Report of the
Provost's Committees on On-Line Learning

Over the past two years, the world of higher education has been disrupted by innovations in on-line education. Two years ago, even technologically savvy academics would have greeted acronyms like "MOOC" and companies with names like Coursera and EdX with a shrug. Today, Massively Open On-Line Courses (MOOCs) attract hundreds of thousands of students, and Coursera and EdX are in vigorous competition with each other to complete negotiations with universities to offer courses on their on-line platforms.

In September 2012, the Provost appointed two committees to advise the faculty and administration in devising a strategy in the area of on-line education—one focusing on courses for credit and the other on courses offered without credit. Each committee is composed of administrators and faculty (membership is listed at the end of this document). Due to the unavoidable overlap in the charge and work between the two committees, this report combines the recommendations from both committees -- for courses offered for credit and those not for credit. Some recommendations are pertinent to both while some are unique from each committee. Communication between the two committees was affected by an overlap of Ms. Jelinkova and Dr. Weiss who were members of both committees.

The committees formed subcommittees to examine a set of discrete issues including infrastructure needs, accreditation matters, and faculty sentiment. A canvass of for credit on-line efforts by peer schools was completed. A survey of the faculty was conducted.[1] Several members of both committees also met with representatives from EdX, Coursera, and 2U to learn more about their activities and plans for the future.

This report sets forth our recommendations for the University of Chicago in the short-run (i.e., two years) in connection with the following potential situations: (1) faculty of the University of Chicago who wish to offer classes either partially or entirely in an on-line format to students enrolled at the University of Chicago; (2) students who matriculate at the University of Chicago who wish to transfer credits toward a Chicago degree that include credits from on-line courses; (3) students who are not matriculated at the University of Chicago who take on-line courses offered by

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[1] In autumn 2012, tenure track faculty were invited to comment on their opinion regarding an online initiative via a brief online survey
http://www.surveymonkey.com/s.aspx?PREVIEW_MODE=DO_NOT_USE_THIS_LINK_FOR_COLLECTION&sm=fH%2bISWsol75kDzkBQeE28soEi4%2fAreYKtWm3shpYa0M%3d. The survey was designed to capture broad opinions on a diverse set of issues related to online education. A total of 22 percent of the faculty surveyed (n=364) completed the questionnaire.

University of Chicago faculty and seek Chicago credit and (4) faculty who wish to offer courses without credit to students both at the University of Chicago and elsewhere.

The members of both committees unanimously agree that the University of Chicago should facilitate the use of on-line technologies by faculty who wish to use them to teach their courses. Although we recommend that faculty be given the option of experimenting with on-line pedagogy as well as the support to create appropriate courses, we also strongly reaffirm our belief that one of the most important attributes that makes a University of Chicago learning experience valuable is the distinctive level of engagement that occurs throughout the campus —engagement between students and professors, and among our students themselves. Preserving, nurturing, and enhancing this engagement is of paramount importance. Thus the committees' recommendations to expand the use of on-line teaching for credit is accompanied by a requirement that all courses offered to undergraduates, graduate, and professional students include a component of meaningful interaction between the students and the faculty. If our recommendations are adopted by the Provost, we do not expect that students will be able to obtain University of Chicago degrees entirely with on-line courses. Because the future is difficult to predict, we recommend that the Provost appoint a second faculty committee to evaluate the University's experience with on-line education after two years have elapsed and that that committee make further recommendations for adjusting University practices with respect to on-line education.

Faculty Views Regarding On-Line Education

The overwhelming majority of Chicago faculty responding to our survey (85.1%) had no previous experience, here or elsewhere, in creating content for online courses. Please refer to Appendix I for a complete analysis of the survey results. Indeed, given the strong commitment of the University of Chicago faculty to rigorous teaching and student engagement and their limited first-hand experience with on-line education, it is not surprising that many faculty members (including members of our committees) initially respond to the idea of on-line education with skepticism. According to the results of our survey of the faculty, while over 70.4% of the faculty members responding to our survey felt that the University should offer on-line educational resources to enrolled students, this level of approval fell to just over one-half (53.1%) with respect to whether credit should be granted for on-line courses. One-third (35.3%) of the faculty said credit should not be offered to enrolled students for online courses and 11.6% had no opinion. Support for granting credit to University of Chicago students taking on-line courses at other universities plummeted to 22.9% with 58.9% in opposition. With respect to the question of whether students at other universities should be able to obtain credit for University of Chicago on-line courses, the faculty was split fairly evenly (38.7% in favor; 40.9% opposed).

The Potential Benefits of Offering Credit-Bearing On-Line Courses

It should be emphasized that the survey results set forth above do not assume any level of familiarity among faculty respondents with on-line courses. As our committee engaged faculty in individualized conversations and as we ourselves learned more about on-line education, we came to increasingly positive views about its potential as a pedagogical tool. While some commentators and schools (particularly large public universities under financial pressure from budget cuts) have speculated that on-line education could reduce the cost of education and enable more students to take large survey courses, we do not view this objective as one that is relevant for the University of Chicago. Indeed, it is very possible that developing quality on-line educational offerings could entail significant financial costs attributable to faculty compensation, infrastructure, and production costs.

Instead, our focus was on the potential educational benefits of on-line courses. One benefit, of course, is that on-line education reduces the need for physical proximity. Students who cannot be on the Chicago campus, perhaps because they are doing a semester abroad program or because their field work takes them elsewhere, could continue progress toward their degrees by remotely taking courses. Similarly, faculty whose teaching and research involves place-specific resources such as archaeology or art history could offer classes from those sites. Another possible use of on-line courses is as a screen for doctoral programs. Departments could enroll masters students in on-line courses and assess their progress. Those who perform extremely well could be offered scarce slots in PhD programs.

Perhaps the greatest pedagogical benefit of on-line courses is the flexibility they offer professors to "flip" their classrooms. For many large courses, live lectures utilize the majority of a professor's face-to-face interaction time with students. On-line classes can provide the lecture material to be covered at home by the student and allow class-time to be devoted to questions, discussions, and small group interactions. With the advent of new technologies to track student progress through pop-up queries and on-line quizzes, faculty members could also determine which topics require extra time, thus directly in-class time more effectively.

Research on the efficacy of on-line education is at an embryonic stage. Indeed, the great variety of on-line courses makes systematic and generalizable research difficult.[2] In their meta-analysis of existing research, Bowen and Lack (2012, 9) conclude that "a holistic look at the literature assembled provides little, if any, evidence to suggest that online or hybrid learning, on average, is more or less effective than face-to-face learning."

The most rigorous study completed thus far examined the performance of 605 students at six public universities (Bowen et al 2012). The students were randomly assigned to a traditional

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[2] For a detailed discussion of different models of on-line education and open courseware, see Walsh (2011).

statistics class or a hybrid on-line class created by researchers at Carnegie Mellon University. The class was characterized as hybrid because it included one hour of face-to-face instruction per week. After controlling for individual demographic, racial, and educational characteristics, the authors concluded that "[w]e find no statistically significant differences in learning outcomes between students in the traditional- and hybrid-format sections."[3]

The Potential Disadvantages of Offering Credit-Bearing On-Line Courses

The Committee considered the potential costs of the utilization of on-line courses at the University of Chicago. The most important cost, by far, is the potential reduction or loss of teacher-student and student-student engagement as discussed in the introduction to this report. We believe that we reflect the faculty in our commitment to the virtues of a rigorous education that involves extensive interaction between students and faculty members as well as among the students themselves. If the utilization of digital technologies were to result in students engaging less in debate and discussion with professors and other students, we, as an institution, would have lost something essential to our fabric.

Other costs would include the financial cost of creating quality on-line offerings.[4] One cost, of course, is the investment in technology required to produce the classes. But, quality on-line education entails more than merely videotaping existing lectures and placing them on a server. In many instances, it will require entirely re-thinking how courses are taught, thus requiring staff qualified to assist in course design. Blended (flipped) classrooms, interactive modules, and pop-up tutoring all require investments of time and money.

A final potential cost is reputational. On-line courses, particularly courses that are available beyond the confines of the campus, can be a wonderful way to showcase the university and its extraordinary faculty to the outside world. However, if the courses are not well-conceived, produced, or taught, they could have the opposite effect and harm the University's efforts to attract top quality students.

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[3] Bowen et al. at 18. According to the authors, the students taking the hybrid course performed somewhat better on three outcomes—pass rates, standardized tests of statistics, and final exam scores—but these differences were not statistically significant. Id. At 18-19.
[4] These considerations as well as the considerations in the next paragraph concerning reputational issues are equally relevant for not-for-credit classes.

<u>The Potential Advantages and Disadvantages of MOOCs (non-credit</u>)

As many of our peers embark on MOOCs, an assessment needs to be made of whether or not the University of Chicago should offer them and, if yes, under what circumstances. The most compelling argument for offering MOOCs is the concern of being left behind and ceding our voice in a discussion about the future of higher education. Without having some level of experience in MOOCs and online learning, the University and its faculty will not have a position from which to discuss pros and cons and inform policy discussions. The other compelling argument is so-called "brand awareness." MOOCs have become powerful marketing tools that showcase institutions and give potential students, their parents, and faculty a "taste" of being at the University of Chicago. There are other learning management systems such as Blackboard.

However, just as with any other disruptive technology, the University of Chicago needs to consider the amplifier effect of anything that is online. Courses of lower quality than what our peers offer could damage our institutional reputation. As more courses become available online, a perception could develop that online experience can substitute for in-person experience and potential students may work with providers such as Udacity to assemble their own "best-of" playlists, choosing faculty across institutions, taking their online MOOCs, and being granted a certificate or a degree that in time could be seen by employers as a substitute for a university degree. Finally, the strongest argument against MOOCs is the potential damage and devaluing of the University of Chicago residential education. This can happen by poorly chosen or lower quality courses, ceding university rights to content and its brand, and being misrepresented by third parties that deliver content. The challenge for the University of Chicago will be to experiment with a small number of not-for-credit MOOCs so that the University will be able to carefully monitor outcomes and prevent misuse.

<u>Recommendations of Both Committees</u>

As stated at the outset, many of us began as skeptics of on-line education. Over a four-month period, we have come to the conclusion that the University of Chicago should approach on-line education as an experiment in pedagogy. We approached this task by viewing online education as yet another medium with which to educate others in the University of Chicago tradition and that the University's current policies on assessment, evaluation, and acceptance be employed as much as possible. We recommend the following:

1. **The University should <u>facilitate</u> the use of on-line methods of teaching for credit-bearing and non-credit-bearing courses by University of Chicago faculty and <u>promote</u> experimentation.**

The University might accomplish this in several ways. First, it should invest appropriate funding in obtaining the appropriate technology to make possible high-quality on-line productions of classes. In addition, it should hire sufficient technical and instructional design staff to operate the equipment and to advise faculty on how to convert their classes into compelling and effective on-line formats. The Provost might consider removing barriers to experimentation by offering departments funds for course releases for faculty who wish to create on-line classes. In lieu of course releases, the Provost might consider competitive awards for on-line course creation. The University will need to provide adequate resources and technology support to allow and encourage this. The University's current structures and policies for other intellectual property should guide key principles, such as control and ownership of each course, business models, and faculty obligations. However the University should review and, if necessary, modify or supplement such structures and policies to ensure they adequately address the unique issues and questions that arise from delivering course content on-line.

2. **The Provost should appoint a committee in two years to review experience with on-line education and make recommendations if necessary to change practices.**

   Perhaps the only certainty about on-line education is that it is impossible today to predict the development of this form of pedagogy, the market, and the University's experience and involvment. We hope that the Provost will constantly monitor progress in this area and we recommend that he appoint a committee in two years to assess whether our recommendations (if implemented) have proved to be too limiting or too permissive.

3. **The University should try to work with both Coursera and EdX (and other suitable platforms) in connection with its initial on-line course offerings.**

   Each of these entities provides a platform for on-line content. As of the date of this report, Coursera and EdX primarily host MOOCs and do not charge students for access. EdX, however, requires universities to make investments when they join. At present, neither Coursera nor EdX provide credit for courses taken although Coursera and the American Council on Education (ACE) recently announced a pilot project to certify certain courses as credit-worthy. Neither Coursera nor EdX has announced a business model that would be self-sustaining although possibilities include charging for testing, certification of completion, or sharing of student credentials with potential employers. The primary benefit for the University of Chicago of associating with either Coursera or EdX would be to gain visibility for future on-line offerings and possible assistance in the creation of content. A third entity, 2U, operates on a different business model, and would provide the University with a way to monetize its investments in on-line education. 2U has created a consortium of universities which will offer courses for credit on its platform. In addition to sharing the income from the courses with universities in the consortium, 2U makes investments in on-line course production. Thus, 2U offers the University of Chicago an avenue to obtain resources for the development of new courses and a possible flow of revenue.

These platforms are not mutually exclusive and using both vendors would provide an opportunity to experiment and learn from the University's various on-line learning efforts. The University should also refrain from entering into arrangements that would prevent it from engaging additional providers or developing its own platform. Given the unpredictable landscape and the likelihood of significant change in this arena over the coming months, this approach will help ensure the long-term sustainability of the University's online offerings. One could also consider other platforms such as Everspring, E-Learning Solutions, Socratic Arts, and Embanet Compass. Note that all these platforms range from non-for-profit to for-profit.

4. **In order to organize and promote Chicago's involvement in on-line learning, there must be central support and organization in the Provost's office as well as support at the Divisional/School level in which interested faculty reside.**

The Provost's office should coordinate structures, best practices, and a pool of resources to enable faculty to engage in teaching on-line courses. Having the overarching strategy coordinated in the Provost's office would (i) enable more efficient coordination of technology resources and support, (ii) allow faculty access to resources and support for designing on-line courses regardless of the applicable department's or Division's/School's orientation toward technology use, and (iii) signal the University's commitment to this endeavor. To the extent possible existing support structures should be leveraged and their coordination should be improved.

<u>Recommendations of the Committee on For-Credit On-Line Offerings</u>

1. **With respect to undergraduate, graduate, or professional students enrolled at the University of Chicago, the University should permit faculty to offer fully-on line courses or partially on-line courses ("blended" or "flipped classrooms") as long as the courses provide for "meaningful interaction" between the students and their faculty.**

   a. Meaningful interaction might include in-person meetings with students or on-line chats with question and answer sessions. Normally, the "meaningful interaction" requirement would not be met if the interaction is exclusively with teaching assistants. Whether a given faculty member is providing meaningful interaction should be decided by the norms of his or her department and not be governed by a one-size-fits-all set of University regulations.

   b. A faculty member may use on-line resources created or produced by third parties (e.g., MOOCs) in their teaching of his or her classes, however nothing in this report should be taken to imply a recommendation by this committee that the

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current rules governing who may teach our students should be changed. All faculty members who teach our students need to be appointed as faculty by the University. All current rules governing residency, hours taught per course, etc. must apply also to on-line education.

    c. In general, on-line courses should be subject to the norms of the departments in which they are offered with respect to such elements as quality and evaluation. While the medium may be different from the traditional in-person model, the quality of learning we expect to be conveyed remains the same.

2. **With respect to students matriculated at the University of Chicago (or who are applying to matriculate at the University) who take or have taken on-line courses not taught by Chicago faculty, the normal rules and practices governing transfer credit should apply.**

It is our understanding that requests to grant transfer credit are approved after rigorous inquiry which we would want extended to on-line courses as well.

3. **With respect to students who are not full-time matriculants at the University of Chicago but who want to receive credit for on-line courses taught by University faculty, the University should follow the model of the Graduate Student At Large Program unless it negotiates a more advantageous arrangement with a third party platform.**

For persons wishing to take courses in the graduate and professional units at the University, admission is through the Graham School's Graduate Student At Large Program. Students are permitted to take classes for credit (but not for a Chicago degree) upon applying for admission and meeting the requirements of the department or school in which the class is offered. We anticipate that the University would adopt a similar model for students seeking credit although whether this would be under the auspices of the Graham School would need to be worked out among the various units and the Provost's office.

<div align="center">Recommendations from the Committee on Not for Credit On-Line Offerings</div>

1. **We recommend thinking broadly about the use of on-line learning experiences to engage alumni, current students, and students and faculty from other institutions.**

The creation of on-line course material, such as lectures, allows for significant secondary use of these materials for other purposes. For instance, subject to faculty approval, the University could combine multiple lectures (from both credit- and non-credit-bearing courses) into a single on-line forum for a particular subject. We support encouraging faculty to think creatively and broadly about the use of these materials to engage alumni, as well as students and faculty from across the country and around the world.

2. **We believe that there will be some instances when it is appropriate to provide a certificate upon the successful completion of selected on-line courses.**

   The requirements for and criteria by which the University would award a certificate need further discussion and vetting by the faculty in the relevant academic units and the Provost's Office. The University may wish to develop a set of minimum requirements that apply for all certificated on-line courses to ensure a level of quality and consistency across schools and units. In addition, certificate-bearing courses would need an ongoing review process to ensure the continued quality and relevance of the material and adherence to certificate criteria. Finally, the University would need to ensure that the relevant platform that provided the certificates (if it is not the University itself) would monitor security and verify student identities to prove participation and performance assessment.

3. **The University should create faculty and administrative structures to conduct a periodic review of student and faculty experiences with the University's on-line courses.**

   Defining and assessing the success of these efforts is critical. Both Coursera and EdX offer metrics for gauging the quality of the experiences from both the learner's and teacher's perspectives. These include evaluations at the end of the course, as well as enrollment statistics. The University should also set goals and develop metrics about what defines successful use of non-credit or certificate bearing online learning experiences at the University level. For instance, what level of use of online platforms is expected? To what extent is the online format used across different Divisions and Departments? The faculty/administrative oversight bodies should define success at the University level and metrics to capture them as the University becomes more familiar with this form of education.

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References

William G. Bowen, Matthew M. Chingos, Kelly A. Lack and Thomas I. Nygren. 2012. "Interactive Learning Online at Public Universities: Evidence from Randomized Trials." http://www.sr.ithaka.org/research-publications/interactive-learning-online-public-universities-evidence-randomized-trials

William G. Bowen and Kelly A. Lack. 2012. "Current Status of Research on Online Learning in Postsecondary Education." http://www.sr.ithaka.org/research-publications/current-status-research-online-learning-postsecondary-education

Walsh, Taylor and William G. Bowen. 2011. Unlocking the Gates: How and Why Leading Universities Are Opening Up Access to Their Courses. Princeton: Princeton University Press.

Appendix[5]:
Analysis of Faculty On-Line Education Survey

In autumn 2012, tenure-track faculty were invited to comment on this initiative via a brief online survey. The survey was designed to capture broad opinions on a diverse set of issues related to online education. It is important to note that faculty participating in the survey did not benefit from the additional information that was made assessable to the committee members over the past four months. Below are the descriptive statistics for each survey item. Where they exist, interesting divisional differences are highlighted. A total of 22 percent of the faculty surveyed (n=364) completed the questionnaire and sometimes very small cell sizes are involved when examining divisional differences; no statistical significance testing was performed and no conclusions about divisional differences should be drawn from the trends discussed.

The first survey question asked faculty to identify the division in which they have their primary appointment. Almost half the respondents (45 percent) are from the biological sciences. Among the other academic divisions, approximately 12 percent of each faculty responded (humanities 14 percent; social sciences 12 percent; and physical sciences 11 percent). Booth and Law faculty responded at comparable rates (4.5 and 4 percent respectively), as did faculty from the Divinity School and the School of Social Service Administration (2 percent each). Faculty from the Harris School and the Institute for Molecular Engineering are also represented.

To put the response rates in a more meaningful perspective, the proportion within each division or school represented in the survey data is presented next. The Law School and the Divinity School are the best represented in the survey (43 and 35 percent, respectively). Approximately 25 percent of the faculty from three academic divisions replied (humanities and physical sciences, 27 percent each; social sciences, 26 percent). Similarly, 23 percent of SSA faculty, 20 percent of the Harris faculty and 19 percent of the biological sciences faculty are represented. The numbers for IME are too small to be considered (the entire faculty at the time of this survey was three people).

When asked to indicate whether the University should offer online educational resources for enrolled students, alumni, and the public at large, the response was overwhelmingly favorable (70 percent, 80 percent and 63 percent). However, approximately half of the humanists and social scientists responded that they were not inclined to offer online educational material to enrolled students. The next largest cluster was 22 percent of the faculty who indicated the University should not offer online educational resources for enrolled students.

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[5] Prepared by Diana Jerovic, Associate Provost

Seventy percent of the respondents indicated that if made available, the online offerings should contain a combination of free courses and courses for which a price is charged. Furthermore, half of the faculty respondents (53 percent) indicated that UChicago students taking UChicago courses online should receive credit while a third (35 percent) replied that UChicago students should not receive credit for UChicago online courses. Divisional data indicate that the physical and social scientists, humanists and divinity school scholars were not in favor of offering credit to enrolled UChicago students talking a UChicago online course. Conversely, the biological scientists and Booth faculty were very supportive of the notion. Sixty percent of the respondents indicated that UChicago students taking online courses elsewhere should not receive credit. Finally, faculty respondents were of a divided opinion regarding students from other universities receiving credit for UChicago online offerings (39 percent indicated credit should be given, 41 percent said no credit should be offered).

With regard to non-degree certificates, half of the faculty respondents indicated that UChicago students should be awarded some sort of recognition for their work, while one-third of the faculty responded indicated UChicago students should not receive a non-degree certificate. Almost half of the faculty respondents (45 percent) indicated that UChicago students taking online courses elsewhere should receive a non-degree certificate for their work and one-third disagreed. Finally, half of the respondents indicated that students from other universities who complete UChicago online offerings should be considered for a non-degree certificate and 27 percent disagreed.

Eighty five percent of the faculty did not have experience (at UChicago or elsewhere) creating content for online courses. Regardless of their previous experience with online courses, 41 percent of the respondents indicated they would be interested in creating an online course. Those who were not interested cited a lack of time (67 percent) and a primary teaching method that requires students to work at a chalkboard or otherwise interact with faculty and other students in person and in real time (44 percent). Concerns about effective grading (35 percent) and effective interaction (29 percent) were also cited. This survey series offered faculty an opportunity to specify why they might not engage with online teaching. Prevailing explanations included arguments that online education might damage UChicago's reputation for "socratic, unmediated pedagogy" or its "artisanal approach to education (small classes, intense interaction with professors and students)…." Others worried that interaction was essential to some clinical and surgical teaching as well as classes in the humanities, social and physical sciences. Finally, some respondents expressed the role in education for the physicality of the classroom (particularly with bored or struggling students). The concern here as well was that education is more than conveying information and with online courses conveying information is all one can presume to do.

When asked if they would consider collaborating with a colleague on an online course or contributing material to an online course, approximately 75 percent of respondents indicated they would. When asked whether they might consider offering an online course independently, 38

percent said yes. Booth, Law and Harris faculty were the most favorably inclined and also indicated they would be willing to offer an online course independently.

Faculty were asked to rate the mode of presentation and gauge the effort required for each. Presentation of material specially designed for online learning was deemed most effective but also the most effort intensive. Taped lectures were considered the next most effective, and requiring less effort. Taped small group discussions were deemed not effective for online course delivery. Finally, faculty indicated that significant access to personnel with technical audio-visual expertise and access to recording equipment would be essential to any such endeavor. Additional responses indicated that the quality of the material should be sufficiently high. Therefore, having access to materials design experts as well as directorial and postproduction editing expertise was also essential for a significant online presence.

Two thirds (64 percent) of faculty respondents indicated that the University should consider partnering with a company dedicated to online education. Over 70 percent of the respondents indicated the University should select the best organization possible as a partner, though a lack of familiarity with extant companies made recommendations impossible. Over 25 percent of the faculty indicated that partnership should be a non-profit organization. Divisional data indicate that the physical and social scientists and the humanists were more evenly split (50 percent indicate the University should partner with an outside company). Divisional data also indicated that social scientists and divinity school scholars in particular preferred that the University partner with a non-profit organization.

The survey concluded with an opportunity for respondents to provide additional comments; approximately 50 useful responses were collected. These range from a clear aversion to the University even considering online offerings to an urgency that the University engage quickly and fully in this activity and not fall farther behind its peers. Between these extremes were considerations of various elements and their interactions (e.g., materials development and mode of delivery, evaluation and credit, fees versus loss of University revenue and faculty compensation, faculty time devoted to this rather than in person classroom teaching, intellectual property issues, considerations of the University's public and global profile versus a dilution of resources and brand). While there was no consensus across these statements; data indicate faculty are grappling with the personal, professional, and institutional implications of various courses of action. Perhaps the most important message to be received is that continued dialogue with faculty, though always an essential component of any new initiative, will be particularly important on this topic.