UNIVERSITY OF CALIFORNIA ACADEMIC SENATE UNIVERSITY COMMITTEE ON INFORMATION TECHNOLOGY AND TELECOMMUNICATIONS POLICY (ITTP)

Approved Meeting Minutes – January 28, 2005

I. Chair's Announcements and Updates

• Alfonso Cardenas, ITTP Chair

ITTP Chair Alfonso Cardenas welcomed the committee and reviewed the order of the agenda for the meeting. The committee was informed of a proposed amendment to Senate Bylaw 128 that is currently under Systemwide Academic Senate review (http://www.universityofcalifornia.edu/senate/underreview/bylaw.128.i.pdf). This bylaw revision would

establish rules for the appointment of members to subcommittees of standing committees of the Systemwide Academic Senate.

ACTION: A teleconference meeting of the ITTP committee will be scheduled for early March.

II. Consent Calendar – Approval of Minutes

ACTION: The minutes of the ITTP meeting of November 12, 2004 were approved with minor revisions.

III. Proposal for UC-wide IT Policy Board

• Alfonso Cardenas, ITTP Chair

REPORT: In December Chair Alfonso Cardenas participated in a retreat of the Information Technology Leadership Council (ITLC). The primary recommendation coming forth from this retreat was the need for a Universitywide Technology Planning Board that would coordinate, in an integrated way, the long-range vision and action for information technology in the University. The planning board would represent the various factions of the University and have representatives from the CIOs, VCRs, Deans, faculty (ITTP and other Senate committees), and students. It is the intention that this committee would have authority to implement actions and not just serve in an advisory capacity.

DISCUSSION: ITTP Members were supportive of the proposed Technology Planning Board as long as it had authority and was not just another IT-related advisory body. Committee members also noted that the board would need a budget or at least have influence over budgets for activating programs and that the reporting structure and other details would need to be formalized prior to its creation.

IV. Anti-Cheating Software

• Andrew Kahng, ITTP Vice Chair

REPORT: Vice Chair Andrew Kahng reported on the findings of Professor Stefan Savage, who has been examining the topic of anti-cheating software for the UCSD Senate Committee on Academic Information Technology (CAIT). Cheating is becoming more pervasive and results in large amounts of time and effort expended for plagiarism detection and prosecution. It may be timely and cost-effective for the University to support default automation of cheating detection.

The best known anti-cheating software for computer programming assignments is MOSS (Measure of Software Similarity), which was developed by Associate Professor Alex Aiken at UC Berkeley (<u>http://www.cs.berkeley.edu/~moss/general/moss.html</u>). MOSS is offered as a free service and works by comparing program structure across a body of assignments and flagging those that are atypically similar. One paper, "Experience Using 'MOSS' to Detect Cheating on Programming Assignments," describes the experience of two faculty members at the University of South Florida who used MOSS to detect plagiarism in their courses: <u>http://www.cse.nd.edu/~kwb/nsf-ufe/1110.pdf</u>.

For prose, a commercial anti-cheating service is provided by <u>http://www.turnitin.com</u>. Turnitin.com maintains a very large historical body of resources that is collected by online crawlers from paper mills, news sources, and other online resources. Secure databases are also maintained on behalf of individual colleges and universities. Turnitin.com is in use at a number of UC campuses and integrates with course management programs such as WebCT and Blackboard. A survey, conducted by Claremont McKenna College, of faculty and student reaction to the use of prose-based anti-plagiarism software is available at: http://writing.claremontmckenna.edu/Examining%20Anti.htm.

DISCUSSION: Members noted several issues with instituting a systemwide strategy for anti-cheating software:

- Potential costs of a federated model.
- Privacy concerns associated with using a federated or centralized database of course assignments, including compliance with the Family Educational Rights Privacy Act (FERPA).
- Anti-cheating software can only be used on electronic documents. Some faculty will be resistant to receiving assignments electronically or having to scan the paper documents into an electronic text format.
- Part of the problem is that some students do not know what plagiarism is. The University needs to be more proactive in teaching students about ethics and what constitutes plagiarism.

ACTION: Vice Chair Andrew Kahng and ITTP Members Curt Burgess and Ethan Miller will work to identify anti-plagiarism software recommendations.

ACTION: Analyst Kimberly Peterson will work with Chair Alfonso Cardenas and Vice Chair Andrew Kahng to draft a letter from ITTP encouraging the development of a proactive Universitywide approach to combat plagiarism.

V. Guest Consultation – Interinstitutional Courses

• Professor Yale Braunstein (UCB)

Professor Yale Braunstein was invited to discuss his experiences teaching an interinstitutional course this Fall. This course, "Realizing Digital Convergence," was offered at both the UC Berkeley School of Information Management & Systems (SIMS) and the Center for Digital Technology and Management (CDTM), an interdisciplinary institution of the Ludwig Maximilians University Munich and the Technical University Munich. Prof. Braunstein presented the committee with an overview of the "Realizing Digital Convergence" course and the technology used in the development and teaching of the course. The course was designed to draw on the interests and expertise of SIMS and CDTM and to expand areas of cooperation between the two institutions. Interactive digital technologies were used in the development of the course, the delivery of the course, and student project development. The technologies used in this course were either "freely" available software, already existing resources, or purchased through a \$1000 campus minigrant.

Overall, both the course and the technology worked quite well. Prof. Braunstein noted the following benefits/success as well as issues/problems with the course:

Benefits/Successes

- Students exposed to faculty and content that otherwise would never have been available
- Sharing of guest lecturers a major success for all parties
- International cooperation/teamwork for course project also a major accomplishment

Issues/Problems

- Without a trained camera operator, it is difficult to track an "animated" lecturer
- Could do more to encourage questions and interaction
- Initial voice problems
- Privacy and security issues still need work
- Switching directions with RealVNC involved some effort and delay
- Needed a technical person at each end at all times

DISCUSSION: ITTP members asked Prof. Braunstein a number of questions about his experience teaching an interinstitutional course:

Q – How well did interaction between the remote faculty/lecturers and students work? A – This is an area in need of improvement. The lecturers had to learn to ask for questions from students from the remote side, and to ask the questions the camera and microphones had to be reversed. A technical person was required at each site at all times because it is not seamless to reverse the directions of the sender and receiver, and reversing directions often caused crashes.

Q – What is it that the students are actually getting by working with and learning from someone from a distance? What pedagogical benefits did they receive that they couldn't have obtained otherwise? A – The Berkeley students were exposed to new course content and lecturers, as well as different perspectives on policy and solutions. For their project work, the students received firsthand experience working together in remote teams, which is an environment they will likely experience in their future employment.

Q - Did you have to diminish your objectives in any way due to the constraints of technology? A - Any problems were overcome sufficiently so that they didn't interfere with the objectives of the course.

VI. Consultation with the Office of the President – Information Resources and Communications (IR&C)

- Kristine Hafner, Associate Vice President
- David Walker, Director of Advanced Technologies
- Jacqueline Craig, Director of Policy

REPORT: Associate Vice President Kristine Hafner and her staff reported to the committee on the following items:

IT Policy Board

At The Regents meeting last week, President Bob Dynes announced the formation of a Long-range Guidance Team for the University. This group will consist of several regents, chancellors and high-level administrators and will be charged with anticipating future directional changes and developing and implementing long-range strategies for the University. Associate Vice President Kristine Hafner intends to recommend that the proposed IT Policy Board will be created as a standing subcommittee of this new University guidance body.

DISCUSSION: The committee expressed support for this recommendation. The members concurred that creating the IT Policy Board as a subcommittee of the University's Long-range Guidance Team might ensure that it will have the authority to implement IT changes systemwide. Several members also suggested that the name of the IT Policy Board should be rethought – a "policy" board seems only advisory in nature, however a "governance" or "guidance" board might seem to have more authority.

Strategic Sourcing

The Regents Finance Committee has been working on establishing targets for savings in various areas of the University, including IT software and hardware infrastructure. UC's Information Technology Licensing Procurement Program is responding by focusing on central procurement of IT, finding critical business partnerships, and assessing the communications and telecommunications costs of the University in order to identify additional opportunities for savings.

DISCUSSION: Members discussed the possibility of the University implementing a standardized managed desktop strategy to generate greater IT-related savings. It was suggested that faculty and staff could be offered a new desktop computer every three years, and if they chose not to accept the new hardware, they would not receive IT technical support. Exceptions to this rule would be allowed for those users with specialized needs; however, the exceptions would have to be allowed in such a way that doesn't encourage exceptions (e.g., IT support is free if the faculty member accepts the new standardized desktop, but support would not' be fully subsidized by the University if the faculty member receives an exception).

Members also made other suggestions for UC's IT strategic sourcing efforts:

- The IT-users should be involved in the decisions to select software and hardware vendors.
- The business/administrative functions of the University are likely to be the areas where the greatest IT-related standardization and savings can be achieved.
- Ensuring that the University community's IT resources are secure would likely reduce drains on ITsupport and other costs. Providing all faculty and staff with an up-to-date IT environment or making a suite of security software easily downloadable would be ways of ensuring greater IT security.

ACTION: Associate Vice President Kristine Hafner will update the committee on the development of IR&C's strategy to implement savings through strategic sourcing efforts.

Federated Identity Management

Director David Walker updated the committee on University's federated identity management project called UCTrust. This project will create an infrastructure to support a common strategy for user authentication for network-based applications and services that are used widely by the UC community. A workgroup has been in the process of drafting the policies, responsibilities, and minimum requirements for campus participation in UCTrust. The major focus of this policy development has been to establish layers of trust amongst the eventual participants in the federated identity management system.

ACTION: Members David Messerschmitt and Ethan Miller will serve as ITTP's lead reviewers for the Federated Identity Management project.

Policy Updates

Electronic Information Security Policy (IS-3) – Director Jacqueline Craig informed the ITTP of the revisions to the IS-3 policy update that have been made in response to members' feedback:

- Added specific requirement that each campus establish a security program (campus policy, procedures and recommended practices) and that these security programs will undergo periodic evaluation
- Modified the language to emphasize the need for risk assessments to identify resources that require protection
- Added recommendations for the protection of decryption keys and clarified the campuses' responsibility for encryption key management plans
- Added requirement that third-party agreements include language regarding compliance with University security policy
- Added requirement for departmental security awareness training

Director Craig indicated that the IS-3 policy updates were a short-term measure to bring the policy into compliance with law (e.g., the new HIPAA requirements) and that the University will begin a full review of the policy once this initial change has been made. It is anticipated that encryption will be a big component of the full review. IR&C is planning discussions on each campus for input and to develop a policy framework that more adequately addresses the issues that have been raised about the IS-3 policy.

Electronic Communications Policy (ECP): The update of the ECP will be sent out officially for systemwide review next week. Comments on this policy revision will be due by April 30, 2005.

ACTION: Director Jacqueline Craig will be invited to participate in ITTP's teleconference discussion of the Electronic Communications Policy (ECP) update.

Legal2Share RFP

The committee was provided with a copy of the January 10, 2005 press release announcing the UC/CSU joint solicitation for proposals from vendors offering online music and movie services.

VII. Universitywide Courses and IT Infrastructure Support

- Alfonso Cardenas, ITTP Chair
- David Messerschmitt, ITTP Member
- Joseph Kiskis, UCEP Chair (via teleconference)

REPORT: ITTP Chair Alfonso Cardenas provided the committee members with a copy of the June 30, 2004 letter from Academic Council Chair Lawrence Pitts to Provost M.R.C. Greenwood that relays the concerns of the University Committee on Educational Policy (UCEP) about barriers to implementation of Senate Regulation 544. SR 544 permits students resident on one UC campus to enroll concurrently in and receive credit for a course offered at another UC campus. UCEP Chair Joseph Kiskis informed the committee of the recent revisions to SR 544 to allow for the designation of "University Courses" (see http://www.universityofcalifornia.edu/senate/reports/sr544.pdf). UCEP Chair Kiskis indicated that SR 544 allows for students to receive credit for a course offered at another UC campus, not a minor or major. Establishing a minor would first require approval at the departmental/campus level before even being considered as a systemwide minor.

Member David Messerschmitt provided the committee with further information on his proposal to establish a Universitywide minor in IT Fluency. The goal of IT Fluency is to teach students how to apply IT to their specific major discipline. The proposal, if implemented, would offer approximately ten different courses and would establish a minor on every campus in IT Fluency. Creating a Universitywide minor such as this would set an example and produce the necessary infrastructure for other intercampus courses.

DISCUSSION: The committee agreed that the proposal would need to be further developed in the following areas:

- Provide historical background and the rationale for establishing a systemwide minor.
- Outline resource and support needs both systemwide and for each campus.
- Develop the specifics of the curriculum and course content.
- Detail how an IT Fluency minor will be incorporated with existing courses.
- Address the issue how funds to campuses are allocated (traditionally each campus receives money based on number of students they teach).

ACTION: UCEP Chair Joseph Kiskis will seek feedback from his committee on the idea of permitting establishing UC wide minors at their March 7th committee meeting. In parallel, ITTP Members David Messerschmitt and Lisa Naugle will develop materials for consideration of the IT Fluency minor draft proposal for the ITTP teleconference meeting. ITTP Chair Alfonso Cardenas will consult with Academic Council Chair George Blumenthal about the proposal for UC wide minors, and a possible proposal for an IT Fluency minor.

VIII. Legislative Activities – NCES Proposal for Collecting Student Unit Record Data

• Alfonso Cardenas, ITTP Chair

REPORT: As part of the reauthorization of the federal Higher Education Act, the National Center for Education Statistics (NCES) is proposing an expanded effort to collect information on students nationally in order to provide accountability information on colleges and universities. The Academic Senate, as part of its new legislative function, was asked for its input on whether UC should support, oppose, or take a neutral stance on this proposed legislation. In response, Academic Council Chair George Blumenthal specifically sought the opinions of the chairs of several systemwide senate committees including ITTP.

ITTP Chair Alfonso Cardenas informed the committee members of the comments he provided for the Senate's response to this proposal. Of primary concern was that this proposal includes collection of personal information, but there is no indication in the proposal that assures the security and privacy of this personal information.

DISCUSSION: Members found the proposal to be concerning, especially because it is unclear why NCES requires such a high degree of personal information. Part of NCES's rationale for developing this database is because Congress wants greater accountability from higher education institutions; however, as is noted in footnote 2 of the briefing document provided for the University's discussion of this proposal:

The discussions and debates around the No Child Left Behind Act set the context for extending the accountability framework to higher education. However, when Congress passed the No Child Left Behind Act, it specifically prohibited a national database to track K-12 students. By requiring NCES to create a national database to track students in higher education, the NCES proposal would do the higher education community what Congress specifically would not do to the K-12 system. See *The Campus Privacy Letter*, vol.1, no. 1, Dec. 2004, p.3; http://www.clhe.org/campusprivacy/cplv1n1.pdf.

ACTION: ITTP members will forward any further comments on the NCES proposal to ITTP Chair Alfonso Cardenas. The University's response to this proposal will be discussed at the March ITTP teleconference meeting.

IX. Instructional Technology Reports and Updates

• Caroline Bledsoe and Curt Burgess, ITTP Members

REPORT: Member Caroline Bledsoe provided the committee with a report on her attendance at the December 2004 "Sakai Project" Conference on Course Management Systems. There are currently 56 institutional members of the Sakai Educational Partnership Program, including four UC campuses. Member Bledsoe indicated that amongst this group of educational partners there is great interest in how Sakai-developed tools could help facilitate student learning. The focus of the project has evolved from an emphasis on the mechanics of delivery (course management tools) to an emphasis on the principles of learning and assessment of learning (collaborative learning environment). Tools developed by the Sakai Project are already in use at the University of Michigan and will soon be implemented and deployed at Indiana University.

DISCUSSION: The committee discussed the potential positives and negatives of the Sakai Project approach to software development:

Negatives:

- The Sakai Project tools, though open source, are not exactly free. The deployment costs of implementing new software usually costs more than the acquisition price of the software. Also, institutions are expending resources by investing in the development of the software.
- It is not clear what the future of this project will be. The Sakai Project could end up becoming a corporation and institutions will end up having to purchase site licenses to use the developed products.

Positives:

- The end user organizations are working together to define a new way to use technology that serves their specific needs.
- The development of these interoperable tools may enhance cross-campus sharing and collaborations.

REPORT: Members Caroline Bledsoe and Curt Burgess related the difficulties in gathering information across the UC system on instructional technology.

DISCUSSION: The members questioned how the ITTP committee could best become involved in the instructional technology efforts of the University. Members concurred that the committee should consult with the UC administration about how the ITTP committee could best assist and provide guidance for UC's instructional technology efforts. It was suggested that the University's instructional technology efforts might receive more funding and attention if they were placed in a broader context (e.g., forming collaborations with K-12 or the community colleges).

ACTION: Vice Provost Julius Zelmanowitz and Director Julie Gordon will be invited to the April ITTP meeting to discuss the Sakai Project and the University's instructional technology efforts. ITTP Members will send Analyst Kimberly Peterson names of other potential guests from 2-3 campuses leading efforts on instructional technology for this discussion and to highlight their campus efforts and views regarding UC wide efforts needed. Members Caroline Bledsoe and Curt Burgess will draft a list of questions for these guests.

X. Conducting Senate E-business

• David Messerschmitt

REPORT: The Berkeley Senate Divisional Council requested that the Committee on Computing and Communications (COMP) investigate the technological and security issues associated with the division

using online mechanisms for senate discussions and voting. COMP in response created a memo delineating a standard level for security for such a system. Now the division is examining how to go about implementing a system. One possibility would be to take an existing system and adapt it to the Berkeley Senate's needs. For example, the UCD Senate is implementing an adapted form of the UCSB senate application, which is built on ColdFusion. The Systemwide Senate also has been developing a new e-business application that is built on PHP.

DISCUSSION: Members questioned why the UC senates are developing two separate solutions for electronic business purposes. Analyst Kimberly Peterson informed the committee that the Systemwide Senate had investigated the possibility of adopting the UCSB senate application, but were unable to do so because of ColdFusion-related issues. Analyst Peterson was not aware of the specifics of these issues. The committee members agreed that it would be ideal to pursue a common, yet adaptable, system that will serve the e-business needs of the both systemwide senate and each divisional senate. A common senate e-business application would allow for articulation and interoperability, and possibly a federated authentication system.

ACTION: ITTP Chair Alfonso Cardenas will consult with Academic Council Chair George Blumenthal about the plans for the systemwide senate's e-business system and the issues associated with adopting a common system across the senates.

XI. Senate Source Article

• Analyst Kimberly Peterson

The editors of *The Senate Source* have requested that ITTP consider writing an article of interest to the UC faculty.

DISCUSSION: Members suggested potential topics for ITTP's article:

- Sakai Project information about the project and UC's involvement in the Educational Partners Program
- Security education and sensitization of faculty about electronic data security issues, faculty responsibilities and tools they can use to comply with the IS-3 policy requirements.
- Strategic Sourcing
- Federated login pilot project

ACTION: Chair Alfonso Cardenas and Member David Messerschmitt will work with Analyst Kimberly Peterson to write an article for *The Senate Source* on ITTP's work.

Meeting adjourned 3:30 p.m. Attest: Alfonso Cardenas Minutes drafted by Kimberly Peterson Committee Analyst