UNIVERSITY COMMITTEE
ON
ACADEMIC COMPUTING AND COMMUNICATIONS

ANNUAL REPORT 2015-2016

TO THE ASSEMBLY OF THE ACADEMIC SENATE:

The University Committee on Academic Computing and Communications (UCACC) is charged in Senate Bylaw 155 to represent the Senate in all matters involving the uses and impact of computing and communications technology and advise the President concerning the acquisition, usage and support of computing and communications technology and related policy issues. UCACC held three in-person meetings during the 2015-2016 academic year. Highlights of the committee's actions are outlined below.

Cybersecurity

The biggest issue facing UCACC in the 2015-16 academic year was cybersecurity. In February, UC's Vice President and Chief Information Officer, Tom Andriola, and Chief Information Security Officer, David Rusting, joined the UCACC meeting to inform members about UC's response to the June 2015 security breach at UCLA. The response, which began immediately after the breach, included the hiring of a third-party vendor with expertise in dealing with large-scale attacks to assist with consistent and coordinated detection to prevent further attacks. It also included the formation of a systemwide Cyber-Risk Governance Committee (CRGC) with representation from the administration of each division and one Senate member (the UCACC chair). Led by VP Andriola, the CRGC is responsible for monitoring the University's risk profile, overseeing its security strategies, and coordinating cybersecurity efforts across the system. UCACC Chair David Kay and/or Vice Chair Christine Borgman attended the quarterly CRGC meetings in 2015-2016.

In May, in response to a need for more faculty involvement at the highest systemwide level, UCACC sent a plan to Academic Council for additional Senate faculty representation on both the CRGC and its technical Advisory Board. The UCACC plan suggested that three Academic Senate representatives be appointed to CRGC: the chair and vice chair of UCACC (or their designees) and a representative from UCAF or UCFW. The Academic Senate, via the UCOC, will make the appointments in consultation with the chairs of the committees. Three representatives from the Academic Senate will also be appointed to the CRGC Advisory Board, which advises CRGC on technical issues. The plan was endorsed by VP Andriola and subsequently approved by Council on May 25, 2016.

UCACC and the faculty more broadly were primarily concerned that UC's response to the cybersecurity attack was implemented with neither advance consultation nor timely subsequent notice to the Senate of the actions taken. The nature and extent of the monitoring itself were also serious concerns. After receiving detailed explanations from UC's IT leadership about the monitoring activity, UCACC concluded that the actions taken at the time were reasonable under the circumstances, but the lack of consultation with the Senate was a serious failure of shared governance. During the February 1st meeting, the committee drafted a statement of its findings to send to Academic Senate leadership. The statement was included on the UCOP Information Security website at http://security.ucop.edu/. Going forward, the committee feels that it is imperative for UC's leadership, both IT and in general, to institute protocols that inform faculty in a timely way of any significant security breaches and the actions taken in response.

Privacy and Information Security
During the 2015-16 academic year, UCACC began work to promote the full implementation of the 2013 Privacy and Information Security Report, a result of the Privacy and Information Security Initiative (PISI) convened by former UC President Mark Yudof (http://ucop.edu/privacy-initiative/). The PISI process was long, thorough, and deliberative, involving senior members of university administration and of the Academic Senate. PISI membership overlaps with current membership of UCACC and the Cyber Risk Governance Committee. UCACC proposes to build upon the University's investment in that report. All recommendations of the PISI report, save one, were approved by the UC Office of the President under President Yudof, and reaffirmed under the leadership of President Napolitano. UC's Senior Vice President and Chief Compliance and Audit Officer Sheryl Vacca led the implementation of the report, which includes the creation of Chief Privacy Officers (CPOs) and Privacy and Data Protection Boards at the campuses where these positions and boards did not yet exist. The one recommendation that was not initially approved by President Yudof was to form a UC-wide board. However, that recommendation has been implemented, de facto, by convening the ten CPOs under SVP Vacca's office, and by the activities of UCACC. Some other formal steps are required to implement the PISI recommendations by the UC Board of Regents, which UCACC is now pursuing. Rather than revisiting the thorough work of the PISI process, UCACC recommends fuller implementation and fuller engagement of the Academic Senate in current campus boards responsible for privacy matters.

In February, UCACC reviewed an early draft revision of the Electronic Information Security Policy (Business and Finance Bulletin IS-3). The purpose of the policy is to establish guidelines for the appropriate protection of the university's electronic information resources. The draft was deemed not yet ready for UCACC to review; members suggested that be revised by a technical writer before input was sought from legal, risk, ethics and compliance, human resources, and academic domains. Along with a revised draft, the committee requested a one-page explanation of the policy, with a summary and rationale. Committee members cautioned against issuing yet another set of requirements for faculty without resources for compliance or implementation.

UC Online Education and Cross-Campus Enrollment System
At its first meeting in November, the committee received an update on the Innovative Learning Technology Initiative (ITLI). ILTI was designed to help students access high-demand courses and support learning across the system. Currently, at the end of its third year, ILTI has 85 students enrolled cross-campus in undergraduate courses. Student experience data is being collected from students, faculty, and teaching assistants. Faculty have expressed appreciation for feedback about how students learn, but engagement can be a challenge. Campus policies and other factors keep enrollment low.

The Cross Campus Enrollment Website was rolled out on November 4th to provide information to students who want to find out about and enroll in a course at another UC campus. UCACC would like to explore ways to increase significantly the number of students who take advantage of cross-campus enrollment. UCACC can help by advising on learning management systems and encouraging standardization, fostering best practices, emphasizing the educational component, and urging involvement by campus academic senates that might be interested in issues such as time to graduation rate and security. UCACC members asked about data or metrics for assessing online education, whether there are standard variables, and who evaluates the success or failure. The committee will continue to engage the administration on these questions.

Educational Technology Leadership Group and Learning Analytics
In April, UCACC reviewed and discussed a "Learning Data Privacy and Principles" document from the Educational Technology Leadership Group (ETLG). The draft principles, which are based on those in the Privacy and Information Security Initiative, address concerns about learning tools and platforms, particularly from third-party vendors. UCACC members appreciated the intention behind the principles and also expressed interest in advising on learning management systems. After obtaining feedback from UCACC and circulating to other groups for review, ETLG will finalize the document and seek endorsement from UCACC.

During the discussion with the ETLG chair and vice chair, it became clear that UCACC would benefit from stronger relationship with ETLG. It was decided that an ETLG representative will be added as an ex-officio member/consultant of UCACC.

Open Educational Resources
At its April meeting, UCACC member Chikako Takeshita (UCR), who is one of three UC faculty participants on the California Open Educational Resources Council, gave an update on the issue of textbook affordability, which had been discussed in previous years by UCACC's precursor committee. The OER Council was formed after the passage of two textbook affordability bills, in 2012, and tasked with facilitating the review of textbooks for inclusion in the new California Open Source Digital Library. The California State Legislature directed the public higher education systems in the state to create an online library with open educational resources and textbooks in order to increase faculty adoption of high quality, affordable or free materials to save students money. Takeshita presented slides on the work and accomplishments of the California Open Educational Resources Council in identifying courses, evaluating e-textbooks, and promoting the adoption of free and open textbooks in California higher education. The California State University uses an open access repository called MERLOT for course resources, and has developed the "cool4ed" website as the public face of the California Open Online Library for Education for all higher education sectors. Faculty can use the website to find free and open textbooks. Many of these are developed by OpenStax and include texts for foundational courses. Since the signing of the College Textbook Affordability Act (AB 798), the California OER Council has shifted its focus to support CCC and CSU proposals for funding.

California Digital Library Data Sharing and Management Services
UCACC members were briefed about the data management services offered by the UC Curation Center (UC3) at the California Digital Library. CDL's intention is to complement local solutions in supporting research data management at UC and help UC maintain control over its research outputs. Tools include the DMPTool and the Dash user interface for depositing data into the Merritt repository. UCACC's concerns were primarily about the total cost of data storage and the inability of UC3 to offer a one-time, up-front fixed price for a specified term primarily due to UC bureaucracy. The committee offered to try to influence the university to consider a fixed price or to provide a minimal amount of coverage for each faculty member.

UCPath Roll-Out Update
UC Deputy Chief Information Officer and UCPath Program Director Mark Cianca attended the February meeting to talk about the rationale behind the UCPath project and its progress. The long-term goal is to standardize the full suite of human resources functions ("from hire to retire") and to reduce risk and enhance compliance. UCACC learned that cost savings are not being

realized, but the system should help accommodate the overhead growth as campuses increase their populations. There was a successful roll-out late last year for UCOP employees. The first campuses to move to UCPath will be UCLA, Riverside, and Merced. Each campus has a UCPath sponsor, generally the Vice Chancellor for Administration or CFO.

Senate Regulation 542
Chair Kay introduced a problem on some campuses created by Senate Regulation 542, which is interpreted by registrars as prohibiting access by waitlisted students to course email messages and other electronic resources. This puts students at a disadvantage when they are finally enrolled in the course. A change to the SR542 was approved by the committee on February 1, 2016, but Academic Council requested additional justification before the starting the intensive review process that a change in regulation involves. Meanwhile, UCACC issued its own statement to express its formal opinion that Senate Regulation 542 does not preclude providing, at the instructor's discretion, access to electronic resources for students with an intent to complete the course.

Additional Business
UCACC devoted part of each regular meeting to discussing systemwide issues as reported by Academic Senate leadership and reports on issues on individual campuses.

Reports and Recommendations
- UCLA cyberattack response (February 2016)
  (See: http://senate.universityofcalifornia.edu/committees/ucacc/reports.html)
- Recommendation to the Academic Council for the addition of Senate faculty to the Cyber-Risk Governance Committee (CRGC) and its technical Advisory Board (May 2016)
  (http://senate.universityofcalifornia.edu/reports/documents/DH_TA_CRGC.pdf)
- Statement on the interpretation of Senate Regulation 542 (June 2016)
  (See: http://senate.universityofcalifornia.edu/committees/ucacc/reports.html)

Looking Ahead
Two key areas were identified by the chair and vice chair for focus in 2015-16 that will continue to occupy the committee's attention in 2016-17:

1. *Involving stakeholders in the design of systems that are widely used by faculty and that affect faculty and students.*
2. *Data management and governance.*

Representation
The UCACC Chair, David Kay, served as a faculty representative to the Information Technology Leadership Council and as an *ex officio* member of the University Committee on Library and Scholarly Communications. Chair Kay and Vice Chair Christine Borgman also served as Senate representatives on the Cyber-Risk Governance Committee (CRGC).

Acknowledgements
UCACC is grateful for the contributions made by the consultants and guests who attended meetings in 2015-16:
- Tom Andriola, CIO (Consultant to UCACC)
- Mary-Ellen Kreher, Director of Course Design and Development, ILTI (Consultant to UCACC)

- Ellen Osmundson, ILTI Project Coordinator
- Roslyn Martorano, Systemwide Privacy Manager
- Stephen Abrams, Manager – Digital Preservation Technology, CDL
- Mark Cianca, Deputy Chief Information Officer
- Rachel Nosowsky, Deputy General Counsel, UC Office of General Counsel
- Israel Fletes, ETLG Chair, Director of Educational Technology and Computing, UC Riverside
- Jenn Stringer, ETLG Vice Chair, Associate CIO, Academic Engagement, Educational Technology Services, UC Berkeley

Respectfully submitted, UCACC 2015-16:
David G. Kay, Chair (I)
Christine Borgman, Vice Chair (LA)
Kenneth Goldberg (B)
Matt Bishop (D)
Alfred Kobsa (I)
Timothy Tangherlini (LA)
Florin Rusu (M)
Chikako Takeshita (R)
Maryann Martone (SD)
Miguel Pampaloni (SF)
Keith Clarke (SB)
Jose Renau (SC)
Michael Sanfilippo (Graduate Student Representative, Merced)
J. Daniel Hare, Chair, Academic Senate *(Ex Officio)*
James Chalfant, Vice Chair, Academic Senate *(Ex Officio)*
Valerie Leppert, CCGA Chair *(Ex Officio)*
Tracy Larrabee, UCEP Chair *(Ex Officio)*
Eric Bakovic, UCOLASC Chair *(Ex Officio)*
Joanne Miller, Committee Analyst