allows us to pursue our own interests, to seek answers to our own intellectual questions, to create our own research or creative agendas. We are allowed to do so in collaboration with others of like interests, or independently, depending on personal preferences. What other work offers such opportunities?

However, I do foresee some changes. Our Cal State Northridge faculty of the future will more closely match our students in terms of race, ethnicity, national origin, cultural background, social class, religious tradition, and other characteristics. Of course, to accomplish that, we must continue our efforts now to reach out to the students of this region, many of whom are first-or second-generation Americans, first-generation college students, and/or from traditionally under-represented groups. Cal State Northridge is among the top master's universities in preparing students for graduate programs, and as such, we are helping to prepare the faculty of the future.

A common explanation for why the faculty has historically been less diverse than the students we teach is a lack of diversity in the pipeline – our students today at Cal State Northridge are the pipeline for tomorrow.

I also think the faculty of the future will be organized differently than we are now. While there will surely always be some form of internal disciplinary or departmental structure, I believe the future will see a redrawing of academic boundaries. The world is interconnected, yet the boundaries of many academic disciplines are quite artificial, and break down quickly in practice. We perhaps see this most clearly across the social sciences, the humanities, the applied arts and sciences, and technical fields. Disciplinary boundaries that have been convenient in terms of curriculum are less realistic when applied in practice to finding solutions to modern problems. And of course, the need for literacy, numeracy, communication skills, creativity, ethics, and the ability to think critically and solve problems spans all fields of endeavor. Engineers must be able to communicate their ideas through writing and speaking, artists must develop budgets for their projects. I'm sure you can think of other examples.

Finally, I predict that how faculty interact and work with students will change. We already see marked changes from the traditional classrooms and faculty-student interactions of the past. Few of us who have been around any length of time teach in exactly the same way we used to teach. We have increasingly come to understand that students are not passive receptacles or *tabula rasa*, but learn best through their own active engagement. This translates into more self-directed learning, more hands-on and applied learning experiences, and a faculty that facilitates such learning as well as conveying content. We have already shifted in this direction, and the trend will surely continue.

VI. In closing, I want to say that while it is always fascinating to anticipate and develop predictions for the future, it is even more important to influence it. Rather than focusing on fears, unknowns, and imponderables which sometimes accompany our attempts to look into the future, let's focus on those things we *can* shape and control. As the French writer Antoine de Saint Exupéry said, "Your task is not to see the future, but to enable it."

I believe the important work for all of us at Cal State Northridge should be not so much to forecast the future, but to define a future we want and then help to make it happen. We want a future where Cal State Northridge is known for its academic excellence and scholarship. We want a future where Cal State Northridge facilitates student learning – preparing students to engage as citizens, succeed in their careers, make meaningful contributions, and lead richer and fuller lives. We want a future where, through scholarship and education of students, we raise the quality of thinking of individual citizens, the level of passion brought to a profession, and the collective efforts of educated people to improve the human condition.

As educators, we want a future where we at Cal State Northridge positively transform lives, both individually and collectively. We at California State University, Northridge are already part of a powerful force for individual, regional, and societal growth, change and opportunity. As faculty and administrators, it is our job to ensure *that* future.