MEETING OF THE BOARD OF TRUSTEES

OF THE

UNIVERSITY OF ILLINOIS

January 23, 2013



This meeting of the Board of Trustees of the University of Illinois was held in the Michèle M. Thompson Rooms A, B, and C, UIC Student Center West, Chicago campus, Chicago, Illinois, on Wednesday, January 23, 2013, beginning at 10:01 a.m.

Chair Christopher G. Kennedy called the meeting to order and asked the secretary to call the roll. The following members of the Board were present: Mr. Ricardo Estrada, Mr. Patrick J. Fitzgerald, Ms. Karen Hasara, Mr. Christopher G. Kennedy, Dr. Timothy N. Koritz, Mr. Edward L. McMillan, Mr. James D. Montgomery, Ms. Pamela B. Strobel. Ms. Patricia Brown Holmes and Governor Pat Quinn were absent. Mr. John W. Tienken, voting student trustee from the Springfield campus, was present. The following nonvoting student trustees were present: Mr. David Pileski, Urbana campus; Mr. Kenneth M. Thomas, Chicago campus. President Robert A. Easter was present.

Also present were the officers of the Board: Mr. Lester H. McKeever Jr., treasurer; Mr. Walter K. Knorr, comptroller (and vice president/chief financial officer); Mr. Thomas R. Bearrows, University counsel; and Dr. Susan M. Kies, secretary. The following vice presidents of the University were in attendance: Dr. Phyllis M. Wise, vice president, University of Illinois, and chancellor of the Urbana campus; Dr. Paula Allen-Meares, vice president, University of Illinois, and chancellor of the Chicago campus; Dr. Susan J. Koch, vice president, University of Illinois, and chancellor of the Springfield campus; Dr. Christophe Pierre, vice president for academic

affairs; and Dr. Joe G. N. Garcia, vice president for health affairs. In addition, the following persons were also in attendance: Ms. Marna K. Fuesting and Ms. C. Ellen Foran, both assistant secretaries; and Ms. Eileen B. Cable, special assistant to the secretary.

Mr. Thomas P. Hardy, executive director for University relations, introduced members of the media present at the meeting.

OPENING REMARKS

Mr. Kennedy welcomed everyone to the retreat and stated that the topic for today's discussions would be technology and the role it plays in education. He recognized the new trustee, Mr. Fitzgerald, and thanked him for attending the meeting. Mr. Kennedy then asked Ms. Strobel to comment on the structure of today's meeting. Ms. Strobel stated that the meeting would begin with a discussion on technology-enhanced education, with presentations from national leaders in higher education. She welcomed the more than 95 leaders from the University in attendance at the meeting, and she thanked everyone for their participation.

Ms. Strobel stated that the topic for today's retreat was drawn largely on the feedback that was received from the retreat that was held in July 2012. She stated that the use of technology in education is a topic of critical importance, and indicated that the goal for today's retreat is to investigate and discuss the topic together without any preconceived outcomes. She presented a slide outlining some achievements at each campus regarding the use of technology and said it is important that these accomplishments are acknowledged. Ms. Strobel encouraged participants to ask questions throughout the day and provided an overview of the agenda for the retreat. She asked President Easter to provide some remarks and to introduce today's presenters.

President Easter thanked Ms. Strobel and said that, in addition to the trustees and University officers in attendance at today's meeting, many deans from colleges throughout the University were also present. He stated that the University has had a role in creating much of the underlying technology that will be discussed throughout the day, and said the use of technology enhances education of on-campus students as well as those who are enrolled in distance education programs. He then introduced the panel speakers: Dr. Michael Tanner, former provost at the University of Illinois at Chicago and current chief academic officer and vice president of the Association of Public and Land-grant Universities; Dr. Marie Cini, acting provost and chief academic officer at University of Maryland University College; and Ms. Candice Thille, director of the Open Learning Initiative at Carnegie Mellon University.

PRESENTATIONS

Dr. Tanner welcomed everyone to the meeting and provided additional information about the panel speakers. He gave a presentation (materials on file with the secretary) that began with an overview of the history of some technologies and indicated that recent advances have led to increased interaction. He predicted that the next phase of innovation will involve the use of adaptive learning systems. He presented a graphic of an "iron

triangle" and stated that this reflects the national need to simultaneously advance learning, control costs, and improve access and success. He then posed questions about learning and the creation of Massive Open Online Courses (MOOCs).

At 10:27 a.m., Dr. Tanner introduced Ms. Thille and asked her to begin her presentation (materials on file with the secretary). Ms. Thille described the Open Learning Initiative and stated that it is based on the science of learning and designed to improve quality and productivity in higher education. She demonstrated the use of a cognitive tutor to provide contextspecific feedback within a course and explained that this type of feedback is helpful to the student and instructor. She provided examples of data that can be collected and used by instructors to evaluate the level of learning for a class or individual student, and she stated that courses designed by the Open Learning Initiative feature an ongoing data collection and feedback loop for continuous improvement. She commented on the power of meaningful collection of large amounts of data. She then described the Open Learning Initiative course development process, which she said relies on a team-based approach, and stated that the use of cognitive task analysis and educational technology provide data for automated analysis and an opportunity for course improvement. She discussed the success of this type of course design, noting that one study showed that students were able to achieve the same or better learning outcomes in half the time in an Open Learning Initiative designed course than those who enrolled in a traditional course.

Dr. Cini began her presentation (materials on file with the secretary) at 10:45 a.m. She posed a series of questions related to learning and the role of technology and described the use of technology as a concept and a tool. She compared learning in the 20th century to learning in the 21st century and discussed the role of faculty in a traditional learning environment versus a personalized online environment where the faculty member's role is similar to that of a facilitator. She emphasized the use of learning outcomes assessment. She then discussed the ways in which technology can aid learning, and she referred to issues such as increasing costs and stagnant student learning and completion rates. She posed questions regarding the selection of technological tools to help students learn more effectively and complete degrees more efficiently, and she presented the idea of technology as a catalyst for creativity. She then discussed impediments to using technological tools in education, and she presented suggestions for moving forward. She described the development of the Center of Innovation in Learning at University of Maryland University College, and she emphasized that much discussion and communication is needed as universities consider the best ways to use technology in educating their students.

These presentations were followed by a round of applause.

QUESTIONS AND ANSWERS

At 11:02 a.m., Dr. Tanner received questions from those in attendance that had been submitted during the presentations. He read these questions aloud and asked the panelists to comment.

Dr. Tanner posed the first question, which asked what the panelists thought about what students should know. He asked Ms. Thille and Dr. Cini to comment on learning outcomes assessment and establishing learning outcomes. Ms. Thille stated that faculty members are asked what they expect students to learn at the beginning of the course development process at the Open Learning Initiative, and she discussed some techniques for identifying and articulating learning outcomes. She said these goals or outcomes should be explicit. Dr. Cini discussed the design process, beginning at the program level at University of Maryland University College, noting that the focus there is primarily on adult students. She described how faculty members and experts from the community contribute to program development and said that faculty experts work in groups to design courses within the curriculum of the program.

Dr. Tanner then presented the next question, asking the panelists to discuss the ways in which a cognitive tutor might be used in humanities courses. Ms. Thille commented that this is a frequently asked question, and explained that, while the use of a cognitive tutor is one application of technology, the emphasis is on a design process that brings people together to establish learning goals and identify the best use of technology to meet those outcomes. She commented that the goal is not to replace faculty but to identify aspects of the learning experience that can be most effectively designed with specific types of resources. She provided some examples of humanities courses that are being designed using this process and said there are various technological tools that can be used.

Dr. Tanner then welcomed questions from trustees. Mr. McMillan inquired about the impact of online learning on employment and asked if there has been any feedback from employers. Dr. Cini clarified that the Open Learning Initiative method of course development discussed by Ms. Thille can be used for online, blended, and face-to-face courses. She stated that while employers have not indicated that students who have completed online courses or programs are more prepared than those who completed their coursework in a traditional classroom, employers generally do not have concerns regarding coursework that is completed online. She said that that attitudes regarding online learning have changed rapidly in the workplace.

Next, Mr. Kennedy listed several aspects of the educational mission of the University and asked in what ways the use of technology could be applied to further the efforts of this mission. Ms. Thille commented on access and stated that it is essential to provide the necessary support students need to succeed after being admitted to the University. She stated that students come from many diverse backgrounds with varying levels of preparation and that these needs must be addressed in a time of diminishing resources. She said that higher education should prepare students for participation in democracy and community, and she discussed some methods for addressing this goal. She advocated that research expertise should be applied to a greater understanding of how learning takes place. Dr. Cini agreed that student support is important and that the use of educational technology can increase the level of student success, and she expressed concern regarding MOOCs due to the lack of support, noting that most students

who enroll in these courses do not complete them. Dr. Tanner stated that students need to learn how to think deeply and synthesize information. He advocated for a hybrid model of teaching that combines classroom and online activities. Ms. Thille commented on the results of an accelerated learning study using a statistics course at Carnegie Mellon University that was designed with the Open Learning Initiative and said the students who completed the course showed a deep level of understanding and learning. Dr. Tanner commented on the issue of access and said that not all students have high-speed internet connections available. He said it is important to remember the student population that courses are being designed to teach, and whether the intended audience is being reached. He indicated that this also pertains to MOOCs.

Ms. Strobel then inquired about Dr. Tanner's discussion of the "iron triangle" and the cost implications of the increased use of educational technology. Dr. Cini stated that online education, when done well, requires a great investment, noting that affordances come after systems and resources are in place and at scale. Ms. Thille stated that the Online Learning Initiative course development process is costly, primarily due to the cost of labor and expertise, and said these costs are offset by grant funding. She advocated for the creation of consortia of departments and institutions to collectively create and utilize these environments. Dr. Tanner stated that he is working on a project that aims to create consortia of institutions to pool resources. He said that while initial capital investment is needed to do this well, he hopes that this would lead to the ability to reach a large audience at a lower cost. Ms. Thille then stated it is also important to consider which aspects are outsourced to a commercial entity and expressed concern regarding outsourcing certain parts of the course development process and collection and analysis of data.

At 11:29 a.m., Mr. Kennedy suggested that the Board take a short break. The meeting resumed at 11:37 a.m., with all Board members previously recorded as being present in attendance.

PRESENTATIONS

President Easter introduced Dr. Douglas H. Beck, professor, Department of Physics, Urbana; Dr. Terri E. Weaver, dean, College of Nursing, Chicago; and Mr. Ray Schroeder, associate vice chancellor for online learning, Springfield.

Dr. Beck provided a presentation (materials on file with the secretary) in which he demonstrated the use of clickers in a blended learning course. He described the format of the course and stated that content is presented to students online before arriving in class, and that time in class is spent engaging the students and working through concepts with presentations and demonstrations. He said students complete additional work in small groups. Dr. Beck explained that he provided access to the online course on magnetism to trustees in advance of this meeting and that they were able to answer content-related questions online. He began his presentation on magnetism that he would usually give to his students, which included demonstrations of key concepts. Questions interspersed throughout the live presentation were answered by the participants using clickers, which allowed Dr. Beck to gauge

the percentage of participants who understood the material. He compared the results from the live presentation to results that were submitted online and showed that the live presentation and demonstrations were beneficial. He explained that this is the process used in his blended course on magnetism. His presentation was followed by a round of applause.

Next, Dr. Weaver provided a presentation on pathways to obtaining a Bachelor of Science in Nursing (BSN) degree at Chicago (materials on file with the secretary). She stated that these degrees are intended for students who are already registered nurses and discussed an increased professional emphasis on the BSN degree. She said opportunities for registered nurses to obtain BSN degrees were needed, and she discussed the benefits of offering an online program. She reported that the program is offered in partnership with UIC Online through the Office of Continuing Education, and that it provides a high quality, rigorous program to a wider audience at a lower cost. She discussed institutional agreements with community colleges throughout the State. She provided a comparison of an online and traditional course in the BSN program and commented on some disadvantages to offering a BSN program online. She then discussed integrative experiences made possible by the use of students' work environments to complete assignments. She presented statistics related to enrollment, retention, graduation, and grade-point average, and she discussed the success of the program and accolades it has received. She thanked her colleagues for their work toward making the program a success, and her presentation was followed by a round of applause.

Next, Mr. Schroeder gave a presentation on emerging technologies (materials on file with the secretary). He discussed the impact of the internet and provided examples of ways in which online learning has provided access to students who may not otherwise enroll in college. He described the backgrounds of four students enrolled in online courses at Springfield. Mr. Schroeder then discussed the use of big data and analytics and shared some insights gained through a predictive analytics reporting project. He then provided information about the Learning First project, which utilizes a concurrent enrollment model at the Springfield campus and some community colleges. He described a partnership with Portmont College that is offering an adaptive curriculum, and he discussed this type of learning model. He then reported on MOOCs, stating that the Springfield campus has been a pioneer in offering these courses, and said that a project is underway to assess MOOCs offered at Coursera and Udacity. He concluded his presentation by encouraging those in attendance to visit his blogs, which provide information on changes in technology-enhanced learning. Mr. Schroeder's presentation was followed by a round of applause.

President Easter explained that participants would now divide into groups for breakout sessions to engage in greater discussion. Each group was given two of the following five questions to discuss:

1. What are the best options for using technology to expand access to nontraditional learners? What is the University's role in ensuring that online education is available to those who

will not/cannot ever come to campus? Massive Open Online Courses (MOOCs) have potential but currently aren't for credit and don't raise revenues. Online courses and degrees reach a significant number of students and do produce revenues but aren't cheaper than regular courses. Are there other models we should be pursuing?

- 2. How should we use technology to transform teaching and learning for on-campus students? Currently they have choices ranging from access to fully online courses, to blended courses, to technology-supported regular classrooms. What are the next innovations going to look like for these students?
- 3. How can we use technology to reinvent large lecture courses? Is sitting in a huge auditorium a good use of space and students' time? How do we "flip" classrooms: put lectures online to be watched anywhere/anytime, and using precious faceto-face classroom time for group projects, labs, practicums, and hands-on teaching and tutoring? (This question also referenced an article regarding the "flipped classroom" format used at San Jose State University that reported to result in increased test scores.)
- 4. How can we use online course delivery to share courses across the University of Illinois campuses? Can we promote new synergies—such as virtual interdisciplinary team-teaching or collaborative research on our online efforts—that create value added for all participants?
- 5. What are the arguments going to be to the next generation of students for the virtues of the (increasingly expensive) oncampus experience? What will the on-campus experience look like when much of the teaching will take place in technologically mediated environments? What does this mean, for example, for the design of residences?

On motion of Mr. Montgomery, seconded by Mr. McMillan, the Board then recessed at 12:31 p.m.

The Board meeting resumed at 2:47 p.m., with all Board members previously recorded as present in attendance. Dr. Kies explained that one member from each group would now report on the discussions held during the breakout sessions, and she asked that these reports be limited to no more than five minutes. These summaries were also added to slides that were projected throughout the session (materials on file with the secretary).

The following individuals had been selected to record and provide a summary of the discussions that were held in groups during the breakout sessions: Ms. Mary Case, University librarian and professor, Chicago; Dr. Karen Colley, professor biochemistry and molecular genetics, College of Medicine, Chicago; Dr. Debasish Dutta, dean, Graduate College, Urbana; Dr. Bruce S. Graham, dean, College of Dentistry, Chicago; Dr. Barbara

Henley, vice chancellor for student affairs, Chicago; Dr. C. Renée Romano, vice chancellor for student affairs, Urbana; Dr. Jorge Villegas, associate professor, business administration, College of Business and Management, Springfield; Dr. Ruth V. Watkins, dean, College of Liberal Arts and Sciences, Urbana. These individuals provided summaries of their group's responses to the questions listed above. This concluded at 3:30 p.m.

Mr. Kennedy commented on the experience and benefit of meeting and convening together as a group. He thanked the faculty and University leaders that participated in the retreat and stated that the challenges ahead can be faced together. Ms. Strobel thanked the presenters for their participation and also expressed appreciation for Dr. Kies and her staff, who helped coordinate and plan the retreat.

MOTION TO ADJOURN

With no additional questions or comments, Chair Kennedy asked for a motion to adjourn the meeting. On motion of Mr. Montgomery, seconded by Mr. Fitzgerald, the meeting adjourned at 3:31 p.m. There were no "nay" votes.

Susan M. Kies Secretary Christopher G. Kennedy Chair