Davis Division Academic Senate

Request for Consultation Responses

IT Excellence Committee Report Review

June 22, 2011

Chair Powell would appreciate review and comment concerning the IT Blue Ribbon Committee Report. We regret distribution so late in the spring quarter. However, the issues addressed are broad and if implemented will impact the academic mission.

Administrative Partners (DANN TRASK)

June 15, 2011 1:46 PM

Response continued on next page.

Dear Professor Powell,

The L&S Executive Committee has reviewed the Report of the Blue Ribbon Committee on Information Technology Excellence. The committee notes that many of the essential integrated IT services, infrastructure upgrades, and innovative ideas (e.g. the Academic Hub concept) that were outlined, when taken together, could drastically change how we do business as a campus regarding IT.

To be a top-tier university, UCD needs faster, better and more robust data networks and equipment. The focus on the interrelationship between the research, academic and educational missions highlights the necessity for these improvements, outlining for the administration the directions in which UCD should be headed. The grand challenge will be the realization of the infrastructure needed to support the proposed changes.

That being said, while the overall approach in the report is proactive in terms of goals, the committee would like to express some concerns regarding follow-up prioritization and implementation:

- Given today's fiscal realities, a practical roadmap should be developed to prioritize the recommendations. Though visionary, not all goals will be equally possible in a reasonable time scale.

- More detail should be provided regarding which IT services are best organized and offered centrally and which are better suited as local implementations. While we realize that certain centralized functions and databases would be useful if adequately funded, others will continue to be best managed by individual departments and other units. Planning and consultation with departments will be necessary to keep duplication of effort to a minimum.

- The report presents a strong case for the need for improvements to the campus IT infrastructure—the operational and application "building blocks" underpinning our IT capabilities—and the committee is supportive of such efforts. However, we were far more dubious about the value and appropriateness of administrative involvement in initiatives relating to academic and educational functions. Those would seem best dealt with under at least the guidance of units associated with the academic enterprise.

- There should be a realistic estimate of the budget needed to implement the proposed improvements, detailing exactly how each would be funded (including ongoing staffing and other maintenance costs). Highlighting the need for a realistic funding model and clear oversight responsibilities could make a real difference in successful implementation.

- Given that the recent track record for centrally-sponsored academic and educational IT "improvements" has been just short of disastrous in many cases—for example, investing considerable money in software that that eventually turns out not to meet our needs—some real outside experts, including campus individuals with substantial hands-on knowledge, should be involved in the implementation and planning, both for much higher capacity and in enabling educational support functionality.

Sincerely,

Patricia C. Boeshaar, Chair
Executive Committee
College of Letters and Science

CAP Oversight Committee

June 19, 2011 8:06 PM

 General suggestions seem reasonable,if understandably still rather general. Would have liked to see a greater emphasis on making sure the infrastructure provided is easy to use. Good infrastructure with a poor user interface (e.g smartsite) will greatly limit its use and value. The report does discuss user support which is good, but probably should emphasize this even more.

Elections, Rules & Jurisdiction

May 31, 2011 2:39 PM

No response at this time.

Graduate Council

June 21, 2011 9:47 AM

No response at this time.

Information Technology

June 24, 2011 8:50 AM

The Information Technology Committee has reviewed the IT Excellence Committee Report Review and has completed the following response, but notes that the short deadline given somehow limited its ability to discuss the issue thoroughly.

The report lists many concrete ideas which would clearly help all members of the UC Davis community. It also lists many ideas which seem more conceptual in nature (e.g. transforming the library into an 'Academic Hub'). The vague ideas are more of a problem. There are many examples of ideas and suggestions that really need to have more details provided before they can be meaningfully assessed. Even when the report moves on to the details of how these ideas can be implemented, it leaves us with vague descriptions such as 'Create the financial basis for these changes and remove the barriers'. How do we create the financial basis? What specific barriers are we trying to remove? At one point the report speaks of 'cultural barriers' that have impeded the use of IT. No explanation is provided of what these barriers are.

While it is understood that this report tries to outline a long-range vision, there are notable omissions regarding fine-grain details and any real-world examples on which claims are based. The report lists many different things that the University could do. We are in agreement that many of these things *should* be done. But at the same time, we want to know a) 'how much this will cost?' and b) 'where the money will come from?' Given the current financial climate, the latter question should really be a key aspect of any UC proposals that seeks to build and expand our infrastructure. There are scant details in this report; though a vague suggestion is made that 'substantial cost savings can be made through consolidating and coordinating resources and services'. This may be true, but this seems to be the argument that is always made in these reports.

Some members pointed out that the report focuses on grandiose plans, but should rather focus on making the current infrastructure work. For example, make sure that moobilenet covers the entire campus. Committee members would like to draw the attention to the facilities west of 113 that also need up-to-date IT connectivity. Usually these facilities are forgotten. The report also ends with details of an appendix that will appear on a website that is 'to be announced'. The omission of supporting information doesn't help our job of fairly evaluating reports like these.

It often feels that top-level reports like this that suggest bold, large-scale changes to infrastructure are all written without any knowledge of the previous top-level report that suggested bold, large-scale changes to infrastructure. There seems to be a lot of overlap between these reports but very little interaction between the writers of each one. It appears that the overall meaning of this report can be boiled down to 'building better IT services will help build a better university'. Clearly, having a robust IT infrastructure is important to the future of UC Davis. A more detailed implementation plan (possibly identifying funding sources) would be welcome and would likely lead to a more informed discussion on some of the specific projects described in the report.

Planning & Budget

June 24, 2011 1:01 PM

CPB has reviewed the report of the Blue Ribbon Committee on Information Technology Excellence, "A culture of Innovation and Excellence Powered by Knowledge and Technology." CPB appreciates the work represented by the report. In the 'modern' age, a world-class university requires a cutting-edge IT system. The current IT system is far from that, and it hampers efforts to achieve excellence in teaching and research on campus.

CPB is concerned, however, not about the vision of the Blue Ribbon Committee on Information Technology, but about how a transformation of IT on campus will be carried out. CPB notes that there is a significant history, especially in the area of IT, of the campus making decisions to centralize activities in ways that have ended badly for faculty. As is true with all such plans, the details control the impact, and lack of consultation on details leads to poor results. Although a better campus-wide IT system is needed, its control by central IT should generally stop at the level of the NAM or wireless hot spot. Of course issues such as computer security and specialized facilities must be taken into consideration. The faculty would obviously not favor a form of centralization that resulted in computation and data storage becoming more, rather than less, difficult and obstructive. (The campus-wide imposition of SmartSite is a recent, very frustrating example of obstructive "improvements" imposed on the faculty.)

In some cases, for example, when locating computer clusters, which require specialized cooling and power systems, it may be necessary for central locations to be made available. Control, however, should be in the hands of the faculty. The diversity of the academic environment requires that control of hardware and software used for research and teaching rest with individual professors or their voluntary aggregation in research groups. UC Davis is not a corporation, and using corporate models of centralization can lead to disasters that damage the campus mission.

CPB also notes that there was a recommendation almost two years ago that IET receive an administrative review. In these tight budget times, an evaluation of IET is needed.

In addition to the general concerns articulated above, CPB has offers the following detailed comments:

Grand Challenges

1) "Create a top-tier cyberinfrastructure, an essential basis for research excellence and growth, as a fundamental campus priority."

CPB fully endorses this goal. Such a system needs to be designed with excess and redundant capacity, because the requirements of students, faculty and staff will be increasing over time, and frequent outages of heavily used servers will be unacceptable.

2) " Transform the Library...."

CPB feels that there must be significant input by faculty into such a transformation. The diversity of the needs of the faculty to excel in their teaching and research missions requires significant input into what an "Academic Hub" would be. If decisions are made based on a central body's perception of needs, significant errors are ensured.

3) "Develop a compelling student experience...."

CPB agrees that there needs to be 'ubiquitous' network connectivity, assuming this means fast, efficient and universal network access. In addition, web conferencing would aid in the research and teaching missions. On-line courses would, of course, need Academic senate input and oversight.

4) "Integrate technology...."

CPB notes that decisions should be made at the local level as to how such integration is accomplished.

Building Blocks

1) CPB endorses this numbered point fully.

2) and 3) Central high-performance computing centers at the campus level were phased out nationwide a number of years ago. Most faculty need a level of control of their computing facilities that cannot be accomplished by a central facility. In addition, there exist national computing facilities that are accessible to faculty if needed. Forcing this type of centralization will require an additional drain on faculty grant resources to support the central structure. In some cases, as for example when locating clusters, which require specialized cooling and power systems, it may be necessary for at least somewhat centralized locations be made available. It is important, however, that faculty who need access to their clusters or require non-standard computer systems to carry out their research not be forced into configurations that hamper their research activities.

4) In every discipline, there exist large-scale data bases that are already available. (For example, NIH now requires that data collected with its grants be made publically available other researchers.) There is no need to recreate everything at Davis. In addition, faculty must be involved in the development of any new database. The diversity of academic research results in widely different requirements across disciplines for computational and data storage systems. In addition, CPB notes that that access to and sharing of databases that include "electronic health records" are controlled by federal law. Some faculty will welcome help with making such data bases publically available, as required, and at the same time anonymous, as also required.

5) CPB notes that the Academic Senate is responsible for curriculum. Development of courses, including on-line courses (mentioned in the Blue Ribbon Committee's report), must be carried out in consultation with the Academic Senate.

6) Any partnership must have strong Academic Senate input. Most successful collaborations start from the bottom up with the research interests of faculty driving the process.

7) CPB feels that local control of computational/IET resources is better than the centralized system proposed. Ubiquitous access, large capacity, and high speed are all very desirable, but barriers to creative use of the campus-wide system are unwelcome. To avoid unforeseen consequences, however, ongoing, broad-based consultation with the faculty will be required at every step to establish appropriate funding models

8) The proposed leadership and governance structure seems to have completely left out the concepts of Academic Senate consultation and shared governance. This is not only unacceptable; it is also bad policy. The administration should provide leadership and resources for the campus's IT needs, but this must be done in consultation with the Academic Senate.

Research - Grants

May 31, 2011 2:39 PM

No response at this time.

Research - Policy

May 31, 2011 2:40 PM

No response at this time.

Undergraduate Council

June 16, 2011 12:04 PM

UGC supports the suggestions of the IT Blue Ribbon Committee report and appreciates the importance of advance IT capacities in undergraduate education.