Thank you for this opportunity to be with you today. We are at a very critical time for the future of higher education. It is one of those periods, which is very frightening, because the winds of change are howling, and yet, it is not clear how much damage these winds will wreak on our institutions. It is also one of those periods in which there is a great opportunity to take advantage of new knowledge that we have about student learning, and we also have new tools available to us that we have not had before today.

I would like to explore some of the major forces, which are driving the winds of change, share a futuristic perspective with you that others have created, and then I will offer some observations about what should occur in the future. My goal is to make everyone feel somewhat uneasy by the time I finish, because I think we need to have an in-depth dialogue about the future. I hope I can stimulate your interest in being part of the dialogue and leading some of the change. I hope that today, we can spend a few minutes engaging in some of this dialogue.

What are some of the forces or trends that are driving the winds of change?

1. The rising costs of higher education are not sustainable over time. President Obama has raised the issue of the affordability of college as a major priority for his second term. Across the country, we are beginning to see calls for limiting fee increases for the future. Since 1987, tuition and fees have doubled, while state funding for higher education has decreased by one third (Eberly, J. & Carmel, M.; The Economics of Higher Education, December, 2012). There will be huge pressure to stop large fee increases, and at the same time, state funding of higher education is not likely to increase dramatically. The public has now joined this bandwagon.

2. As a result of rising fees, student loan debt is rising at very alarming rates. Student loan debt has now exceeded one trillion dollars in the United States. This is greater than the nation’s credit card debt (Time, October 29, 2012). The average student loan debt for students graduating in 2010 was $25,250 (Time Carnegies Corporation, December, 2012 study). The inability of students to pay off this debt may be the next fiscal scandal the country has to face.

3. Students who are coming to us are digital natives. Every year, students who enroll in universities, come to us more sophisticated in using technology. Student’s methods of engaging with their world have changed dramatically in the last six-eight years, and it continues to change in staggering numbers. We must better understand how students learn in the current era.
4. Research on the brain and learning are helping us better understand how students learn. Unfortunately, we have not spent a great deal of time changing how we teach based on this new knowledge. Work at Carnegie Mellon University is beginning to change some of the ways we construct our learning environments. Stanford professor Sebastian Thrun’s experiments with teaching online have utilized some of this new knowledge, which led to his founding Udacity and launching MOOCs.

5. Alternatives for the delivery of education are expanding at an exponential rate. (Jeff Selingo, Chronicle of Higher Education). As we look across the nation, we see huge investments are being made in new learning tools; the Kahn Academy rose up almost overnight, and MOOC's have become the hottest topic in higher education. I could go on at length about the new tools, which exist. Many of these tools promise to lower the costs of education and make education universally available to all.

The public has begun to question the value of higher education. An October 2012 Time/Carnegie Corporation survey found that 80% of the general population said that they somewhat, or strongly agree that the education that students receive today, is not worth what they are paying for. Interestingly enough, only 41% of the college leaders surveyed in the survey agree that the value of a college education is not worth what students are paying for. A more recent survey, by Jeff Selingo, found that 57% percent of the population believes that a college education is only a fair-to-good value today.

Increasingly, there is emphasis being placed upon competency based learning and assessment of learning. There is an emergence of interest in granting credit for previous learning, or granting degrees based on competencies students learn. We now have the tools, which make it more feasible to assess learning. There is new interest in changing college calendars, and the length of time in which a course is offered.

These forces are causing a great deal of speculation about the future of higher education. Every day, we hear of a new proposal to reduce costs of going to college. Many advocate online education as the solution, without fully understanding the complexities. We are in a period of significant disruption.

Educause prepared a video titled EDU@2020 in 2006, which attempts to trace the technological evolution of higher education. The video predict sin 2008 that the Google Higher Education Division will launch open source materials followed by MIT open courseware. The video predicts that Google Phoenix will be created as a fully accredited entity. It further predicts that Microsoft will announce the acquisition of Pearson and Blackboard. Further, a Faculty One talent agency will be formed.

In 2009, the video predicts that Disney, Sony and Apple will form an education division. In 2010, Google Phoenix announces a new effort to access all knowledge. In 2012, the MIT Open Learning Alliance announces that students can petition for a degree if certain experiences are completed.

Moving forward to 2017 the video predicts that Google will create academic personas with professors who are simulated. This leads to the adoption of synthetic pedagogy on student learning and finally in 2020 synthetic educators dazzle the masses. All but the wealthiest experience a standardized curriculum to reduce costs. This dramatic change results in the increase in quality and the reduction of costs.
The picture painted by this video contains some major changes, which may not happen. However, there is a great deal to ponder in the video. Much of the technology to create the scenario described is now available.

So, what does our future look like and where are we headed? Let me suggest some things, which I believe, will happen in the very near future.

1. The role of the faculty member will continue to change. We have all heard the stereotypes about the role of the faculty member changing from the sage on the stage to the guide on the side. I don't think there is any question that the faculty member’s role will continue to move toward that of a designer of learning experiences, and away from the lecture approach to teaching. I think what will change even further, is an emphasis on the faculty member serving on a team of people who include instructional designers and others to design the learning experience. The faculty of the future must become comfortable with functioning as a team member or leader, and make a commitment to using new tools to improve instruction. There are numerous examples of our faculty who are engaged in course redesign and who are achieving very positive results in terms of student learning. Pennebrantz and Goosling at the University of Texas have launched a research-based psychology course in which they believe they can enroll 10,000 students effectively. NOVOED has just been founded to address new ways of teaching remedial math. There are many more experiments underway.

2. We must place greater emphasis on applying research on the brain and learning, to how we teach our courses. There needs to be less emphasis on seat time, and more attention devoted to assessing student learning and allowing students to progress at their own pace. We also need to redesign the academic calendar. There is no evidence, which suggests that the 14-week semester is the best timeframe for students to learn.

3. We will have to learn how to serve more students at less cost. This probably means that we rely more frequently on many of the tools which are available that can serve more students. It probably also means that we place greater emphasis on how we deliver learning experiences, and on how we can be more effective in helping students to learn. We will need to encourage experimentation in this area to learn how to do it best. We must overcome our resistance to attempting new approaches.

4. I believe we need to engage in serious discussions about how we can develop some competency-based degrees. Further, we need to give serious attention to assessing learning and granting credit for students who can demonstrate that they have learned through other methods. This is not an easy task but it is a critical issue for our future. If we don’t, we may face legislative interference in this area, and that would not be positive.

5. The advent of learning analytics provides a great opportunity to personalize learning experiences for students and to better understand how students learn. I think that we all know that not everyone learns in the same way. Previously, we have lacked sufficient tools to figure out what these differences are. I believe that we have the tools available, and we must begin to understand how to use these tools. This may be the most positive outcome of the MOOC phenomena.
6. We must continue to place more emphasis on intrusive advising and the coaching of students. I believe we have learned through our student success work that our students do respond positively to more structure and the increased expectations we establish. Supplemental instruction has been an extremely effective approach to improving student achievement. Likewise, early intervention has proven to be successful. The for-profit sector has much for us to learn from through the coaching techniques, which many firms have established. We must not be afraid to try some of these approaches.

7. We must give priority to redesigned courses and experiences, especially those in which we have high failure rates. There are many examples of course resign, which have demonstrated that student achievement can be improved. We must be willing to attempt these efforts relying upon many of the resources that exist on campus and those that exist through national centers like the Center for Academic Transformation. As we preparer teachers, we must utilize new approaches if future teachers are to function in the changed environment. We must better align our curricula at all levels. The Common Core Standards effort is clearly a way to do that. However, I fear that higher education is not giving sufficient attention to this effort. The outcome could be another misalignment of the curriculum, which negatively impacts students.

As we engage in attempting to control our destiny, I think it is very important to remember the admonition of William G. Bowen, who gave the Tanner lecture at Stanford in October 2012. He suggests that we must retain three things as we address the future:

1. We need to emphasize and if need be to re-emphasize the great value of "minds rubbing against minds."

2. We must retain, whatever the provocation, the unswerving commitment of great colleges and universities to freedom of thought.

3. Our colleges and universities should focus unashamedly on values as well as on knowledge - and we should spend more time than we usually do considering how best to do this.

I urge all of us to devote some time to reflect on the issues I have identified above. Our failure to do so, could threaten our future.