Minutes of a meeting of the Council of the Princeton University Community held March 11, 2013 in 010 East Pyne. Present were Council members Ms. Alivisatos, Ms. Bui, Mr. Burd, Ms. Cherrey, Ms. Clifton, Mr. Cook, Prof. Davis, Mr. Diskin, Ms. Doyle, Ms. Durden, Mr. Durkee, Provost Eisgruber, Prof. Harman, Dr. Hourihane, Mr. Jackson, Ms. Kim, Mr. Kugelmass, Mr. Maisel, Ms. Mancenon, Dr. Matthies, Mr. McDonough, Prof. Morel, Dr. Neglia, Mr. Okuda-Lim, Mr. Riley, Prof. Rivett, Mr. Robertson, Ms. Scott, President Tilghman (chair), Ms. Wright, Prof. Wysocki, Dr. Yao, and Mr. Zhu; Ms. Halliday was secretary.

After the roll call and approval of minutes of the February 11, 2013 meeting, the President called for questions. Hearing none, she introduced Professor Deborah Prentice, Chair of the CPUC’s Resources Committee.

Resources Committee Amendment to the Charter

Professor Prentice introduced an amendment to the CPUC Charter concerning the make-up of her committee. Professor Prentice described the work of the committee to “consider, on behalf of the Council, questions of general policy concerning the procurement and management of the University’s financial resources….” Since 1970 when the CPUC charter was first adopted, management of the University’s investments has transferred to the Princeton University Investment Company (PRINCO). Her committee has found it useful to include a member of PRINCO in its meetings, and the committee proposes officially making a member of PRINCO a non-voting member for transparency’s sake. The text of the Charter would be changed in this way:

5.5.2 The Committee on Resources shall consist of the Financial Vice President; three members of the Faculty; two undergraduate students; one graduate student; and one member from one of the other groups represented on the Council. A member of the Princeton University Investment Company [PRINCO] shall be a non-voting member of the committee.

Following usual procedures for amending the Charter, the language proposed at this meeting would be brought for a Council vote on May 6. There were no questions.

Online Learning

The President then introduced the main agenda topic: a discussion with a group of faculty engaged in the University’s first set of ventures using Coursera, an educational website that focuses on interactive learning and concept retention through the use of video lectures embedded with quizzes, collaborative forums and online discussion groups. She asked Deputy Dean of the College Clayton Marsh to moderate the discussion.

Dean Marsh introduced the topic reminding the Council that last year the University had joined with several other institutions including Stanford University to offer free, massive open online courses (MOOCs) through Coursera. Princeton has two primary goals: to make
educational material accessible to the world and to understand how to develop and deliver material on Coursera which can help the University with teaching and learning on campus. About 7 courses have been offered, all free and open to the world. They have attracted some 500,000 internationally, and many finished the courses. Today’s focus would be on how Coursera is helping campus teaching and learning. The panel included the following:

- Professor of History Jeremy Adelman, director of the Council for International Teaching and Research who taught a course on the history of the world
- Professor of Sociology Mitchell Dunier who taught a course online this summer
- Professor of Electrical Engineering Mung Chiang on building a MOOC community and other enhancements
- Professor of Electrical Engineering Claire Gmachl on “flipping” the lecture at Princeton
- Professor Kevin Wayne from Computer Science on automated grading
- Dr. Jeffrey Himpele from the McGraw Center on student-centered approaches to teaching online

A wide-ranging discussion followed. Among the points made were the following:

Professor Adelman described the problem of “two scales”: he was teaching a large campus gateway course at the same time as teaching 93,000 online students. Bridging the two realms of teaching poses challenges including coordinating participation especially of Princeton students.

Professor Dunier encountered questions about grading from off-campus participants. Of the 40,000 who took the course, 25,000 took the midterm and 1,200 the final exam. The peer assessments were useful in providing a score, not a grade, assessing how much was learned.

Professor Gmachl described a difficult course she teaches where she employed techniques of MOOCs to help Princeton students with the subject and labs. She “flipped the classroom,” by allowing students to review topics and lab procedures online, at their leisure. In-class time was partly spent then on clearing up problems and expanding on topics.

Professor Wayne’s primary goal was to improve education worldwide and apply lessons to campus. The course taught was on algorithms, involving writing code where multiple answers are correct. He described the challenges of automating the course and correcting for errors.

Professor Chang underscored the importance of the video-taped lectures as the backbone for his course in a challenging math course, at least for the 30 students enrolled on campus. He used the class time for questions and to delve deeper into the subject. He also noted general challenges about MOOCs: how to assign credentials to those who finish the course; teaching in an asynchronous environment, with no common classroom or even common aspirations.
Dr. Himpele described efforts to change where students receive course content, turning the classroom into the venue where they process information and pursue it further. In a sense the pedagogical challenge is flipping the professor, enabling instructors to take the point of view of students when designing the course, shifting attention from content to what the students do with the content. Engaging students throughout the world is exciting but connecting with all of the students is a challenge.

During the discussion that followed comments acknowledged both the time that good teaching of any kind requires and the special challenges of assessing learning when confronted with a broad variety of different cultures especially in interpretive disciplines. Faculty also warned of the challenge of maintaining academic integrity in a world where developing an answer may mean simply “goggling” a question rather than solving the problem individually. Dean Marsh remarked that the question of integrity was one reason for Princeton’s conservative approach to any accreditation tied to MOOCs and Coursera in particular. Princeton is the only institution of over 60 participating that does not offer a statement of “completion.”

One council member asked if by putting courses online Princeton is changing the culture of the classroom. The overwhelming view on the part of faculty is that the experience is enhancing the classroom, leading to more engaged students.

The President thanked the participants and the meeting was adjourned at 6:00 p.m.

Respectfully submitted,

Ann Halliday
Secretary