

Two Outcomes of UC Berkeley's Campus-wide Information Technology Strategic Planning Process 2004-06

Campus Technology Council

January 10, 2007

Campus-wide Information Technology Strategic Planning

Executive Vice Chancellor and Provost Paul Gray launched a process in fall 2003 to develop an information technology (IT) strategic plan for UC Berkeley. Over the next two years, more than 200 members of the UC Berkeley community, including ten committees that advised and set policies for campus IT activities, were engaged in collaborative IT strategic planning for the campus. In addition, the Academic Senate Committee on Computing and Communications (COMP) surveyed department chairs about IT needs.

Two significant outcomes of the Campus-wide IT Strategic are featured in this document:

- IT Guiding Principles for UC Berkeley, which were developed during the first phase of the planning process and adopted in June 2004 (pages 3-5).
- Six critical IT Issues for UC Berkeley to address to ensure that the campus survives and thrives (pages 6-12).



UC Berkeley's IT Guiding Principles (adopted June 2004)

The University of California, Berkeley is complex in both its organization and its technology, requiring that competing information technology (IT) needs be carefully evaluated to ensure the optimal use of limited resources. Information technology decisions makers must therefore balance:

- innovation vs. stability/reliability
- standardization vs. autonomy/experimentation
- accessibility vs. security/privacy
- consensus vs. efficiency in decision making
- centralized vs. distributed services
- proprietary vs. open source



SUPPORT FOR TEACHING AND RESEARCH:

We will provide a responsive IT environment that enriches and enhances learning and creativity.

INTEGRATION AND INCLUSION:

Information technology will help UC Berkeley fulfill its teaching, research, and public service mission—to create, apply, and share knowledge with the citizens of California and the world—by allowing members of the campus community to communicate, collaborate, learn, and disseminate, within and across disciplines and campus borders.

SECURITY AND RELIABILITY:

Increasingly, the intellectual property and resources of our students, faculty, and staff are in electronic form, requiring that the campus IT infrastructure be stable, safe, and secure.



UC Berkeley's IT Guiding Principles continued

EASE OF USE:

Campus applications, systems, communications devices, and classroom technologies will be integrated and easy to use.

ALIGNMENT:

Campus priorities will drive UC Berkeley's IT strategies and investments. Information technology requirements differ among fields, and UC Berkeley will strive to allocate resources appropriately and accountably, anticipating and adopting IT innovations and standards where beneficial to the campus as a whole.

INFORMATION TECHNOLOGY EXCELLENCE:

Teaching, research, and public service require information technology that meets the highest standards of excellence. We will evaluate the quality of IT with the same rigor as the rest of our university programs





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Critical Issue 1: Teaching & Learning

How IT can support the teaching and learning activities at the heart of UC Berkeley's mission, including:

- Support of research-based learning
- Support of active/interactive learning
- Collaborative learning environments
- Information access and usability
- Copyright and intellectual property management
- A campus organizational structure for effective teaching and learning



How technology can support the experience for prospects, students, alumni, donors, and supporters in interacting with the campus.

- Service demands and expectations of students are outpacing the current service delivery models.
- The importance of revenue generated from students, parents, and alumni has changed considerably.
- Students are best served by staff and faculty who have access to student information that is seamlessly integrated and used throughout the campus.
- Students are best served when the University can officially account for all students with the State, and demonstrate its compliance with the growing range of regulations and policy changes in many areas including student enrollment, financial aid, athletic eligibility, homeland security, and others.



Critical Issue 3: Research

How IT can support research in all disciplines, and serve to interconnect the campus with the greater Bay Area research community.

Strategic technology needs for research at UC Berkeley:

- Basic IT resources
- Technical support
- Advanced collaborative and multi-site research
- Data stewardship and digital asset management
- High-performance computing, simulation, and visualization environments

Critical Issue 4: Security, Reliability, Access

How the IT environment can be made secure and reliable while maintaining the kind of access required of an open university.

Security

- Large number of unmanaged or mismanaged computers on our network
- Lack of adequate resources to bring campus systems into compliance with minimum standard
- Need of IT security related education and cultural change

Reliability

- Reliable, centralized backup service
- Reliable funding
- Reliable, physical network infrastructure
- Reliable computing security
- Reliable physical environment for information and services

Access

- Ubiquitous access to appropriate IT infrastructure and services
- Timely and integrated access to online information is impeded by missing or inadequate middleware components
- Physical infrastructure



Critical Issue 5: Governance, Funding & Structure

How IT governance, funding, and structure can be improved to advance UC Berkeley's IT Guiding Principles, and effectively and optimally serve the IT needs of users for teaching and learning, research and discovery, and student services and administration. Key findings from UC Berkeley's IT Self-Study:

- The IT investment process has been disconnected from the campus funding and budgeting process.
- A "silo-specific" and incremental budgeting approach has been applied to central administrative systems
- The AVC-IT/CIO has not managed (or necessarily know about) twothirds or more of the IT activity on campus.
- Central administrative roles are unclear with respect to instructional computing, research computing, and campus IT services.
- There is no mechanism to encourage IT managers to migrate toward "best practice" for either customer application development or workstation and desktop support.



Critical Issue 6: Information Technology Expertise

How to attract and retain the dedicated IT professionals needed to maintain a high-quality IT infrastructure.

This issue will be further defined at a future date.



For More Information

Visit the web site at:

http://technology.berkeley.edu/planning/strategic/

Contact:

Jon Conhaim, <u>conhaim@berkeley.edu</u>, 643-2255 Liz Marsh, <u>lizm@berkeley.edu</u>, 872-8442