UNIVERSITY OF CALIFORNIA ACADEMIC SENATE UNIVERSITY COMMITTEE ON COMPUTING AND COMMUNICATIONS

Minutes of Meeting July 1, 2010

Attending: Anthony Joseph, Chair (UCB), Joel Primack, Vice Chair (UCSC), Felix Wu (UCD) (telephone), Brett Stalbaum (UCSD), Ida Sim (UCSF), Henry Powell (Academic Senate Chair), Martha Winnacker (Academic Senate Executive Director), David Ernst (Information Resources and Communication Associate Vice President), Ramon Lim (Information Resources and Communication Director of Strategic IT Projects) Brenda Abrams (Policy Analyst)

I. Chair's Announcements

Chair Joseph announced that his tenure as chair is ending and Vice Chair Primack will become the new UCCC chair.

II. Consent Calendar

Action: The minutes were approved.

III. Consultation with the Academic Senate Office

• Harry Powell, Chair, Academic Senate

During the Commission on the Future meeting in June some of the recommendations from the work groups were discussed, as well as recommendations from...The Senate had reviewed the first set of recommendations and provided comments. The goal was to identify a couple of ideas everyone supported that could be forwarded to the Regents. A major focus will be on facilitating transfers into UC. Eighty percent of the students are able to successfully transfer into UC and a higher number also successfully transfer into the CSUs. However, these students do not have the information they need to select an appropriate major and there are limited numbers of advisors available to help students. The lack of counseling makes it harder for students to get the information they need to transfer. The state is not providing UC with sufficient funding to support transfer students. More students eligible for UC are enrolling now than in previous years. There is a commitment to upgrade ASSIST to make it more user friendly but this will require money from the three segments. Chair Powell is not aware of any formal peer counseling programs to provide help with the transfer process.

Chair Powell reported that the governor's budget includes more than \$300 million that would restore funds that were lost this year. There will be additional funds to support undergraduate education. If this budget is passed, it will prevent furloughs next year but there will be significant hurdles before the budget is approved. The proposed budget positions UC against other significant constituencies. Tax increases would be needed.

Chair Powell provided an update on post-employment benefits. There has been a 20 year holiday from contributions into UCRP and last April a small contribution started. The contribution could eventually amount to 20%. A different retirement plan for new employees will be proposed. Employees may contribute between five and eight percent a month. Faculty are protective of the benefits that allow them to retire when ready. Funding post-employee benefits will increase the difficulties already faced by the campuses.

Discussion: A member asked about IGETC. Disciplines where curriculum changes rapidly and community colleges may need assistance in order to understand the changes. UC could provide leadership and guidance about the state of these disciplines. UC has formal meetings with the leadership of the senates from the community colleges and CSUs in the Intersegmental Committee of Academic Senates. ICAS discusses issues like IGETC and pathways that facilitate transfers but has not focused on the changing nature of certain disciplines. ASSIST could be used to capture the information about the differences across the campuses and departments. Chair Powell commented that this issue should be discussed especially since UC is in the process of downsizing. Departments across campuses could be asked to align their hiring so that similar departments at different campuses could provide common offerings. New ideas and new ways of doing business need to be integrated.

Chair Powell agreed with the statement that postponing actions to address the post-employment benefits makes the problem worse. A member pointed out that UC faculty salaries continue to lag behind the comparison eight private and public institutions, and with a change in the benefits package UC will be unable to recruit the best faculty. Chair Powell indicated that UC would be forced to recruit fewer faculty. UCCC members were encouraged to contact state legislators to advocate for funding for UC. At present eight percent of the state budget goes public higher education whereas eleven percent goes to the prison system. The legislators need to be educated about the importance of access to UC and public awareness of UC's contributions needs to be increased. A public relations firm will be working with the senate to develop ideas about how to lobby the legislators.

IV. Fair Use of Published Articles for Teaching

This item was not discussed.

V. Open Source Software

Chair Joseph remarked that there are compatibility issues with Open Office and Word.

Discussion: A member commented that significant savings resulting from the use of open source software might be found if staff are required to use it. However, some open source software does not provide the features that staff need. Site licenses are not very expensive considering how many people will use the software. Google applications make it easy to set up forms for things like surveys. UCCC could recommend that the costs are quantified by comparing a site license cost with the transition and training costs. Members questioned whether it would be better for UCOP to negotiate the site licenses. The functionality needs for different user types need to be considered. Students are increasingly using Google Docs because of the ability to collaborate with others. Campus IT departments could be polled to determine if site license purchasing is centralized. Another approach would be for individual faculty to purchase a license.

VI. Electronic Civil Disobedience

The UCSD representative, Professor Stalbaum, provided the background about and a timeline of events related to the electronic civil disobedience issue at UCSD. There are two investigations occurring at the campus. The practice of electronic civil disobedience began in the 1990s as part of the activism of Professor Ricardo Dominguez, Professor Stalbaum and others on behalf of the Zapatistas. A technique called a virtual sit-in was developed by Professors Stalbaum and Dominguez which direct web traffic to a particular server. The protestors are informed and aware. It fits under a general category of illegal activity called denial of service attacks. A denial

of service attack is where someone co-opts a large number of computers and without the users' knowledge, directs a large amount of traffic at some service elsewhere on the internet to disable it or make it inaccessible to the public. This idea was adapted to civil disobedience. However the civil disobedience model allows people to knowingly and consciously use their computers in a coordinated performance of protest against the server. This work became well known in two fields, the internet security field and the art world. Essays about virtual sit-ins from prominent cyber security experts were shared with the committee.

In 2005 Professor Dominguez was hired at UCSD due to the prominence of his practice as an artist. In 2008 a virtual sit in was held and Professor Dominguez hosted the software for this on the server in his office at CalIt2. This protest was directed to UCOP's main web server. In March 2009 Professor Dominguez was promoted to tenure by the associate vice chancellor for academic affairs. The file letter explains the importance of Professor Dominguez' work in electronic civil disobedience, both in practice and in the theorization of it, and the importance of this work in the art world. Professor Dominguez writings on the theory of electronic civil disobedience were published in PLMA, the main journal of the Modern Language Association.

Since 2007 the Professors Stalbaum and Dominguez have been working on the Transborder Immigrant Tool. This is closely related to research Professor Stalbaum has been involved with related to GPS, small mobile platforms, and other things that had to do with geographic location in the arts. Inspired by a group of water station activists, they had the idea to install a user interface into inexpensive mobile phones that have GPS that would give anyone, including immigrants, lost or crossing the desert the ability to navigate to a water safety site, or turn themselves into the border patrol. The professors thought this would be provocative in the art world, but did not imagine this would be as controversial as it became. In November and December, it was taken up by the media in the context of professors at UC providing people with the ability to navigate long distances and avoid the border patrol, which is not what the software was designed to do. The software presents poetry that provides practical information about the desert environment. Beginning in late December, the professors started receiving death threats, and people contacted the department chair and President Yudof's office expressing concerns about the use of taxpayer money. An audit investigation of the project was conducted by the UCSD Office of Audit Management to examine the project and the spending associated with it.

On the day of action in March 4, 2010, a virtual sit-in was directed at a server at UCOP from Professor Dominguez' server at CalIt2. The associate vice chancellor who promoted the professor received an email threatening criminal prosecution for the same activities for which Professor Dominguez was promoted, signifying a change in the AVC's attitude toward electronic civil disobedience. On March 25th the Office of Audit Management launched a second investigation of the March 4th protest and the professor's tenure is now threatened and there is a threat of criminal prosecution. There is circumstantial evidence that the UC policy on electronic communications policy is being applied arbitrarily and capriciously. After the public reaction to the Transborder Immigrant project there was a change in the AVC's and UCOP's actions in response to electronic civil disobedience activity. The administration has been silent on this issue. Fortune five hundred companies in Europe have ignored acts of electronic civil disobedience for many years and any complaints lodged were by government bureaucracies.

Discussion: Chair Joseph pointed out that the Transborder Immigrant project and the electronic civil disobedience should be considered separately. The Transborder Immigrant project is an academic freedom issue and the project is like other examples of research that may not be liked

by others at a campus such as tobacco research or taking money from BP for bio energy research. The electronic civil disobedience activities used UC resources which is a potential problem, although Professor Stalbaum argued that this is Professor Dominguez' research and is therefore an appropriate use of UC resources. Chair Joseph remarked that the courts have given employers control over how their resources are used and allowed employers to define the misuse of resources. UC have the right to tell faculty how UC resources cannot be used, making it difficult for UCCC to take a position about this. Federal and state laws related to this issue are not clear. The virtual sit-in did not cause damage although it did slow down the server but whether this is considered material damage is not certain.

Chair Joseph suggested that Professor Pam Samuelson at UCB Boalt Law School could consider whether the electronic civil disobedience was a violation of UC policy, and recommend whether UC should be supporting Professor Dominguez' research. A member commented that there might be a role for an institutional review board in approving projects like the two discussed today. In the arts, review of research only happens at the granting and funding phase and there is no separate oversight body like an IRB that looks at the research. There is a question about whether a review by an IRB would protect faculty or if it would be a violation of faculty's academic freedom. The IRB process is in place to protect patient safety but the process is onerous. If an IRB was implemented for arts and humanities what will be reviewed should be carefully defined. Cyber security laws are constantly being reviewed and these have been defined as a result of trials. Lawyers have taken very conservative positions when providing feedback on potential problems. Chair Joseph indicated that this situation appears to be an academic freedom issue. Professor Samuelson could be asked to advise UCCC. UCCC should continue to monitor the electronic communications policy for situations when the policy is being applied inconsistently. The use of UC resources for acts of electronic civil disobedience should also be discussed.

VII. Member Items

Berkeley: The computing committee is now a subcommittee of the library committee. Baine conducted an efficiency study and recommended centralization of servers in the campus data center. This will be feasible for some departments and not for others. The argument is an economic one, as the costs for heating and cooling are better. Benefits could be found in department services and disaster recovery.

San Diego: A tax on servers located in offices is being considered. One of the challenges is how the funding agencies will react to the tax since overhead to pay for the server is already provided. It would be a challenge to identify how to charge this to a grant. An incentive to use the data center needs to be in place.

VIII. Consultation with the Office of the President

- David Ernst, IR&C Associate Vice President
- Ramon Lim, IR&C Director of Strategic IT Projects

The shared research computing project went live a month ago and IR&C has received early feedback from the PIs. The oversight board includes faculty, technical staff and administrators and it has met a couple of times. The faculty members were appointed by the Academic Council and additional faculty will be appointed in the future. Nine campuses are represented in the project. There are two clusters right now and additional clusters could be added in the future. The project can be scaled up to support additional researchers. There are three hundred users on the

system. One of the twenty-four PIs dropped out in part because of a timing issue and this was the only Humanities project. The PIs have asked for good user support and many received training on how to use the cluster. Goals are to improve research, increase demand for the resources and increase user satisfaction.

A formal way to capture feedback from users such as a survey will be used to identify strengths and weaknesses. Director Lim provided an overview of the business model for the project. A funding model subcommittee has been created to develop a sustainable business model and will develop a five year plan outlining what will be required to make the project economically feasible. The subcommittee will also market the clusters to the UC campuses after the pilot by reaching out to vice chancellors of research. Details about how campuses and UCOP will contribute to the cluster need to be determined. There are 544 nodes and 4352 cores currently in the system.

Discussion: UCCC hopes that IR&C is able to add a new project from the Humanities to the shared research computing project. There should be a strong outreach strategy when the project is opened up to more users to ensure that faculty who do not have access to resources like the cluster are made aware of the project. Government funding sources will be explored and NSF and DOE currently have significant amounts of funding available. At the end of the pilot there should be an assessment of what UC had to spend versus leveraging larger scale efforts to determine if the project is cost effective. A member commented that the business model is probably not viable especially if PIs will be charged to use the clusters. When there is a charge to PIs the question will be how the cluster compares to other resources that have a cost. The survey of users should ask about other resources to which the PIs have access. A complete description of the system was requested by UCCC. Regarding moving racks of servers to a space at UCSD, a survey is being developed to determine the demand for space. This will be a cheaper cost to UC and faculty.

IX. New Business

Committee on Privacy and Security

The Senate is seeking a volunteer from UCCC to participate on new joint Administration-Senate committee on privacy and security which is a subcommittee of the ITLC. The UCD representative volunteered to serve.

Goals for 2010-2011

Members identified the following agenda topics for 2010-2011: survey of campuses to identify risk cost structures for network and strategies for replenishing resources; undergraduate computing resources, and the changing nature of undergraduate labs and how labs are funded; whether there are notebook or laptop requirements; potential use of iPads especially as ebooks are more widely used; the software needed by students for particular applications; and encryption and privacy risk.

Meeting adjourned at: 5 p.m. Minutes prepared by: Brenda Abrams Attest: Anthony Joseph