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Chair of the Assembly and the Academic Council
Faculty Representative to the Board of Regents
University of California
1111 Franklin Street, 12th Floor
Oakland, California 94607-5200

June 9, 2008

WYATT R. HUME
PROVOST AND CHIEF OPERATING OFFICER

Re: Review of the ITGC Report, "Creating a UC Cyberinfrastructure"

Dear Rory,

The Academic Council concluded its review of the ITGC Report, "Creating a UC Cyberinfrastructure," at its May 2008 meeting. In total, nine divisions (UCB, UCD, UCI, UCLA, UCR, UCSB, UCSC, UCSD, and UCSF) and seven systemwide committees (CCGA, UCAAD, UCCC, UCEP, UCOLASC, UCORP, and UCB) responded; UCM did not respond. While responding divisions appreciated both the Report and the work of the UC Information Technology Guidance Committee (ITGC), they did have a number of comments and concerns.

In general, the report is very broad, and may not be specific enough to guide planning for and management of the University's information technology (IT) infrastructure (UCB, UCD, UCCC, UCPB, and UCORP). Along similar lines, the Report also fails to prioritize its recommendations (UCB, UCORP). It does not provide any details on possible costs (UCSB, UCSC, UCORP, and UCPB), nor does it contain information on the actual implementation of a plan (UCD, UCSB, UCSC, and UCORP). Given the fact that some IT issues on some campuses are reaching near crisis points, the lack of any near-term plan is also troubling (UCSC).

Council committees and divisions took a particular interest in the formation of an Information Technology Leadership Council (ITLC). First and foremost, this should be a UC-wide IT governance body (UCSB, UCPB) that includes Senate membership (UCB, UCI, UCLA, UCSB, UCSD, UCCC, and UCPB). Such a group should leverage IT experts in the UC community as well (UCD, UCPB). It is unclear how this group will dovetail with such other groups as the 'Vice Chancellors for Research Group on Cyberinfrastructure for Research' though (CCGA). UCEP and CCGA remarked that any IT infrastructure planning efforts should be mindful of the Senate's purview over teaching and learning; in particular, the ITLC would need to accommodate the results of the current dialogue about remote and online instruction.

Adequately meeting the needs of the end of users the IT infrastructure, e.g., the faculty, staff, and students, is very important to Academic Council members. Maintaining and ensuring quality accessibility, and affordability are certainly key (UCEP). In fact, UCORP remarked that ensuring that all faculty have modern lap-tops and access to well-qualified support personnel would "significantly facilitate the research and education efforts." In particular, divisions and committees noted that attention should be paid to the differing IT needs of the different end-users (UCB, UCD, UCLA, CCGA, and UCOLASC); IT needs, with respect to varying disciplines, are also very different and distinct (CCGA, UCOLASC). It was observed that UC campuses have different capabilities as well; standardization could have disparate financial impacts on those campuses that may need to catch up (UCB, UCEP).

Divisions and systemwide committees also provided comments on the recommendation to invest in economies of scale to build a more centralized set of IT systems, as well as centralized planning. Primarily, they noted that centralized planning assumes a top-down approach, which does not allow for innovation in response to local needs, insights, and opportunities (UCI, UCEP, UCORP, and UCPB). On a similar note, communication and collaboration between campuses should be better, but standardization should not substitute for this (UCD). To increase such communication however, it may not be necessary to invest in such expensive tools as video conferencing; many of the communication tools mentioned in the Report are currently free (UCORP). It would also be useful to have a mechanism to decide which functions will be managed by UCOP, which functions by campus consortias, and which functions by individual campuses and their respective sub-units (UCCC, UCSD). Finally, IT planning should address the changing role of UC's libraries, which are leaders in utilizing IT to extend their services. However, UCOLASC cautioned that in a push to expand cyberinfrastructure, a devaluation of libraries as material entities could occur; that committee remarked that "the physical infrastructure of libraries and the skills of librarians will always be an important compliment to the cyberinfrastructure."

Please do not hesitate to contact me if you have any questions regarding Council's comments.

Sincerely,

Michael T. Brown, Chair
Academic Council

Copy: Academic Council
        María Bertero-Barceló, Executive Director

Encl.   1

May 5, 2008

MICHAEL BROWN
Chair, Academic Council

Subject: UC Information Technology Guidance Committee (ITGC) report,
"Creating a UC cyberinfrastructure"

On April 28, 2008, the Divisional Council (DIVCO) of the Berkeley Division discussed the report cited above informed by consultation with the divisional Committee on Computing and Communications (COMP). The sense on DIVCO is that the report addresses the needs of high-end IT users, but fails to take into consideration the needs of many others on the Berkeley campus, where computing capability is quite variable. If money were no object, DIVCO would be inclined to support many of the report's recommendations, but what would have to be cut in order to the fund the recommendations?

DIVCO discussed each of the specific recommendations. With respect to the formation of the proposed Information Technology Leadership Council, DIVCO found the idea acceptable in the abstract, but questioned the role of shared governance in the proposed council. DIVCO understands that the council will provide a framework for systemwide IT governance, but feels that its scope of authority and responsibility should be clarified.

DIVCO is sympathetic to the recommendation to fund IT as critical infrastructure, but the report fails to prioritize specific IT needs. In times of scarce resources, prioritization is essential, not only among IT needs, but also between IT and other campus needs. DIVCO feels that it will be important to consider IT infrastructure in the broader campus context.
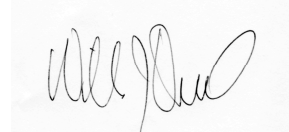
The recommendation on network connectivity does nothing to address the more serious connectivity issues on our campus. As the oldest campus, our buildings often are in a woeful state of network connectivity. Those departments that stand to benefit most from the recommendation tend to be those in well-funded research areas, which already have good networks. DIVCO is concerned about the growing gap between the IT haves and have-nots on campus. This recommendation would do nothing to narrow the digital divide.

DIVCO found the creation of a data center to be a useful recommendation. It noted that UC is at a disadvantage vis-à-vis other university systems. Many faculty members have installed clusters in their labs, but this Balkanized approach is very inefficient. This is an area where centralization would be welcome, but more information is needed about how it would be funded.

With respect to developing IT infrastructure and tools for collaboration, DIVCO noted that while facilitating collaboration among UC campuses is a worthy goal, the recommendation does not address the need to collaborate beyond UC. Berkeley researchers have cultivated relationships with institutions outside the UC system. In addition, IT is not viewed as a major barrier to collaboration, so this should not be considered a high priority.

In sum, DIVCO finds many of the recommendations to be reasonable in the abstract, but lacking the specificity and prioritization necessary to evaluate them in a useful way. In addition, the lack of cost estimates undercuts the utility of the report. DIVCO is concerned that many of the recommendations will benefit those well-endowed segments of the campus, while leaving others to fall further behind. Finally, DIVCO underscored that any centralized, systemwide coordinating body should focus on truly broad initiatives that benefit the system as a whole. The California Digital Library was cited as an example.

Sincerely,

William Drummond
Chair, Berkeley Division of the Academic Senate

Cc: Martin Head-Gordon, Co-chair, Committee on Computing and Communications
        Katherine Yelick, Co-chair, Committee on Computing and Communications
        Diane Sprouse, Senate Analyst, Committee on Computing and Communications

UNIVERSITY OF CALIFORNIA, DAVIS

May 7, 2008

MICHAEL BROWN, CHAIR
University of California
Assembly of the Academic Senate
Academic Council
1111 Franklin Street, 12th Floor
Oakland, CA 94607

RE: Systemwide Senate Review of the UC Information Technology Guidance Committee (ITGC) Report, "Creating a UC Cyberinfrastructure"

The subject proposal was distributed to all of the Davis Division standing committees and the Faculty Executive Committees of the schools and colleges.   Comments were received from the Committee on Planning and Budget as follows:

We commend the ITGC for its outstanding report and the thoughtful broad scope recommendations. However, the plan lacks sufficient details and implementation strategies. Additionally, the committee would like to provide the following comments in response to the report and its recommendations:

The key to a successful UC Cyberinfrastructure depends critically on the ability of UC to closely address the needs of its broad spectrum of users (students, faculty, staff, and other Californian stakeholders). The pathway to creating a UC Cyber-infrastructure needs to include an effective and proven mechanism to facilitate and incorporate user input and feedback.

UC should leverage its world class experts in IT. Most UC campuses already have information technology related departments (e.g. computer science) with top experts in the field. They have played a prominent role in the development of computer and information technologies for the nation and the world. UC needs to utilize this strength through utilization of its experts in computer science and network technologies when developing strategies, long term plans, and evaluating technology investment decisions. Inputs from top UC technologists can help prevent wasteful and often outdated investment.

Centralized initiatives planning (by the reorganized ITLC) cannot be viewed as substitution for better communication among various UC unites. UC campuses currently lack good communications even about the availability of information technology capabilities and services to constituents. Various units often conduct duplicate studies, duplicate efforts and purchases.

UC should seriously examine the possibility of investing in the development of future technologies by funding its internal information technology experts in order to reap returns from such investment.

Each campus, in order to utilize the existing resources efficiently, needs to maintain and publicize a centralized information technology resource/support database which is made available to its faculty. The campus needs to compile and publish information technology usage reports to assess the usage and user feedback of various information technology resources and services by its faculty members. Such information could 1) rank top services and resources; 2) identify unused and under-utilized resources; 3) provide user-driven information technology upgrades.

Sincerely,

Linda F. Bisson
Professor of Viticulture & Enology
Chair of the Davis Division of the Academic Senate

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April 28, 2008

Michael Brown, Chair, Academic Council
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**RE: Systemwide Review of "Creating a UC Cyberinfrastructure" by UC
          Information Technology Guidance Committee (ITGC)**

At its meeting of April 22, 2008, the Irvine Division Academic Senate Cabinet reviewed
"Creating a UC Cyberinfrastructure" by UC Information Technology Guidance
Committee. The Cabinet members agreed that the report's objective of developing a
university-wide information technology infrastructure was an important goal. However,
there were significant concerns related to budgetary resources, the structure of the
governance committee, and the participation of faculty in developing the infrastructure.
The following issues were considered:

- The report envisions installing a central high-level committee that will identify
  strategic directions. Centralized IT governance runs counter to current modern
  distributed IT structures and distributed organizations. Technology, service
  competitors and user demands change too quickly for the top-down multi-year
  strategy proposed in this report to be effective.
- The centralized governance committee would be empowered to earmark critical
  funding to be deployed centrally. Successful models should percolate up in the
  system and compete for renewable funding.
- Unspecified funds that are planned to be devoted to this cyberinfrastructure effort
  might go into a competitive program that funds the development of IT services
  that can be shown to successfully advance teaching and research across UC
  campuses. Proposals would need to include faculty and IT units from at least two
  campuses, and an impartial monitoring process for user adoption would need to
  be established.
- Once feasibility, usefulness and long-term adoption of a service have been
  demonstrated in pilot applications, a wider adoption would be considered. The
  "cyberinfrastructure" would then be improved based on the demand that this
  adoption creates.
- While members supported the overall goals of the report, members expressed
  concern regarding the extent of faculty involvement in developing this

infrastructure. There should be more explicit ways in which faculty are involved in all levels of this process, including significant faculty participation in the governing body of the Information Technology Leadership Council (ITLC).

The majority of the Cabinet was unwilling to endorse the UC Information Technology Guidance Committee Report "Creating a Cyberinfrastructure" based on the aforementioned concerns.   If you have any questions related to this matter, please do not hesitate to contact me.

Tim Bradley, Senate Chair

C: María Bertero-Barceló, Executive Director, Academic Senate

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May 2, 2008

Michael Brown
Chair, Academic Council

In Re: Systemwide Review of the ITGC Report

Dear Michael,

Thank you for the opportunity to review and opine upon the Information Technology Guidance Committee (ITGC) report, "Creating a UC Cyberinfrastructure." Upon receipt, I asked the Graduate Council (GC), the Undergraduate Council (UgC), the Council on Planning and Budget (CPB), the Information Technology Planning Board (ITPB), and the Executive Board to opine; I received responses from the UgC, CPB, and Executive Board. The UCLA Academic Senate raises no objections to the report or its recommendations.

However, it is worth highlighting concerns raised by the UgC and CPB, respectively, which the Executive Board endorsed. There is a consensus that the report engages a critical issue for the University of California, but that further examination and study is critical. I am attaching both responses to this letter, for your information. CPB noted and the Executive Board concurred that, while specific disagreements with the report were not found, there are three lacunae which, if addressed, would greatly augment the utility of the report. Specifically, and by way of summary, those are: (1) Insufficient attention to the needs/desires of end users; (2) Few mechanisms for ongoing consultation with faculty and students; and (3) Virtually no discussion of costs.

The UgC stated, and the Executive Board concurred, that there would be support for "further examination of technology-based advances in education by the ITGC, with input from the Divisions."

Please do not hesitate to contact me if I can be of further assistance.

Sincerely,

Elizabeth Ligon Bjork
Chair, UCLA Academic Senate

Cc: María Bertero-Barceló, Executive Director, Chief of Staff, UC Academic Senate
Jaime R. Balboa, Ph.D., CAO, UCLA Academic Senate

UCLA *Undergraduate Council*

April 14, 2008

Elizabeth Bjork
Academic Senate Chair

In Re: UC Information Technology Guidance Committee (ITGC) report, "Creating a UC Cyber infrastructure"

Dear Elizabeth,

Thank you for the opportunity to opine upon the UC Information Technology Guidance Committee (ITGC) report, "Creating a UC Cyber infrastructure", dated December 2007. The ITGC was commissioned in 2006 and charged with identifying ways in which a centralized approach to technology issues could enhance UCs mission of research and education. A set of nine recommendations were discussed categorized as follows: Governance, Funding and Collaboration; Infrastructure; and Services.

The Undergraduate Council reviewed the report at its meeting on April 4, 2008 engaging in discussion focused on the framework of undergraduate education. We invited Jim Davis, Associate Vice Chancellor of Information Technology and Chief Information Officer, to brief us on the report. As a member of the Leadership Council and ITGC, Associate Vice Chancellor Davis provided us a context to understand the report and process of the committee's formation. He explained the recommendations categorically in the framework of Undergraduate education. Specifically, workgroups were formed to assess the following areas of information technology: research, education, administration, and infrastructure. Education was examined through a review of structural technology, stewardship of digital assets, and IT in the student experience. The ITGC co-conveners, Vice Provost of Academic Information & Strategic Services Dan Greenstein and Associate Vice President & Chief Information Officer Kristine Hafner visited campuses to gather feedback and input from constituencies.

Included in the report are recommendations pertaining to the research mission of UC that are quite detailed and for which there is ample justification. For instance, Council members recognized the advantages of centralized planning with regard to projects like the UC Grid and the Data Center. But notably, the recommendations corresponding to education and student life were stated merely as a set of principles. Specific educational initiatives, introduced previously to the ITGC by its Instructional Technology and Student Experience Work Groups, were dropped from the recommendations after campus visits, partly because system wide approaches brought no clear advantages.

Consequently, the Council chose not to vote on endorsing the report as a whole. However, we are in support of further examination of technology-based advances in education by the ITGC, with input solicited from the Divisions.

Other concerns raised by Council membership include:

   The Undergraduate Council is concerned about the fiscal impact of projects outlined in the report, at a time when the UC is facing daunting financial challenges. For instance, no specific figures for the UC Grid or the data center are presented, nor are funding plans and sources.

Council members noted the importance of balancing Divisional priorities with centralized planning in general, and particularly so for educational initiatives, as the ITGC moves forward.

In conclusion, we recognize the importance of information technology and acknowledge the efforts of the committee including the workgroups and campus visits. Although the Undergraduate Council felt that much of the content of the report lay outside the Council's purview, we felt this is a very important issue requiring further examination and study. Soliciting faculty input and involvement throughout the process is integral for its success.

Thank you again for the opportunity to opine. Please contact me should you have any questions.

Sincerely,

Stuart Brown
Chair, Undergraduate Council

Cc: Jaime Balboa, CAO Academic Senate
        Dayna Baker, Senior Policy Analyst
        Linda Mohr, Assistant CAO Academic Senate

MEMORANDUM

April 16, 2008

TO: Elizabeth Bjork
        Chair, Academic Senate

FR: Robert G. Frank, Jr.
        Chair, Academic Senate Council on Planning and Budget

RE: Report of the UC Information Technology Guidance Committee (ITGC)

Dear Elizabeth,

We distributed to our members the report on UC Cyber Infrastructure that was written by the Information Technology Guidance Committee, and discussed it at the Council's meeting of 14 April 2008. We were fortunate in having as our basis an analysis composed by one of our members who has extensive experience in computing systems; that analysis is attached. We recommend that the Executive Board consider carefully the many good points made in that analysis

Overall, I think Council members agreed with the broad vision of an improved cyber infrastructure. However, as we worked our way through the major recommendations, it became clear that there were themes that recurred again and again in our discussions. These represented not so much disagreements with what was said, but rather a perception of what was not covered in the report.

• <u>Insufficient attention to the needs/desires of end users</u>. The report was clearly generated by a very high-level and knowledgeable group, but there is little evidence that its broad policy recommendations were based on an extensive survey of perceived student and faculty needs, as opposed to the concerns of those who would oversee the structures.

• <u>Few mechanisms for ongoing consultation with faculty and students</u>. There are constant references to "working with" leadership on the campuses, but no structures that would guarantee that, as this new infrastructure is built, its features and costs aligned with the developing needs of the user community. The model for implementation is always a top-down one.

• <u>Virtually no discussion of costs</u>. As a Senate body concerned with resource allocation, it's distressing to work through a glossy document, the object of a great deal of attention and expense, and find very little about the costs of such an infrastructure—even in very general terms. Council had just done a review of the bleak budget situation for 2008-09 and beyond, and we felt acutely the disconnect between the resources likely to be available, and the grand vision of the ITGC Report.

The Council certainly found nothing to which it objected. We were, however, disquieted by the way in which an admirable planning opportunity failed to deal with some major issues that are very important to students and faculty.

cc: Jaime Balboa, Chief Administrative Officer, Academic Senate
        Michael Goldstein, Vice Chair, Academic Senate
        Linda Mohr, Assistant Chief Administrative Officer, Academic Senate
        Members of the Council on Planning and Budget

UNIVERSITY OF CALIFORNIA, RIVERSIDE

CHAIR, ACADEMIC SENATE
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April 16, 2008

Michael T. Brown
Professor of Counseling/Clinical/ School Psychology
Chair, UC Systemwide Academic Senate
1111 Franklin St., 12th Floor
Oakland, CA 94607

Dear Michael:

RE: Systemwide Senate Review of the UC Information Technology Guidance Committee (ITGC) report, "Creating a UC Cyberinfrastructure"

The above report has been reviewed by the appropriate committee and the committee felt that overall, there was not much to disagree on. They also offered the following comments that might be useful for assessing if there was anything left out.

1. The current direction for utilizing technology to improve learning outcomes and the student's university experience points toward initiatives related to active and participative learning. Technology that supports these types of learning modes should be included in the vision.

2. They enthusiastically supported the vision of a shared computing grid and would like to add on some emphasis that it come along with a good mechanism of inviting and facilitating its use.

3. They also wondered if IT costs could be reduced by recognizing and exploiting various economies of scale?

Yours faithfully,

Thomas Cogswell
Professor of History; and
Chair of the Riverside Division

May 5, 2008

TO: Michael Brown, Chair
        Academic Council

FR: Joel Michaelsen, Chair
        Santa Barbara Division

RE: Review of UC Information Technology Guidance Committee (ITGC) report, "Creating a UC Cyberinfrastructure"

The Santa Barbara Division distributed the ITGC report entitled "Creating an UC Cyberstructure" to Council on Planning and Budget (CPB), Council on Research and Instructional Resources (CRIR), and the College of Engineering Faculty Executive Committee (FEC). The majority of the reviewing agencies were supportive of the recommendations in the report, and said that it was a well developed document. There was particularly strong support for the recommendation to establish the ITLC as the UC-wide governance body, although questions were raised about lack of representation by faculty, particularly those with research expertise in aspects of IT planning.

A general concern was the lack of any funding and implementation plans. In addition, while research and instructional IT applications are addressed well and administrative business computing needs are discussed briefly; there is no mention of student information systems, another crucial component of the overall IT environment.

Turning to more specific comments, with respect to Recommendation 1 CPB suggests that the hospital clinical computing needs could overwhelm the system and questions why the hospitals and national labs should be included. They urge that a firewall be established between clinical uses and academic uses. CPB is pleased to see consolidation of the IT functions on each campus through the development of CIO positions. In regards to Recommendation 6, CPB suggests that a critical evaluation of current and proposed modalities be done prior to any upgrades of existing equipment or development of new modalities. The Council said that further development of the UC Grid Prototype should be monitored to ensure that costs are equitably shared thereby avoiding any "attempt to offload them onto research grants unfairly." Finally, CPB expressed serous concerns about Recommendation 8 which implies that UC owns scholarly work by its employees. They state "While the council supports faculty members' voluntary sharing of data in a research database (e.g. the Scholarship Repository), it opposes mandatory participation." Council suggests that the technical aspect of managing data be separated from the policies related to overseeing the data.

The College of Engineering FEC had several areas of serious concern.   They said they had mixed views among their committee about the overall desirability of the proposed infrastructure, the proposed scale and the overall management. For example, the FEC finds the idea of mass storage and rapid networking to be a positive recommendation; however, they found that the plan does not account for future technological advances into 2025. The Committee found the report short of critical details about timing, the phasing in of the plan and "how invasive the system might be if CPU on existing machines distributed throughout the system were included in the network."

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May 5, 2008

Michael T. Brown, Chair
Academic Council

RE: UCSC Response to Review of ITGC Committee Report on "Creating a UC Cyberinfrastructure"

Dear Michael,

The UC Santa Cruz Division received comments from four committees on this report: our Committees on Computing and Telecommunications, Teaching, the Library, and Research each opined. The overarching intent of the Report seems uncontroversial: for greater efficiency and to take advantage of economies of scale, UC should develop a common infrastructure for information technology. Thus, the "power of 10" has potential considerable benefits associated with a unified IT Cyberinfrastructure. That said, such an intercampus enterprise needs to be carefully and intelligently planned—and the key details of cost, implementation and envisioned infrastructure required obviously need to be carefully evaluated and documented. These issues are not part of the purview of this report but, as most of our committees commented, getting beyond a trivial assessment (Would better system-wide IT collaboration/coordination be good? Would improved IT service and capacity be beneficial?) of its non-specific, blue-sky recommendations is essentially impossible without some sense of the magnitude of operational issues associated with the report's recommendations.

The document presents nine recommendations that cover issues of governance, infrastructure, and services. However, no specific information is given. For example, what would these recommendations cost? What new administrative positions/structures would be needed (beyond the ITCG)? How will "collaborations of services" be implemented? Given the panoply of different systems in use (e.g., both administrative process- and datacenter-related), how will ITCG decide which are optimal systems/software, and how will the system go about getting campuses to switch over? Who will bear the transitional costs? In short, while we see no problem with the formalization of the system-wide ITCG collaborative group, the key issues of how the campuses will operationally interface with each other in sharing of resources and information remain enigmatic. This is a vital long-term goal, but no budget models are presented nor is a plan of near-term action (beyond formalizing an oversight committee). In this context, we note that by-and-large most campus IT organizations do not have a great deal of experience with systemwide collaborative efforts, and

the manner in which a cultural change. Accordingly, it would have been a highly useful near-term step to identify an initial set of system-wide projects that are not overly ambitious, but could help establish and solidify the types of agreements, experiences and interactions needed to fruitfully generate larger-scale cooperation.

The lack of a near-term plan is of considerable concern, as some IT issues are approaching crisis points. For example, at our campus, we have little or no available space for housing new computer clusters (we believe other campuses are experiencing comparable problems). This shortage has already had serious repercussions, and will tangibly impact our research enterprise as we move forward. Accordingly, the need for a datacenter (with fast access) is urgent—and this plan calls for analysis, and to "ultimately develop a new blueprint for providing data center services to the UC community...." If we knew that something substantive was going to happen at the system-wide level, and we knew how soon, we could perhaps plan with system-wide initiatives and guidance in mind; as things stand, we can't—a recommendation that we will ultimately get a blueprint provides *no* reassurance that anything timely will occur. In this sense, the lack of urgency and near-term planning are major and disappointing shortcomings of this report.

Finally, we note that one goal of the project is to "ensure that the information produced in the course of research and instruction is effectively secured, managed, preserved and made available for appropriate use by others." Given the nature of this goal, we could envision that serious issues related to the academic freedom of individual faculty members might arise, and we recommend that the implications for academic freedom of such policies be carefully evaluated before such recommendations are implemented.

The Santa Cruz Division looks forward in the very near future to the next plan of action from the ITGC committee on how these collaborations could be implemented, in what areas they might be implemented, and how much such collaborations might cost.

Sincerely,

Quentin Williams, Chair
Academic Senate
Santa Cruz Division

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May 8, 2008

Professor Michael Brown
Chair, Academic Senate
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Re: Systemwide Senate Review of the Report of the UC Information Technology Guidance
        Committee (ITGC), "Creating a UC Cyberinfrastructure"

Dear Michael:

In response to your request of February 14, the San Diego Division sought and received comment
from the appropriate Divisional committees on the Report of the UC Information Technology
Guidance Committee, "Creating a UC Cyberinfrastructure". Reviewers agreed that the appropriate
and innovative use of information technology is critical to UC's future success. The Report's
recommendations were seen as solid¸ although basic; their implementation was viewed as having a
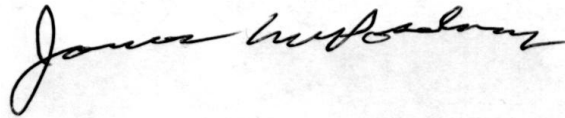potentially positive impact on the sharing of knowledge and research among the campuses.

Substantial concerns were expressed, however. The Report's recommendations are modeled on a
centralized infrastructure that works well in the business world, but that model's applicability to an
academic institution was seen as questionable and potentially compromising to the individuality of the
ten campuses. The "Power and Promise of 10" comes from the individual strengths each campus
brings to the academic mission of the University, not from standardizing the campuses under central
coordination.

Accordingly, reviewers urged that the University needs a mechanism to discuss and decide which
capacities and functions will be managed by OP, which by consortia of campuses, and which by
individual campuses or their subunits. These decisions will require that UC balance such values as
economic efficiency, academic effectiveness, service to faculty and students, preservation and
management of University resources, and the maintenance of an environment that encourages
innovation. A permanent body is needed to ensure that the management of the University's
cyberinfrastructure becomes and remains aligned both with the evolving technology and with the
needs and functions of the faculty and the student body. The Divisional Committee on Academic
Information Technology recommended that an expanded IT Leadership Council, with more faculty
and student members, could serve to bring the most important perspectives of the University's IT
resources – those that define UC's academic mission – to the necessary planning and management
process.

Reviewers also commented on the vague nature of the Report. The Report outlines several technical initiatives without accompanying examples of how these new capacities would be used to solve existing problems and provide new strategic opportunities. Further, it is unclear whether implementing the recommendations would provide the structure necessary to effectively couple coordinated technological infrastructure with the needs of individual campuses. Discussion will also be needed on how local implementation, and associated benefits, could be given greater visibility.

Finally, sufficient details about the resources required to implement the recommendations were lacking, leading reviewers to question whether the goals could be achieved. A budgeting process that could produce systematic funding proposals for the expansion and maintenance of the cyberinfrastructure, while ensuring that the proposals would be competitive with other budgetary demands is needed, rather than the current, ad hoc funding policies that are inadequate to meet even the most modest demands of the report.

Sincerely,

James W. Posakony, Chair
Academic Senate, San Diego Division

David Gardner, MD, MS Chair
Elena Fuentes-Afflick, MD, MPH, Vice Chair
Mary J. Malloy, MD, Secretary
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COMMUNICATION FROM THE SAN FRANCISCO DIVISION
David Gardner, MD, Chair

April 15, 2008

Michael Brown, PhD
Professor and Chair, Academic Council
University of California Academic Senate
1111 Franklin Street, 12th Floor
Oakland, CA 94607-5200

**RE: Review of UC Information Technology Guidance Committee Report Creating a UC
Cyberinfrastructure**

Dear Chair Brown:

On behalf of the San Francisco Division, the UCSF Academic Senate Committee on Academic Planning and
Budget reviewed the UC Information Technology Guidance Committee Report *Creating a UC
Cyberinfrastructure* submitted to the San Francisco Division for review and comment.

The UCSF Committee on Academic Planning and Budget and the San Francisco Division support the
recommendations presented in this report.

If you have any questions or if we can assist you in any way, please feel free to contact Wilson Hardcastle, Senior
Analyst in the UCSF Office of the Academic Senate, at whardcastle@senate.ucsf.edu or (415) 476-4245. Thank
you.

Sincerely,

David Gardner, MD
Chair, UCSF Academic Senate

cc: Maria Bertero-Barcelo, Executive Director, UC Academic Council
        Kit Chesla, Chair, Committee on Academic Planning and Budget

COORDINATING COMMITTEE ON GRADUATE AFFAIRS (CCGA)
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May 9, 2008

MICHAEL T. BROWN, CHAIR
ACADEMIC COUNCIL

Re: ITGC "Creating a UC Cyberinfrastructure" Report

Dear Michael:

The Coordinating Committee on Graduate Affairs (CCGA) thanks Provost Hume and the Information Technology Guidance Committee (ITGC) for the opportunity to read and comment on the ITGC report "Creating a UC Cyberinfrastructure". This is a pressing issue, and the members of the ITGC are owed a debt of gratitude for the task they took on. All in all, CCGA found the report to be excellent in its enumeration of the deficiencies and opportunities associated with the University's IT infrastructure. Below, we present a number of observations and suggestions for the committee's consideration.

Page 10 of the Report suggests the establishment of an ongoing Information Technology Leadership Council (ITLC) to follow through on the areas identified by the ITGC. Given the magnitude and complexity of the task, this is clearly warranted, and its constitution should be carefully considered. CCGA did have a few questions about the establishment of this body, which the ITGC (or a subset of its members) might be asked to address. There will need to be an initial charge to the ITLC, likely generated by the ITGC, which at this point has the broadest overview of the IT environment of any group within the University. Also, in this charge, or in accompanying language, it would be helpful to know how this group is expected to dovetail with existing IT oversight groups, such as the Vice Chancellors for Research group on cyberinfrastructure for research (page 22 of the Report).

There were several areas that the committee felt may not have received due consideration and would like to single out for further consideration as the ITLC begins its work. CCGA felt it important that explicit attention be paid to support mechanisms for the faculty, staff and students users of the cyberinfrastructure, particularly for disciplines that tend to make lighter use of IT in general. Attention should also be paid to the differing needs and requirements across disciplines. For example, an electronic-file template appropriate for a CV in the sciences may not suffice for a faculty member in the humanities. CCGA also felt that a more explicit focus on University-wide library services would be appropriate.

Finally, CCGA pointed out two issues of which the ITLC should be aware as it moves forward. First, it is important that the IT that is developed not be used as a disguise to devolve more clerical functions to the faculty, which would constitute an inefficient use of University resources. Instead, the University should apply this aspect of IT development to maximizing efficiencies appropriate to respective University staff. Secondly, CCGA pointed out that the ITLC should maintain its cognizance of the Senate's purview over teaching and learning; in particular, the ITLC will need to accommodate the results of the current dialog about remote and online instruction.

We hope that you find these comments of value. Do not hesitate to contact me if you wish to discuss this further.

Respectfully submitted,

Bruce Schumm
Chair, CCGA

Copy: CCGA
         Executive Director Bertero-Barceló

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April 22, 2008

MICHAEL T. BROWN, CHAIR
ACADEMIC COUNCIL

RE: ITGC Report "Creating a UC Cyberinfrastructure"

Dear Michael,

The University Committee on Affirmative Action and Diversity (UCAAD) has discussed the ITGC Report "Creating a UC Cyberinfrastructure", and we would like to make **a** suggestion to enhance the report's relevance to all UC personnel. The committee appreciates the need for large-scale research computing projects, such as systemwide clusters, but feels including specific and focused software would also be valuable. For example, instituting standardized software for human resources information systems across the campuses would enable UCOP to respond accurately and quickly to the Regents' request for annual reports on diversity issues as well as allow UCOP to give faculty targeted feedback on how well local practices are producing results consistent with State and Federal requirements. The current lack of standardization across campuses creates translational problems for UCOP that require costly, labor- and time-intensive solutions, which usually means that they languish undone.

Sincerely,

Pauline Yahr, Chair
UCAAD

cc: UCAAD
       María Bertero- Barceló, Executive Director, Systemwide Academic Senate

UNIVERSITY COMMITTEE ON COMPUTING AND COMMUNICATIONS (UCCC)
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May 5, 2008

MICHAEL T. BROWN, CHAIR
ACADEMIC SENATE

RE: ITGC Report, "Creating a UC Cyberinfrastructure"

Dear Michael,

The University Committee on Computing and Communications (UCCC) has discussed both the ITGC draft report and its final version, and, regretfully, we are disappointed. As one might expect of a committee composed of faculty and students deeply interested in information technology and its role in the university, UCCC regards the principal point of the report as quite basic. Indeed, ten years ago, one could have easily made this same argument: that information technology had become a vital resource for teaching and research and that building a robust cyberinfrastructure was necessary – not merely important – for the accomplishment of the University's many missions.

UCCC was also nonplussed by the final version's de facto omission of much of the work done by the task forces that ITGC had commissioned. Consequently, the report is, in our opinion, too general to guide planning for and management of the University's information technology infrastructure. In our view, the report should have discussed the following issues and recommended the establishment of an institutional arrangement to implement them.

- Because technology and its uses evolve continuously and rapidly, the University needs a mechanism to discuss and decide which capacities and functions will be managed by UCOP, which by consortia of campuses, and which by individual campuses or their subunits. These decisions require that UC balance such values as economic efficiency, academic effectiveness, service to faculty and students, preservation and management of university resources, and the maintenance of an environment that encourages innovation. Some functions should be handled as the equivalent of a utility – such as email services, and others can be left to individual departments, research groups, or faculty members. Technological change, such as the rapidly increasing capacity of the network, has changed the parameters of such decisions, and UC needs a reflective, responsive, and permanent body to ensure that the management of the University's cyberinfrastructure becomes and remains aligned with the needs and functions of the faculty and student body.

- UCOP must establish a regular mechanism for budgeting expansion and maintenance of the cyberinfrastructure. These essential resources are more like libraries than buildings. The former are now budgeted by a formula; the latter through a process of campus proposals assessed and put in order by UCOP for consideration by the Regents. While it is unlikely that information technology

will be budgeted by formula – and a formulaic approach might not be the best one in any case – it is clear that the steady improvement in technology and the steady expansion of its uses and demands require a budgeting process that can produce systematic funding proposals which will be competitive with the other demands represented in arguments for budget support. Current, ad hoc funding policies are inadequate to meet even the modest demands of the report.

- UCCC recommends that the University base the necessary planning and management structure in an expanded IT Leadership Council. The Council needs more faculty and student members to bring the perspectives of UC's various constituencies to bear on cyberinfrastructure issues. The most important perspectives on the development of the university's IT resources are those that define UC's academic mission. The body that makes recommendations about the distribution and management of these resources must understand the way they are being and might be used in research and academic programs. It must also be able to grasp the technical possibilities as its recommendations will mesh academic and technical values and information. UCCC imagines that an expanded IT Leadership Council will do a great deal of work through subcommittees to ensure that it receives the full range of information and evaluation needed to make good recommendations to the university's leaders.

UCCC looks forward to seeing UC create a strong management structure for its IT infrastructure. The ITGC Report is the first, rather small, step in this process. The report will be enhanced if next steps follow soon and are of the magnitude one would expect from a great university.

Sincerely,

Lisa Naugle, Chair
UCCC

cc: UCCC
        Maria Bertero-Barcelo, Executive Director, Universitywide Academic Senate

UNIVERSITY OF CALIFORNIA

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May 5, 2008

MICHAEL T. BROWN, CHAIR
ACADEMIC SENATE

RE: Recommendation on Guidelines for Minimum IT Standards for Instructional Technology

Dear Michael,

This year the University Committee on Computing and Communications (UCCC) has continued discussing the establishment of guidelines for providing hardware and software to faculty for instructional purposes. The aim of these discussions has been to define a minimum level of information technology that every instructor at UC should have.

Currently, the determination of what instructors require in information technology has been left to departments and schools on the campuses. This arrangement has produced a very wide range of capacity— both between and within campuses. Some have a great deal of technology at their disposal for teaching purposes (in some fields that technology has been acquired for research purposes and put to instructional use as well); others have none at all.

The definition of a university-wide guideline might seem gratuitous; the initial view of most faculty members and administrators might be that such decisions should be left to local, instructional units. However, UCCC believes that it would be advantageous to the University to establish guidelines for minimal IT requirements, because IT is now recognized as one of the essential resources a university needs to accomplish its mission and because, in some fields, guidelines would further the curricular use of this essential resource. Just as the ability of the University to accomplish its mission has been enhanced by the renovations of classrooms to provide information technology, it will be similarly enhanced by ensuring that the greatest possible percentage of instructors have the instruments to take advantage of these classrooms and to meet their students online as well as in classrooms, offices, and hallways.

UCCC is not the right body to write the guidelines; a task force composed of faculty and technical staff should do this work. The task force might include members from other Senate committees, such as UCEP, which have purview over the university's academic programs. However, we have outlined a preliminary list of capacities that every instructor should have.

- Access to the Internet – providing access to information resources needed for teaching

- The hardware and software necessary for communication and collaboration with colleagues and students

- The technology necessary for creating course materials of all types

- The technology necessary to manage course web sites

- The technology necessary for course management tasks, such as posting assignments and recording and reporting grades

- Instruction in the use the minimum technology recommended by the guidelines and help through online manuals and help desks

Such minimal technology now has an importance equivalent to that of telephone and voicemail, and promulgating these guidelines would permit every instructor to take control of his or her instructional activity, reducing reliance on departmental staff. The committee recognizes that IT needs vary a great deal from discipline to discipline and that science and engineering disciplines, and some others, do not need and would not benefit from minimum standards or guidelines. However, the committee believes that it is time for the University to set the goal of bringing all faculty and instructional programs into the IT world. The committee does not seek to require faculty to add technology to their instructional activities, but it believes that the university should make a minimum amount of information technology available to all instructors.

Sincerely,

Lisa Naugle, Chair
UCCC

cc: UCCC
        Maria Bertero-Barcelo, Executive Director, Universitywide Academic Senate

UNIVERSITY OF CALIFORNIA

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May 6, 2008

MICHAEL BROWN, CHAIR
ACADEMIC COUNCIL

Re: Information Technology Guidance Committee Report "Creating a UC Cyberinfrastructure"

Dear Michael,

At its April 2008 meeting, the University Committee on Educational Policy (UCEP) reviewed the Information Technology Guidance Committee (ITGC) Report, "Creating a UC Cyberinfrastructure." We endorse the recommendations made in the report and offer the following comments and observations.

UCEP was most interested in aspects of the report that relate to instruction at UC, particularly information technology systems and services that enhance the faculty's ability to teach and do research and that build educational opportunities for students. As such, UCEP reaffirmed Recommendation 8 and 9, which discuss the role of IT systems in allowing faculty to share instructional content, data sets, and analytical tools, and in leveraging instructional technology to improve the student learning experience.

We also note that the same goals and principles currently being discussed in the context of the UC budget – ensuring quality, accessibility, and affordability – should also apply as goals for the use of information technology in instruction. Unless systems are in place to ensure platform independent computing, for example, some students could be left out of educational opportunities created by enhanced online technologies.
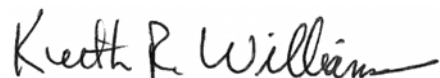
The report does not address the need to teach students information literacy. That important effort is becoming more central and essential to the overall educational effort at the University level and involves several components. At the most basic level, students need to learn how to use computers and other technologies to participate in society as fully informed citizens. Second, with so much information now instantly available, it is important that students learn how to effectively and efficiently access that information and then evaluate it to discern what is and what is not valid and useful. Finally, students need tools that will help them form a sense of ethics about the proper use of information and how to recognize when information is being misused.

In general, UCEP believes that investing in economies of scale to build a more standardized set of IT systems and tools is a worthy goal. However, we also have several concerns: first, we note that UC campuses have different capabilities and that such an effort could have a disparate financial impact for the campuses that need to catch-up. Second, the committee feels that IT standardization efforts should focus more on the business processes – i.e. more uniform registration and accounting systems – rather than on instructional areas such as classroom management systems. We believe that instructors may be reluctant to give up homegrown campus systems for a systemwide system they would have less influence over, and that academic freedom should allow instructors to develop systems that will best serve their academic needs. We should guard against any de facto restriction on academic freedom imposed by adoption of a standardized IT system. We also note that new technologies develop quickly and too much standardization could slow the adoption of innovative new technologies if campuses become captive to certain systems. Before embarking on a standardization effort, the University should undertake a broad evaluation of the systems currently in use so that the number of faculty, staff, and students who have to learn a new system is minimized. Finally, the ITGC should continue to involve a broad range of faculty in deliberations and decision-making.

The report also relates to two projects UCEP is currently involved in. The first is an effort by the Office of Academic Affairs to define and address administrative obstacles and inefficiencies involving courses that enroll students from multiple UC campuses. UCEP has endorsed the idea of using technology to help clear the path to students wanting to enroll and earn credit in multi-campus courses and to faculty wishing to offer such courses. UCEP also supports the use of technology to maximize resources for the benefit of campuses and programs with fewer resources. Building UC's capacity to administer more multi-campus programs more efficiently will help UC maximize "the power of ten" concept and will create new educational and research opportunities for students and faculty. At the same time, the money spent to expand the cyberinfrastructure should generate an equivalent magnitude of cost savings and/or value to the educational enterprise.

The second project is the current conversation going on in the Senate about the role of online instruction, distance learning, and residency requirements at UC, initiated by a CCGA/UCEP/ITTP subcommittee who noted that the use of online courses is likely to become more common in higher education. While many UC faculty feel that the University should remain open to new educational innovations, we also need to determine how these new modalities intersect with UC quality. The ITGC should keep both efforts in mind as it works to implement the recommendations in the report.

Sincerely,

Keith Williams
Chair, UCEP

cc: UCEP members
        Executive Director Bertero-Barceló

UNIVERSITY OF CALIFORNIA

UNIVERSITY COMMITTEE ON LIBRARY AND
SCHOLARLY COMMUNICATION (UCOLASC)
Ben Crow, Chair
bencrow@ucsc.edu

May 6, 2008

MICHAEL BROWN, CHAIR
ACADEMIC COUNCIL

**RE: Information Technology Guidance Committee Report, "Creating a UC
       Cyberinfrastructure"**

Dear Michael,

At its April meeting, the University Committee on Library and Scholarly Communication
(UCOLASC), reviewed the Information Technology Guidance Committee (ITGC) Report
"Creating a UC Cyberinfrastructure." We would like to share a few comments about the report
that we feel are particularly relevant to libraries and scholarly communication.

First, UCOLASC supports the ITGC's main recommendations for enhancing and building
collaborative relationships to facilitate the sharing of instructional content. We believe the
development of UC's cyberinfrastructure should be based on the principle of enabling the ability
of faculty and students to be creators, users, and publishers of academic information, and of
maximizing the cost-effective dissemination and impact of faculty scholarship. Libraries play a
key role in these efforts and should be included in all IT planning decisions affecting academic
information.

As the report notes, the UC Libraries are world leaders in leveraging IT to extend the reach of
their services. Technology-enabled and enhanced services are critical to the operation of the
campus libraries, UC Press, and the California Digital Library. New and enhanced technologies
allow UC's diverse library and scholarly information resources to be shared more widely—
giving faculty and students on all campuses access to a broader range of educational
opportunities. In particular, the California Digital Library has been a pioneer in facilitating
access through technology to scholarly information. For CDL, managing the infrastructure will
be an increasing challenge in the years ahead as it plans for the preservation of management of
digital assets over time while also maintaining long-term financial stability.

Publishing is as fundamental to the research and teaching infrastructure of the University as
classrooms and labs. Moving forward, the ITGC should consider the diverse set of perspectives
across disciplines and campuses in terms of content, resources, and options for publishing, and

make recommendations for increasing investment in the tools and infrastructure that facilitate the sharing of academic materials.

We felt there should be a clearer distinction in the report between the role and purpose of the cyberinfrastructure in the service of research and in the service of teaching. Linking them in the document obscures their differences, but they are two very different missions with very different needs and should be kept separate.

There was also a concern that in a push to expand the cyberinfrastructure, there could be a devaluation of libraries as material entities with real physical space for academic materials. We fear there is a growing misperception that print materials, libraries, – and even librarians – are becoming obsolete, and some faculty may not fully understand or appreciate their importance. The physical infrastructure of libraries and the skills of librarians will always be an important compliment to the cyberinfrastructure.

We note that there are benefits to more cross-campus collaborations around information technology, but those collaborations need to be approached carefully. Some UCOLASC faculty expressed a concern that in a collaborative effort, the IT organization sometimes becomes the central decision-maker after input from faculty or librarians. New collaborative efforts should clarify roles and responsibilities and in addition, monitor how the money is being used, and what that money is supporting.

Finally, there was a concern that if faculty are required to operate through new systemwide infrastructures they could lose other options. New polices and strategies should maintain enough flexibility so that instructors can use and develop systems that best serve their academic needs.

Sincerely,

Ben Crow
UCOLASC Chair

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May 5, 2008

MICHAEL T. BROWN, CHAIR
ACADEMIC COUNCIL

RE: ITGC Report, "*Creating a UC Cyberinfrstructure*"

Dear Michael,

During our April and May meetings, the University Committee on Research Policy (UCORP) discussed the UC Information Technology Guidance Committee (ITGC) report, "Creating a UC Cyberinfrastructure". This report proposes a series of recommendations that support and enhance the information technology (IT) structure of the University, with the ultimate goal of furthering its research and educational missions.

UCORP finds that most of the general goals and infrastructure needs posited in the report are sensible, and that fulfilling them will become increasingly important for the proper functioning of the University. The Committee did find serious deficiencies in the report, however, and I summarize them below.

Though the overarching goals are reasonable, most are also rather obvious: it is clear that IT is of great importance to the University, that it is expensive to enhance and maintain, that an increased budget will be needed to insure this, and that this will necessitate a modified funding model, especially in these lean times. The report is, unfortunately, mum on how this is to be achieved; this is true even for the simplest goal, that of fostering inter-campus collaborations. This lack of specificity significantly decreases the usefulness of the report.

The proposed infrastructure improvements for network connectivity, and the data centers are, again, very reasonable but, again, lack any specific implementation proposals. These are areas where the clear benefit to the State and other educational institutions (ranging form K-12 schools to private universities) can be used to leverage funds and partnerships, yet the report does not mention this possibility. More importantly, there *already* exists high speed connectivity among the campuses, and it is troublesome that this fact is not mentioned in the report.

Several recommendations call for the long-term adoption of *specific* technologies. This type of commitment in high-tech infrastructure is very dangerous since the field is very nimble; new developments regularly demote yesterday's marvel into today's dinosaur. The University should simply not have the adoption of any individual technology as a long-term plan.

Recommendation(s) 6, "develop infrastructure, tools and services to support collaboration within the UC community" is not, in the opinion of the Committee, at the same level as the previous ones. Many of the

communication tools mentioned are currently available for free; the only need is for the collaborators to own a computer and to have access to a high-speed connection. Other tools are of questionable use: high-definition studio-based video conferencing is *extremely* expensive and, though it might *look* nice, it would have minimal impact in both research and education; proposing to have a document repository is a recurring but underdeveloped theme that is plagued with copyright complications that are still yet to be clarified.

On the other hand, insuring all faculty members have an up-to-date laptop (or even desktop computer), and insisting that campuses have a sufficient number of well-qualified computer-support personnel *would* significantly facilitate the research and educational efforts. This is not mentioned in the report.

The usefulness of recommendation 7, connected with "services", is also uncertain. While developing a "grid" can certainly make available more computing power, it is unclear who the target audience would be. Most "proof of concept" programs can be managed using a single computer and the proposed structure would not be able to deal with very large computations (protein folding, data analysis from the LHC). Moreover, faculty involved in collaborations using large computations frequently have the necessary computing power already. It is possible that in this case "if we build it, they will *not* come".

In short, the ITGC report provides a useful list of challenges and possibilities connected with the IT infrastructure at the University of California. The report does not, however, prioritize the identified needs, nor does it provide suggestions for funding the various proposed projects; it misses several items that would have a very direct and positive impact in research and education. Because of these omissions, the usefulness of this document is, in UCORP's opinion, limited.

Sincerely,

Jose Wudka, Chair
UCORP

cc: UCORP
        María Bertero-Barceló, Executive Director, Systemwide Academic Senate

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May 7, 2008

MICHAEL T. BROWN
ACADEMIC COUNCIL CHAIR

Re: Report of the UC Information Technology Guidance Committee (ITGC)

Dear Michael,

The University Committee on Planning & Budget has considered the report: Creating a UC Cyberinfrastructure, which was forwarded to the Academic Senate by Provost Hume. The report outlines a vision for development of a UC-wide cyberinfrastructure intended to enhance the University's ability to carry out its mission of teaching, research and public service.

Unfortunately, much of the report is nebulous. It makes clear that there are manifold benefits that could result from such a coordinated effort, but fails to estimate the costs involved. Clearly these costs will not be small, and it will be desirable to consider costs and benefits together so as to ascertain the most effective use of any funds that are available for this effort. Here too the report is unhelpfully vague, as it states, "The ITGC emphasizes the necessity to fund information technology as critical infrastructure, and to change current funding models to provide sustainable, renewable, funding." but does not indicate either what it means to fund something as "critical infrastructure" nor what "current funding models" are.

All in all, UCPB is hesitant to endorse this report. Although the various recommendations (summarized on p. 6 of the report) largely make sense, they are on occasion too abstract (#3), and often simply describe the need for further study (#5, #6, #7, #8, #9). Since this large-scale vision for the University's "cyberinfrastructure" will necessarily require significant investment (#2, #4), a report we could endorse would need to describe the size and sources of the funding, the timeline for a build-up, and describe the extent to which it should be provided centrally or by individual campuses.

The report does have one specific recommendation (#1): that the IT Leadership Council (whose membership includes chief information officers (CIOs) and IT leaders from the UC campuses, Office of the President, medical centers, and Lawrence Berkeley National Laboratory) should become the UC-wide IT governance body. Such a body should have Senate representation, and should, if constituted, prepare an appropriate business plan for the next three years indicating (1) how much money is needed, (2) where the funds should come from, and (3) what spending these funds will achieve for the University. Such a business plan should then be reviewed by the Academic Senate –

along with other stakeholders – and the importance of such expenditures more effectively ascertained in the context of other University priorities.

Finally, UCPB observes that this report, on the whole, represents a top-down approach, rather than a bottom-up approach. Committee members found this approach problematic as it goes against the grain of what many experts in information technology believe today – that you should allow ideas and best practices to bubble up in response to local needs, insights, and opportunities.

Thank you for the opportunity to opine on this report. If you have any questions about UCPB's comments, please let me know.

Sincerely,

Christopher Newfield
UCPB Chair

Copy: UCPB
Executive Director Bertero-Barceló