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Office of the President

TO MEMBERS OF THE COMMITTEE ON EDUCATIONAL POLICY:

DISCUSSION ITEM

For Meeting of January 16, 2013

ONLINE EDUCATION AT THE UNIVERSITY OF CALIFORNIA

EXECUTIVE SUMMARY

Online education is an idea whose time has come. Yet, perhaps paradoxically, it is an idea that has been part of the University of California for decades through University Extension and more than a decade through UC College Prep (now Scout) and is currently the subject of much debate – and excitement – about its use in undergraduate and graduate degree programs.

In 2011-12, UC campuses offered over 2,500 online courses, most through UC Extension as part of UC's service mission. Three campuses offered online degree programs, all four at the master's level. The ten campuses together offered over 250 online courses for credit in UC undergraduate and graduate degree programs. This report focuses on credit-bearing online courses for UC undergraduates.

Of the approximately 170 undergraduate for-credit online courses, at least 114 are available to enrolled undergraduates during the academic year or summer. The remaining courses are offered through Extension, primarily to non-matriculated students. Of the 27 courses fully approved for the academic year, 11 were developed through UC Online Education (UCOE) work with interested campus faculty and departments. 21 additional UCOE supported courses are in development and 12 of their courses are the only online systemwide courses currently approved to be offered to all UC undergraduates. The Academic Senate has established procedures and criteria at all campuses that consider the unique aspects of online courses, and the Senate's systemwide University Committee on Educational Policy (UCEP) has established guidelines for extending the approval process to make campus-approved courses available systemwide. Early information from the Senate's requested UCOE evaluation are that courses are successful, valued, and "high quality curriculum." Similar evaluations of campus-produced online courses would undoubtedly yield similar results.

Anticipated benefits from for-credit online undergraduate courses include additional opportunities for high-quality instruction throughout the UC system, decreased time-to-degree, increased student success, and decreased costs of instruction. Future directions include streamlining cross-campus and systemwide processes, increasing enrollment in for-credit online undergraduate courses, using innovative learning technology, enrolling non-UC students, and establishing viable long-term financial models and short-term investments.

BACKGROUND

Online courses have been available at UC for years, including thousands offered through UC Extension, and online technology has been a valued part of many UC courses, most extensively in hybrid courses, where instruction occurs in both online and traditional formats. In 2009, when the University of California Office of the President (UCOP) first began exploring a systemwide strategy for online instruction of credit-bearing courses and degree programs, there were relatively few fully online for-credit courses to be found among UC's offerings. Online undergraduate programs were being offered by for-profit institutions, community colleges, or programs designed for specific populations such as military personnel, and a few research universities had instituted online programs, but there was little presence of online courses in the general curriculum at research universities.

In 2010, the Report of the UC Commission on the Future recommended that the University continue exploring online instruction in undergraduate, graduate, and Extension programs. At that time, most of the university's online efforts were focused on Extension certificates and two master's degree programs. One of the key recommendations of the report was to further develop the use of online instruction in undergraduate education and explore its potential to address challenges of demand, cost and access. Later that year, the Regents endorsed a proposal by UC Berkeley Boalt School of Law Dean Christopher Edley for a university-wide undergraduate online instruction pilot project. The Academic Senate also endorsed the pilot project to explore the effectiveness of online courses at UC.

Today, the field has changed. Elite universities are increasingly participating in the development of online programs and are predicted by *Forbes Magazine* to be the leading drivers of growth in online education in 2013. For its part, UC, both at the campus level and systemwide, is utilizing online education through a variety of models to serve a range of objectives and students from California high schools through UC graduate and professional degree programs. The University has also established a systemwide program, UC Online Education (UCOE), to address a specific demand for high-enrollment lower division, UC credit-bearing courses that can ultimately be offered across the system.

Online Education at Comparable Institutions of Higher Education

The number of universities offering online degree programs has expanded significantly and grown to include an increasing number of offerings from top-tier institutions (see Table 1 below), including UC. Online education service providers are also teaming up with universities to develop online programs. The University of Texas Online Consortium acts as a systemwide catalogue of online courses and degree programs produced at the individual UT campuses. UT online courses are only available to students enrolled at one of the UT campuses or in its online degree programs. Similar to the UT Online Consortium, UC is proposing the development of a systemwide catalogue of not only online courses but also all courses available to students from campuses other than the one that originated the course.

Carnegie Mellon University's Online Learning Initiative develops courses for CMU students and also offers their courses at no cost to the public. The courses are built in a proprietary learning system that incorporates a high degree of learning analytics from which instructors can monitor student progress through the material to be learned. The CMU program does not offer online degrees.

UC is developing a mechanism that will easily allow UC students to take courses at campuses other than the one in which they matriculated. This cross-campus enrollment process will allow UC students to take full advantage of one of the key benefits of online courses – the opportunity to learn from experts outside their own campus. Similarly, Semester Online, a consortium of ten universities, including Duke, Brandeis, Notre Dame, and Northwestern, was recently formed to offer online courses to students across the participating institutions while also enabling open enrollment to the public. There are no degree programs in their catalogue.

Most other programs, such as UMassOnline, Arizona State Online, and Penn State World Campus, do not offer individual courses; instead, they enroll students into fully online degree programs.

Table 1. Comparison of Online Programs at Other Research Universities

Institution	Program	Degree Program	Individual Courses	Open Access
U Texas	Online Consortium	X	X	
Carnegie Mellon	Online Learning Initiative		X	X
U Massachusetts	UMassOnline	X		
Arizona State	ASU Online	X		
Penn State	World Campus	X		
Harvard, MIT	edX		X	X
Duke, Brandeis, Notre Dame, Northwestern	Semester Online		X	X

Most recently, elite institutions such as Stanford, Harvard, MIT, and Berkeley have begun experimenting with massive open online courses (MOOCs), which provide non-credit-bearing courses free of charge to all who enroll. Harvard, MIT, and Berkeley are partnering on edX to offer MOOCs. Two companies have emerged from Stanford's forays into MOOCs: Udacity and Coursera. The University of Washington is partnering with Coursera to offer 19 courses and plans to explore awarding credit for MOOCs, although that will be done by adding layers of instruction and assessment that will make the courses and their cost more similar to conventional online courses and credit will be available only to UW students. The American Council on Education has launched an evaluation of MOOCs and will also be assessing their potential to be offered for American Council on Education (ACE) college credit.

MOOCS and other innovative learning technologies are providing a variety of alternatives for online and more generally for technology-assisted education. Among UC and its peer institutions there is much enthusiasm for the opportunities and possible benefits, little certainty about the best path forward, and considerable concern about the actual costs and possible cost savings of any such venture. (For example, see Bowen and Twigg in Further Reading.)

CURRENT STATUS OF ONLINE INSTRUCTION AT UC

Courses Offered

In 2011-12, altogether UC campuses offered over 2,500 online courses, enrolling more than 90,000 students. UC Extensions offered the largest number of online courses and accounted for the vast majority of the students and so directly contributed to fulfilling UC's public service mission. Three UC campuses currently offer online degree programs, all at the master's level: Masters in Advanced Study of Integrated Circuits at UC Berkeley, Masters in Criminology, Law and Society at UC Irvine, Masters in Engineering at UCLA, and Masters in Public Health at UC Berkeley. In addition, Scout University of California (formerly UC College Prep) has a collection of three dozen online college preparatory, advanced placement, honors, and credit recovery courses that are targeted for students in underperforming California high schools, are approved for high school credit, and include a wide variety of multi-media, sophisticated learning tools, activities, and assessments. Also, the Senate's Board of Admissions and Relations with Schools (BOARS) committee plays a key role in establishing the policy for use of online courses to satisfy a-g requirements, and in May, 2012 approved revisions to the policy that determines the criteria and process by which online courses may be used to satisfy the "a-g" subject requirements.

University of California campuses are now exploring opportunities through which the MOOC model can benefit the University and serve its students. Three campuses – Berkeley (edX), Irvine (Coursera), and San Francisco (Coursera) – have partnerships with MOOCs and others are considering the option. Faculty on these campuses and others have offered ten MOOCs thus far with Coursera, edX, and Udacity.

This report focuses on undergraduate online courses for credit, because they offer potential benefits, as yet not fully realized, for the University and, in particular, for UC students. A course was considered online if all learning activities were carried out online, with the possible exception of the midterm or final examination. The multitude of outstanding UC hybrid courses that include both online and face-to-face learning opportunities and the online courses and degree programs for UC graduate students are not discussed.

Table 2 summarizes the number of credit-bearing online undergraduate courses offered by the nine general campuses according to the circumstances under which each course was developed and/or is offered. All courses are approved for regular UC credit and have been developed with faculty on a UC campus, 13 with support from UCOE. The Academic Year courses (created on each campus with and without engagement from UCOE) are Senate-approved, offered by departments, and can be offered during the academic year and the summer. Summer courses are

offered by departments. On some campuses, a course that is first approved for summer is also automatically approved for the regular academic year, while at other campuses the course may need additional review before being offered in the academic year. Extension X courses are most often taught by instructors Extension hires and offered primarily to non-UC students; departments may prefer that matriculated students complete the course in person with an instructor the department has chosen. Lower division gateway courses are defined here as the lower division, undergraduate major requirement courses which often have high enrollments or are over-enrolled. Restricted availability to enroll in these courses may slow a student's progress at the University. Many lower division pre-requisite courses (e.g., Introduction to Psychology, General Chemistry, or Calculus 1) are considered gateway courses.

It is safe to say that currently at least 114 for-credit online courses are available to UC undergraduates during the academic year or the summer. Twelve UCOE courses (not all of which have yet been offered) are currently approved for credit systemwide. Most of the remaining finished and in-development UCOE courses are expected to become available systemwide as well. Courses the campuses developed on their own could also seek systemwide approval, thereby greatly enriching the for-credit online courses available to UC undergraduates everywhere.

Table 2. Online Courses Offered for Credit at UC through Fall 2012

Type of Undergraduate Course	Extension X*	Academic Year Campus	Academic Year UCOE	Summer	Total
General	54				54
Upper Division		7	1	40	48
Lower Division Non-Gateway		6	7	31	44
Lower Division Gateway		3	3	16	22
TOTAL	54	16	11	87	168

* Extension courses that carry UC credits equivalent to campus courses – designated as XB, XD, XI, XM, XL, XSD, XSF, XSB, or XSC depending on the campus.

Other Achievements Associated with For-Credit Online Course Offerings

UC faculty who are part of the Academic Senate on each campus are responsible for the review and approval of all for-credit courses and degree programs. They also conduct periodic reviews of all degree programs. In the last few years, the Academic Senate has established procedures and criteria at every campus for the approval of online courses; the criteria often include online-specific topics beyond those used for face-to-face courses. At the systemwide level, the Senate's UCEP has established guidelines for extending the campus approval process to make courses available systemwide. This process can be applied to any course and is not specific to online courses. It has already been used by the UC in DC program to get systemwide approval for some of its courses. This process endorses the course as being appropriate for enrollment by UC

students systemwide, and in the case of UCOE online courses also makes the courses available for enrollment by non-matriculated students.

The UCOP Provost's office is spearheading two efforts to work out the financial and administrative arrangements needed to make cross-campus online course enrollment viable, efficient, and fair. The work addresses the needs of UCOE, which has led some of the effort, other online courses developed by each campus, and programs such as UC Education Abroad and UC Sacramento that enroll students from multiple campuses in face-to-face or hybrid courses held in off-campus locations. These latter programs have established models for sharing student-related revenues and expenses between the home campus and the campus/program in which the student is temporarily engaged. It is likely the model can be extended to systemwide online courses and be replicated in the future as appropriate. To handle efficiently the record keeping functions of each campus, UCOE has proposed a data hub that would act as a translator and communication system among the different registration/enrollment systems present across UC and between the campuses and various systemwide programs. There is widespread recognition of the benefits such a system will provide for many different endeavors. Funding is currently being sought.

The Academic Senate is slated to consider an inter-UC articulation process patterned after the system already in place for course articulation between UC campuses and the California Community Colleges. Such a system would leave approval of courses in the hands of the home campus faculty for major or GE requirements when students take them from other UC campuses and would generate a searchable database of pre-approved courses linked to major or GE requirements so that the current staff- and time-intensive approval process could be replaced with a more efficient system. This process could apply to any systemwide course, including campus-developed online courses and offerings from systemwide programs.

Finally, the infrastructure and processes needed to recruit, enroll, and support eligible non-UC students in for-credit UC courses have been developed by UCOE in partnership with Blackboard Services. The system is supported by UC Merced to provide enrollment and support services. Winter/spring 2013 will be the first major test of the marketability of approved systemwide courses to non-UC students. The infrastructure and processes developed for non-UC students provide the foundation for the systems and services needed to support UC student enrollment across campuses; e.g., the systemwide catalogue, cross-campus data transfers, and support services.

Structures for Creating and Using For-Credit Online Courses

Each UC campus has had for some time equipment, facilities, and staff to support various uses of technology in instruction. They are often housed in different types of administrative units and in more than one unit on each campus. The Extension programs are the one place across the campuses where online courses have been offered for some time. On several campuses, Extension has also been instrumental in the development of for-credit online courses that are offered in summer or, for a few, during the academic year.

On every campus there is new recognition of the opportunities today's technology offers and a desire to examine how best to take advantage of them in the instructional programs for enrolled UC students, including especially use of hybrid courses, online courses, and MOOCs. Most campuses have created special committees and/or programs to develop goals and plans; several have been testing new approaches. For example, UC Santa Barbara has evaluated some pilot online classes to inform the course approval process and strategies for future developments, and UC Davis has established specific funding opportunities to help support faculty in developing hybrid and online courses. UC Berkeley, as a third example, has established the Berkeley Resource Center for Online Education, co-directed by a ladder faculty member and the Extension dean, with a strong steering committee of administrators, deans, and Senate faculty. In July 2012 Berkeley formally partnered with edX, which was founded by Harvard and MIT, and the campus has been actively engaged in establishing policies, principles, practices and more for its development and use of MOOCs and for research about them. It has also been explicit that online education is "not one thing." It is a public good (edX), individual credit courses (summer, Extension, and UCOE), certificate programs (Extension), and degree programs fully or partially online (two Master's so far). All indications are that by the end of the 2012-13 academic year most campuses will have developed a strategic vision and plan for enhanced uses of technology for instruction, including the place of for-credit online courses and degree programs and engagement with MOOCs.

The systemwide structure, UC Online Education (UCOE), was launched January 2012, following a two-year Online Instruction Pilot Project. For simplicity both the Pilot Project and UCOE will be referred to as UCOE. UCOE has created a core development program that has both informed and assisted independent campus efforts that have occurred in parallel. It has also led the way in working through the policies and processes needed to obtain Senate approval for campus and systemwide online courses and in creating mechanisms that will permit campus record systems to communicate with each other when students are taking for-credit courses on a campus other than their own or in a systemwide program.

All UCOE online courses are developed by interested campus faculty and departments. Courses are approved on that campus and first offered there. Following the original vision, courses are intended to be high-quality, high-touch, and high-enrollment, and to address multiple campus needs, especially for gateway courses. As part of the development process, UCOE provides funding to participating faculty in the form of summer salary, course buyout, or support for graduate student assistance, and each course is assigned an instructional designer to help identify appropriate online methods and work with faculty to create the course. UCOE has a team of instructional designers and also collaborates with campus instructional designers. In some cases UCOE has provided financial support for local design staff helping with a campus UCOE course and has contributed to the costs of developing production facilities. The cooperation and communication across campuses have helped advance online course development systemwide and at campuses by identifying innovative learning technologies and design methods, and by providing an avenue for sharing information and identifying good practices.

Since it launched, UCOE has collaborated with campus faculty and departments to develop and offer 13 online courses; twelve are now approved for use systemwide. A few courses have been offered multiple times. UCOE-supported courses have enrolled over 1700 students in both the

regular and summer terms. There are an additional 21 courses under development that the home campuses will offer during 2013. The Educational Evaluation Center at UC Santa Barbara is conducting a course and program evaluation as part of the pilot project. The mid-project report released in December 2012 offered the following key findings:

- Students, faculty and staff felt generally positive about the potential for the online project despite some early technical and administrative problems that have since been addressed.
- More than 70 percent of students reported they would recommend the online course they took to other students and, if given the opportunity, would enroll in another online course at UC.
- Eighty-four percent of students agreed that their courses had a "high quality curriculum."
- Specific analyses for each course provided information useful to instructors and instructional designers for use in redesign geared toward making courses more effective.

BENEFITS OF ONLINE EDUCATION

Credit-bearing online undergraduate courses have the potential to be a game-changer for UC. Today's and tomorrow's technological capabilities provide a great many options for creating very high-quality, engaging, academically rich online courses and making them available to students on all UC campuses. Greater availability of gateway courses and flexibility as to when they are taken can decrease time-to-degree. The costs of an undergraduate education would be reduced for students and their families, and the greater throughput would allow UC to educate more undergraduates over a given time period. It is also possible that online courses can decrease, or slow increases in, the university's instructional costs, while sustaining UC's high curricular standards. Instructional quality is central to any serious effort to offer online courses to UC students. These courses must be as effective and meaningful as the best of the other courses offered for UC credit.

Quality and Richness of Instruction for UC Students

Course quality is determined not by delivery systems but by instructional methods and their suitability for the affordances and constraints each delivery system offers, and for the goals of the instruction. That said, when developed with an eye toward high student-content, student-student, and student-instructor interaction and dynamic presentation of material, online courses have the opportunity to go beyond cost savings and flexibility to present whole new possibilities for how students learn. Outstanding lectures by leading experts can be available to all students. Shared writing, video analysis, asynchronous dialogue and debate, multi-player gaming, elaborate simulations, and much more can become an everyday part of instruction. Some of these online tools are quite useful to undergraduates in their daily lives but not until now in UC instruction.

Cross-campus enrollment, where a student at one UC campus enrolls in a course at another UC campus, is a real benefit of online education. Students are able to take advantage of academic expertise or unique course offerings from across the system, greatly increasing the richness of their UC education. For some niche courses, local student enrollment alone may not support the

course, but combined online enrollments across UC would enable the offering. As departments increasingly have to make decisions about what electives they can continue to offer in the face of reduced funding, online courses make it possible for under-resourced departments to expand their student's curricular options by taking advantage of an online course offered by another campus.

Time-to-Degree and Student Success

UC has excellent undergraduate graduation rates, with four- and six-year rates for those entering as freshmen on average higher than our AAU public counterparts and six-year rates only slightly behind AAU private institutions. The two- and four-year rates for those entering as transfers are also excellent. Nonetheless, there is room for improvement, given that UC undergraduate degree programs are intended to take four years for those entering as freshmen and two years for those entering as transfers. The 2011 UCOP accountability report data on time-to-degree showed that 40 percent of freshmen students who entered UC in fall 2006 took more than four years to graduate and 50 percent of transfer students who entered fall 2008 took more than two years to graduate. Clearly there is room to decrease time-to-degree further than UC has already achieved.

Freshmen who graduate within four years and transfers who graduate within two year share some qualities – they are better prepared, transfer more units to UC, and take more units per term than other students. Online for-credit UC courses can contribute in all these areas. For matriculated students, the flexibility of scheduling and location can make it easier to take more units and increased access to gateway courses can make it easier to progress smoothly in completing degree requirements. For high school and community college students, online UC-credit courses can help better prepare them for the rigors of a UC education. Because these courses would also carry UC credit, these students can enter UC with transferrable credit.

There are two benefits of decreasing time-to-degree. The cost-savings potential for students is clear – by being able to take more units per term or take courses when needed and/or by being better prepared to succeed in UC courses, students are more likely to graduate in less time. Finishing even one quarter early would mean a savings today of approximately $10,000 in tuition, fees, and living expenses for a student and his/her family, and the opportunity costs of attending college rather than being employed full-time are reduced as well. In addition, the greater throughput in the undergraduate student body would enable the university to educate more undergraduates in a given unit of time.

Costs of Instruction

The potential costs and possible cost savings of online instruction, particularly of high-quality for-credit online instruction at elite, largely residential institutions of higher education, have been vigorously debated recently. Particularly given UC's goals for online courses and programs and the current status of potential revenue streams, caution must be exercised in anticipating cost savings and/or revenue generation. Nonetheless, some suggestions will be offered, if tentatively.

The increased enrollment capacity possible with online for-credit courses could result in a cost-savings to campus departments. An on-ground course that enrolls 100 students may require an instructor and two teaching assistants (TAs). To teach 500 students, the department would have to offer and cover the instructional costs of offering the course five times. An online course could enroll 500 students in one offering; it may still require the same number of TAs, ten in this example, but it will save the department in instructor expenses and time. Instructors can be deployed to teach other undergraduate courses or focus somewhat more on activities such as research, graduate teaching and mentoring, and service.

Online courses also allow the university to enroll students without the proportional need for new capital projects. It would cost the University approximately $1.8 billion to build the brick and mortar infrastructure needed to serve 11,000 new full-time equivalent students. The online infrastructure required to support the same number of students would cost approximately $20 million, a savings of over $1.7 billion. Because online courses will not require classroom space, greater adoption of online instruction can alleviate some classroom scheduling constraints and some need for new instructional space.

By offering select online courses to students outside the University and charging for them, UC can generate revenue. At the same time, the university broadens and potentially reaches students who are not able to take courses on a campus (e.g., individuals who are employed full-time, have family obligations, or intend to enter a four-year institution).

FUTURE DIRECTIONS

In the last two years UC has made substantial progress in developing its for-credit online education infrastructure. Systemwide efforts and facilitation of some campus work have largely been led by UCOE. At the same time, campus consideration of the place of technology-assisted, hybrid, and online instruction in its for-credit courses and degree programs has become lively. Most campuses have recently completed or are in the process of developing clear plans as to how to proceed. By the end of the spring 2013 semester/quarter, there should be much greater clarity as to the directions they will be taking. At present, some directions seem certain and others, possible.

Streamlining Cross-Campus and Systemwide Processes

As described earlier, efforts are underway to facilitate a more streamlined process for enrollment across campuses than is currently available. The data transfer hub project is ambitious and will take two to three years to develop. It will be vigorously pursued. In the meantime, an intermediate process that would enable some level of cross-campus enrollment as early as fall 2013 is in active development. Included in the proposals for the cross-campus enrollment project is the development of a UC-wide catalog of courses, one that would list courses (online or otherwise) open to students across campuses and those open to non-UC students. Such a systemwide catalog would alleviate the problem of trying to list courses from multiple campuses within a given campus's registration format and would become a one-stop location for students seeking information about systemwide courses.

Increasing Enrollment in For-Credit Online Undergraduate Courses

There are some immediate ways the number of online courses and online course offerings available to undergraduate students might be increased thereby increasing the number of student enrollments. One involves maximizing the use of current for-credit online courses and, where appropriate, offering them multiple times per year. There are currently online courses that have been offered only during summer sessions. If they have been approved only for summer, the Senate might consider whether approving them for regular terms as well would be appropriate, and departments should evaluate whether some or all of those courses might be offered during regular terms and as systemwide courses. Similarly, some of the Extension XB, XD, etc. online courses might be considered for approval as courses to be offered during regular terms and systemwide if the course is appropriate and is not currently offered online to UC students.

All campuses are in some way working to develop new courses and their development is based on local campus needs and available resources. Plus, as mentioned earlier, UCOE currently has an additional 21 courses under development on the campuses. Additionally, UCOE has leads for eight to ten more courses from various campus faculty and intends to engage them as soon as UCOE staff can take on new courses. UCOE will continue to focus on courses that would be of benefit systemwide, while campuses would likely focus on courses with primary benefit to their campus, though many of those courses would also be useful systemwide. UCOE can also provide additional resources for course development on a recharge basis for campuses with a desire to develop local online courses but without adequate resources to meet the full development effort they desire.

Using Innovative Learning Technology

UC will undoubtedly continue to identify how it can leverage current and evolving trends in innovative learning technology to benefit UC students and faculty. One aspect of this might be to encourage UC faculty to develop MOOCs with the various for-profit or non-profit groups while simultaneously working to develop ways to provide UC credit for MOOC students either currently at UC or with intentions to enroll at UC. This might be accomplished by developing specific exams for current or future students to take that would certify a competency appropriate for UC credit or by adding additional learning activities and instructor involvement that rounds out the MOOC experience in ways that make the totality eligible for UC course credit. Also, UCOE will seek to collaborate with campuses and faculty to create incubator site(s) facilitating pilot tests of innovative learning ideas that need testing and evaluation.

Enrolling Non-UC Students

Efforts will continue to explore the feasibility of enrolling non-UC students as a means both to provide additional access to UC and also to provide additional funding to the University. Placement of UC online courses in the expanding online market has become more challenging, and careful attention needs to be paid to establishing the feasibility of this part of UC's plan for UCOE. Whatever UCOE learns is likely to be a good guide for campuses that may also want to consider this possibility. When the UCOE pilot project began about two years ago, MOOCs were

not a concept with any recognition in the online scene, yet now they are garnering headlines in ways online offerings have never achieved before. New startups and companies that have been around for a number of years have gained increasing prominence in the online higher education landscape as well. One consequence of the rapidly changing online perspective in higher education is that the role for UCOE (and campuses) as a provider of for-credit, for-fee courses to non-matriculated students is currently overshadowed by excitement about the MOOCs which have been developed with the expressed intention of providing high-quality, college-level learning experiences to everyone everywhere free of charge.

Establishing Viable Long-Term Financial Models and Short-Term Investments

All campus budgets include funds for instructional costs other than those associated with instructors and teaching assistants. These costs typically include classrooms and their accouterments, equipment, some production capabilities, and some staff. With the continuing decreases in funding, campuses are stretched already to provide what has customarily been provided. Sophisticated uses of technology and the development of hybrid and online courses are beyond customary and daunting to consider at this time. Nonetheless, campuses are beginning to consider them and recognize the likely need to make special short-term investments and to establish long-term models that make these newer instructional forms useful, of high quality, and financially viable and sustainable.

UCOE has had a similar need and began addressing it at the time the Pilot Project began. The basic funding model established at that time will be undergoing a review to evaluate its efficacy in the current online environment. When the original marketing study was done 16 months ago, there were relatively favorable indications of interest in enrolling in UC for-credit, for-fee online courses within California, and many of the online options available now were not in place or even envisioned. For a number of reasons, development of online courses in UCOE is approximately six months behind the original schedule, but the number of course offerings that could enroll non-matriculated students for 2013-14 exceeds the original budget planning assumptions. However, projections as to the market for these courses may turn out to have been overly optimistic.

Although enrolling non-UC students can still be an important revenue source for online efforts at UC, care must also be taken to ensure that the non-UC student efforts do not adversely affect developments beneficial to UC students and do not divert resources that could better be applied to the benefit of UC students. By the end of spring 2013, UCOE will have a better understanding of the potential that exists for enrolling non-UC students and should also have in place a more diverse funding model that draws on a variety of options for revenue to support long-term operations. The model, and its development, will be shared with others.

RESOURCE NEEDS

The University of California leadership recognizes the enormous potential of online education to expand student learning, increase capacity, reduce cost, and even generate new revenue streams. How UC can incorporate this evolving means of learning into the delivery of a world-class

education is an as yet unresolved challenge. It is, however, something the University of California remains committed to exploring and to taking the time to do it right.

Most campuses expect that by July 2013 they will have in place a vision and set of goals for the use of current and evolving technology in their instructional programs, especially for undergraduates. UCOE has made substantial progress in the last 18 months and is poised both to continue development of new courses with campus partner faculty and departments and to explore additional ways to leverage its developed capabilities to benefit other UC schools or programs. It too expects by July 2013 to have a vision and set of goals, drawing on the original plans and what two years of experience have so far indicated about them.

It is clear now that both the campuses and UCOE would benefit from an infusion of funding on a temporary basis to facilitate continued development. The cross-campus hub needs to be developed, and there is currently no budgeted fund source. Additional instructional designers for UCOE and instructional designers at the campuses would greatly increase the rate of creation of new online courses, the improvement of existing online courses, and the movement of courses to approval for both academic-year and summer offering and then to systemwide approval. Current estimates are that an instructional designer can develop three to four courses per year, provide a major update for three to four courses already offered per year, and provide a minor update to several courses per year. Several campuses, if not all, and to a lesser extent UCOE would also benefit from additional equipment and facilities for the production of online, hybrid, and technology-assisted courses and from a fund for the short-term contracting out of particular development tasks. UC will continue to elaborate on resource needs as campus plans and systemwide goals become clearer.

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