IT@CSUEB: Strategic Plan for IT 2007-2011

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# Table of Contents

**Introduction**  
Page 3

**Strategic Imperatives**

- Imperative A – Solid Foundation of IT Infrastructure and Sound Fiscal Planning  
  Page 4
- Imperative B – Pedagogically Sound Application of Academic Technology Resources and Support for Faculty  
  Page 6
- Imperative C – Anywhere/Anytime Access to Services and Support for Student Success and Engagement in Campus Life  
  Page 8

**Advisory & Governance Structure**  
Page 10

- University-wide IT (UIT) Advisory Committee
- Technology Leadership and Coordination (TLC)
- University Technology Projects (UTP) Office

**Current Technology Initiatives**  
Page 12

- Funding Priorities
- Roadmap – Project Timelines
- Dashboards – Project Status and Prognosis Charts
Introduction

“The University values learning in an academic environment that is inclusive and student-centered. We value engagement in the civic, cultural and economic life of the communities we serve--locally, regionally, and globally. We value critical and creative thinking, effective communication, ethical decision making, and multi-cultural competence. We value the open exchange of ideas and viewpoints.”

CSUEB’s Values Statement [link]

“We strive to be known for:
 • Outstanding academic programs, recognized for their excellence
 • Curricula that foster active student participation through applied learning, research, and community service
 • High academic standards along with services and support that ensure each student the opportunity for success
 • A learning-centered experience where teaching is lively and engaging and individual differences are appreciated
 • An array of activities that promote students’ enjoyment and well-being”

CSUEB’s Vision Statement [link]

Excellence in teaching and learning, information sharing, and the exchange of ideas and viewpoints, along with anytime/anywhere access to resources and services, are defining features of the academically rich, student centered university experience we intend to provide for Cal State East Bay students. The goal of excellence in the use of information technology is an essential ingredient in achieving this vision.

Toward the realization of this vision, the strategic plan for IT@CSUEB focuses on the alignment of central and local information technology resources, services, projects and support structures with Cal State East Bay’s strategic Goals and Objectives [link], and with the CSU’s Integrated Technology Strategy [link]. Structurally, the plan is presented as a set of three strategic imperatives: 1) a solid foundation of IT infrastructure and sound fiscal planning; 2) the pedagogically sound application of academic technology resources and support for faculty; and 3) anywhere/anytime access to services and support for student success and engagement in campus life.
Strategic Imperatives

**Imperative A:  Solid Foundation of IT Infrastructure and Sound Fiscal Planning**

"An Efficient, Well-Run University with a Culture of Accountability. We must create, sustain, and reward a culture of excellence, efficiency, accountability, and continuous quality improvement —"a university that works" — as a requirement for survival as well as the foundation for growth and future success."

CSUEB’s Framework for the Future – Mandate 1

“Update information systems and infrastructure.”

An Objective for Mandate 1

**Strategies/Goals & Objectives**

**A.1. Provide a solid foundation of IT infrastructure, with life-cycle replacement built into planning at every level of IT investment.**

A solid information technology infrastructure is a fundamental requirement for Cal State East Bay’s success in achieving its academic and administrative agendas. Therefore, it is no longer appropriate to plan for technology use in an ad hoc manner, and it is no longer appropriate to fund technology on an ad hoc (or crisis) basis.

**Objective A.1.a.** Establish appropriate standards for university-wide hardware, software, network, and storage system products, as well as appropriate service level criteria.

**Objective A.1.b.** Coordinate university-wide system, server, and workstation replacement cycles.

**Objective A.1.c.** Forecast multiyear university-level budget requirements for lifecycle maintenance and replacement of network infrastructure equipment and systems, as well as central and departmental servers and information systems.

**Objective A.1.d.** Provide life-cycle replacement and support services for faculty and staff computers.

**A.2. Strengthen university-wide IT security and identity management.**

Security of information and information technology is a university-wide concern, requiring a university-wide response: clear and forceful policies, appropriate plans and procedures, and ongoing programs of education and awareness.
Objective A.2.a. Establish and institutionalize an office (and function) of information security, education, and awareness.

Objective A.2.b. Establish an information architecture and data administration function.

Objective A.2.c. Establish an incident response team, and associated policies and procedures for addressing information security issues and operations.

Objective A.2.d. Leverage university-level data warehouse systems to improve information security and reduce shadow systems.

Objective A.2.e. Provide NetID-based authentication and authorization to university systems and resources.

A.3. Provide responsive well-integrated administrative and instructional information systems that meet the self-service and informed decision-making needs of our campus community.

Staff must have convenient and timely access to accurate and complete information for planning, reporting and decision-making purposes. Faculty and students must have convenient and timely access to accurate and complete student and course information for advising and registration, as well as for managing teaching and learning activities.

Objective A.3.a. Coordinate planning, acquisition/development, and implementation of university-level information systems and services, such that integration issues are appropriately addressed.

Objective A.3.b. Deliver web-based access to essential university systems and services.
Imperative B: Pedagogically Sound Application of Academic Technology Resources and Support for Faculty

“Strong Growth and Full Enrollment with Personalized Learning and Expanded Access. We must aggressively grow and strategically manage our enrollment, benefiting all of our campuses and locations, while increasing access for students from all backgrounds and also strengthening our hallmark personalized learning/teaching environment.”

CSUEB’s Framework for the Future – Mandate 2

“Expand, renew, and update curriculum and pedagogical approaches to teaching and learning that will meet changing societal and market needs.”

“Broaden access and meet changing student needs and preferences with online learning.”

Two Objectives for Mandate 2

“A Tradition of Teaching, Learning, and Academic Quality — Emphasized and Reinforced. Our core mission of teaching, learning, and commitment to the success of students of all backgrounds must be honored, reinforced, and reflected through our academic programs, practices, and faculty — and understood as the measure by which our quality is defined and judged.”

CSUEB’s Framework for the Future – Mandate 5

“Expand online and technology assisted programs, teaching, and learning.”

An Objective for Mandate 5

“Our Quest for Distinction Realized. We must identify, develop, cultivate, and invest in the programs, features, and aspects of a CSUEB education we wish to be known for, and we must promote them consistently and creatively.”

CSUEB’s Framework for the Future – Mandate 6

“Invest in and build a reputation for information and technology literacy, online learning, and learning technologies.”

An Objective for Mandate 6

Strategies/Goals & Objectives

B.1. Reduce the funding gap for academic technology.

CSUEB’s academic technology funding gap is expanding at an accelerated rate as a result of recent IT budget cuts and growing demand for IT support and services.

Objective B.1.a. Plan for and conduct a student referendum on a proposed technology fee if the State does not provide adequate academic technology funding.

Objective B.1.b. Streamline routine campus-wide IT infrastructure and support services to achieve efficiencies of scale for operations that can be done better and at less cost in a centrally coordinated manner, in order to provide greater support for academic technology.

Objective B.1.c. Coordinate bulk purchases of computers and servers where we have an opportunity to secure larger discounts.

B.2. Provide appropriate classroom technologies.
Assisting faculty efforts to integrate technology into instruction requires classrooms that are appropriately equipped, as well as responsive classroom support services.

**Objective B.2.a.** Design, develop and maintain technology-enabled “smart” classrooms, labs, and learning spaces.

**Objective B.2.b.** Establish appropriate processes and service level criteria for supporting faculty within classrooms.

**B.3. Support academic department and faculty efforts to develop and deliver accessible and pedagogically sound content and learning objects for technology-enhanced, hybrid, and online courses and programs.**

National trends suggest that we will increasingly be asked to support departments or groups of faculty engaged in curriculum-level academic transformation (designed to improve student learning while reducing institutional costs), and in moving entire degree programs online. In order to successfully scale our faculty support services to meet this emerging demand, a team approach will be necessary – working closely with staff within the Faculty Center for Excellence in Teaching, the Library,

**Objective B.3.a.** Scale our faculty support services to meet this new demand by creating integrated support teams composed of staff from MATS, Faculty Development, and the Library.

**Objective B.3.b.** Provide centrally delivered support for distributed technology infrastructure systems and services – enabling college IT staff to focus greater attention on the discipline specific technology needs of academic departments and faculty.

**Objective B.3.c.** Establish support for (and promote faculty use of) emerging instructional technologies, mobile computing environments, and network-based information and learning resources.
Imperative C: Anywhere/Anytime Access to Services and Support for Student Success and Engagement in Campus Life

“Vibrant University Villages. We must plan, develop, and build the infrastructure for a lively, vibrant, and sustainable "University Village" at each of our campuses, where “24/7” facilities and activities promote the quality of life and well-being of students, faculty, and staff, as well as surrounding communities.”

CSUEB’s Framework for the Future – Mandate 3

Strategies/Goals & Objectives

C.1. Provide a dynamic online presence for university services, information, advising, academic programs, learning resources, and campus life.

When asked to write about their experiences with technology, one student (E. Woolsey) remarked that “asking a college kid about technology is like asking a fish about water… it’s clearly critical, but so ordinary it is not a very compelling topic to write about.” Today’s students simply expect the convenience, connection, and control available to them in the always on (always connected) world. They expect the same of their university experience.

Objective C.1.a. Provide online access for students to university services that can be delivered in a technology-mediated format.

Objective C.1.b. Collaborate with deans and department chairs to move selected high-demand programs online.

Objective C.1.c. Collaborate with faculty to accelerate the movement of course content online.

Objective C.1.d. Provide 24x7 support for faculty and students engaged in technology-enhanced, hybrid, and online programs, courses and learning activities.

Objective C.1.e. Provide dynamic online presence for social networking, clubs, and other campus life activities.

C.2. Leverage our computing, communications, and learning management system infrastructure in support of efforts to improve student retention and graduation rates.

Quoting from CSUEB’s response to point #11 of the CSU Facilitating Graduation initiative, “Retention is closely related to student success. When students get into academic trouble they are more likely to drop out or be disqualified. All too often students wait to get help when they are already in serious academic difficulty. We wanted to devise a system that would warn students early on in their courses that they were not
doing well and needed to seek assistance. We wanted to do this in a way that was not burdensome to the faculty. Thus, we designed an electronic Early Alert System.”

“The goals of the early alert system are to: 1) improve quality of student work in class; 2) increase student retention and progress to degree; 3) increase FTE; 4) increase awareness and utilization of campus support programs by students; 5) enhance advising by faculty and staff advisors; and 6) increase interaction between students and faculty.”

Objective C.2.a. Support efforts to expand and enhance the early alert system.

Objective C.2.b. Support efforts to provide tutoring assistance online.
Advisory & Governance Structure

Chief Information Officer (CIO)

Charge: The CIO is responsible to the President on matters of university policy and planning related to IT infrastructure and support services. The CIO provides leadership for all aspects of IT which includes academic and administrative computing, and networking and communication services as a combined and integrated set of functions, as well as the development and support of the campus’s enterprise level information systems, IT infrastructures and applications, and campus-wide user support services.

University-wide Information Technology (UIT) Advisory Committee

Charge: UIT shall have primary responsibility for advising the Chief Information Officer (CIO) on matters of university policy and planning related to IT resources, infrastructure, service, support, security and innovation. The work of the committee shall include developing CSUEB’s IT Strategic Plan in
consultation with the Provost Council, the Administrative Divisions, and the Academic Senate; aligning the Plan with the University’s strategic goals and objectives; establishing funding priorities for IT initiatives, projects and services outlined within the Plan; facilitating successful university wide implementation of the Plan; and reviewing and reporting progress in achieving the desired outcomes of the Plan.

**Technology Leadership & Coordination (TLC) Core Group**

**Charge:** Work together with the CIO to cause university wide technology leadership and coordination to occur more effectively. Establish IT coordination subgroups needed to effectively and efficiently coordinate IT functions that have both centralized and distributed components. Establish standard operating procedures, workflows, and best practices where appropriate. Facilitate sharing of (and secure, easy access to) information about IT services, projects, issues, and solutions for IT staffs university wide through the use of advanced collaboration technologies, e.g., websites, blogs, wikis, etc. Plan IT professional development activities for IT staffs university wide.

**University Technology Projects (UTP) Office**

**Mission:** The UTP Office, while reporting to the CIO, functions as an independent project office. This allows the UTP Office to work across all University divisions. The UTP has 6 FTE, but may have as many as 40 FTE additional assigned on projects.

**Online & Hybrid Programs**

**Structure:** The Online & Hybrid Programs unit (under the Faculty Support Services umbrella) has a dual reporting relationship. Programmatically, its priorities are established by the Provost. Operationally, it reports to the CIO with advisory input from the Faculty Support Services (FSS) Advisory Committee.

**Mission:** The Online & Hybrid Programs unit provides leadership, coordination, project management, training and support for the design and delivery of online and hybrid instruction. It also serves as a resource center for the Provost, deans, chairs, program directors, and faculty interested in growing enrollments via online instruction, or achieving other technology-enabled academic transformations.
Current Technology Initiatives

Top 3 Funding Priorities for FY2006/07

1. Replacement of Aging Servers
2. Expansion of Storage-Area-Network (SAN) Capacity
3. Create Additional “Smart” Classrooms

The full list of Funding Priorities [link] considered by UIT addressed each of our major funding gaps that need to be closed in order for IT@CSUEB to achieve compliance with CSU Baseline Standards for Hardware/Software/Network Access, Training, and Support.

Roadmap – Project Timelines
Dashboards – Project Status and Prognosis (as of June 2006)

Prognosis for University Network & Infrastructure Projects
Fiscal 2006/2007

Legend
Good
Warning
Issues

Timeline
Budget
Staff Resources
Deliverables
Risk

Server Replacements
Network Security
ID Management/NetID
Desktop Infrastructure
Wireless Expansion

Prognosis for Academic and Curricular Projects 2006/2007

Legend
Good
Warning
Issues

Timeline
Budget
Staff Resources
Deliverables
Risk

Blackboard Upgrade 7.x
E-Portfolio
Smart Classrooms
Streaming Media
Learning Commons
Help Desk
TaskStream
Assistive Technology Initiative
Prognosis for University Information Systems Projects
Fiscal 2006/2007

Legend
Good
Warning
Issues