

TECHNOLOGY PLAN

Convergent Information Technologies: Data, Voice, and Video



City College of San Francisco

November 30, 2002

Foreword

The Technology Plan is a continuously developing document that guides the planning and delivery of information technology services at the City College of San Francisco. Updated versions of the plan are issued periodically on the basis of additions and modifications recommended by the Information Technology Policy Committee and approved by the Chancellor.

Comments and suggestions should be directed to the General Manager of Information Technology Services.

Technology Plan

City College of San Francisco

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Mission, Goals, and Vision

Mission, Goals, and Vision

Mission Statement

Information Technology (IT) is a service that supports the teaching and learning mission of the City College of San Francisco through the use of information technology resources for all aspects of college operations, educational and administrative.

Goals and Outcomes

The overall goals and anticipated outcomes guiding the growth and development of Information Technology at CCSF are the following:

- I. Improved access to college services
 - A. Students will have more access to City College programs and services from work, home or from one of our campuses.
 - B. Disabled students will enjoy greater access to City College than ever before.
 - C. Faculty and staff will have greater access to College information technology tools, supporting increased job performance.
 - D. The community will have consistent, quality information about City College, promoting access and increased utilization of resources.
- II. Improved access to educational opportunities
 - A. Students will be able to access more instruction on demand.
 - B. Testing will be less complicated because students will be able to take tests at all times in laboratories around the College.
 - C. Students will be able to be more efficient by using technology in laboratories for tasks that require practice and repetition.
 - D. The learning experience both in class and out of class will be richer and more engaging with the use of multi-media, smart classrooms and the Internet.
 - E. Faculty and staff will have increased access to technology training opportunities.
- III. Improved student retention and success
 - A. Programs will be able to accommodate diverse learning styles through one to one contact; group work and cooperative/collaborative learning projects; online instruction and telecourses.

- B. Students will have more accurate information about the courses they need and the best way to access those courses to meet their scheduling needs and their goals.
- IV. Improved institutional effectiveness and efficiencies through the deployment and application of appropriate technology
- A. College operations will be more efficient, reliable, and cost-effective.
 - B. College employees will have better access to data with improved capability for processing and retrieving information.
 - C. College employees will have better, more accessible, and more efficient communication.
- V. Enhanced the image and reputation of the College through technological excellence

Vision

Through the strategic application of technology, Information Technology will improve access to the services and educational opportunities offered by City College, increase student success and retention, promote the effectiveness and efficiency of operations, and enhance the image of the College.

Strategic Goals, Objectives, and Activities

Strategic Goals, Objectives, and Activities

Strategic goals, objectives, and activities for the next three years are provided for four technology areas under the direction of Information Technology Services (ITS), including educational technology services, network services, administrative information services, and IT management and operations. For each strategic goal or priority, objectives and activities have been formulated for implementation.

Strategic Goal 1: Educational Technology Services

1. Develop and implement enhanced educational technology services
 - 1.1. Conduct external and internal scans leading to the identification of strengths, weaknesses, opportunities, and plans for development and improvement
 - 1.2. Continue the development of on-line courses and programs
 - a. Provide support for continued development of online courses for an expanded number of courses and graduation requirement courses
 - b. Institutionalize the online courses already developed within departments to become additional courses which will provide expanded enrollment
 - c. Explore alternative business models for developing new markets external to the College for online courses
 - d. Evaluate and select a long-term web-hosting solution for online courses and faculty WebPages
 - 1.3. Develop and implement an improved computer lab arrangement and multi-media classrooms
 - a. Increase the quality and capacity of computer lab facilities that are available for courses across the District
 - b. Increase the quality and capacity of electronic classrooms that are available for courses across the District
 - 1.4. Continue to provide professional development programs in technology for faculty and staff
 - a. Increase faculty use of web-tools in support of instruction and incorporate these technologies into a broader range of courses
 - b. Expand department-specific training in the use of technology to support instruction
 - c. Offer computer-based training courses for faculty and staff to self-train in a variety of topics

- 1.5. Assess and plan the development of new instructional technologies
 - a. Continue to support video distribution for BEMA at the current level of service
 - b. Evaluate and pilot video-streaming or interactive television for delivering instruction to students
 - c. Develop a comprehensive plan for the use of video technology across the District
 - d. Develop a plan for the deployment and distribution of digital satellite downlink programming across the District for the CCCSAT project

Strategic Goal 2: Network Services

2. Develop and implement enhanced network services
 - 2.1. Conduct external and internal scans leading to the identification of strengths, weaknesses, opportunities, and plans for development and improvement, including next generation of converged network technologies
 - 2.2. Complete preparatory arrangements for the rollout
 - a. Plan and implement the desktop rollout throughout the District
 - b. Develop standards for network services, appliances and access
 - c. Develop training plan and help desk policies and procedures
 - d. Develop RFP and acquire equipment, software, and services for rollout
 - e. Complete network management preparation, with tools and testing
 - 2.3. Complete phase 1 of rollout
 - a. Install and test core network services (email and other network services)
 - b. Pilot test rollout
 - c. Implement delivery and installation of desktops
 - 2.4. Complete phase 2 of rollout
 - a. Install and implement fax services
 - b. Install and implement group ware services
 - c. Install and implement wireless networks
 - 2.5. Complete phase 3 of rollout
 - a. Make help desk refinements for ongoing service
 - b. Make training refinements for ongoing service
 - 2.6. Complete final network connectivity to all campuses

- a. Complete construction of the network infrastructure (including manhole repair and sealing and installation of network equipment)
 - b. Develop and implement inter-campus connectivity solution between all campuses
 - Conduct feasibility of fiber and microwave connectivity
 - Issue RFP and select service
 - Execute
 - c. Plan and provide wireless access to web services at pilot locations
 - d. Plan, develop and deploy a comprehensive network management strategy including security, disaster recovery, performance and diagnostics
- 2.7. Develop and implement solutions to provide universal access to web-based services and resources for all students through the internet, including
- a. Priority areas:
 - LRC access areas for students
 - Discount purchasing of PCs
 - Student email service
 - Web portals for all students
 - ISP services for students
 - b. Areas for further investigation:
 - PC/laptop loan program
 - Information ports/kiosks
 - Wireless access
 - Corporation computer donation program
 - Improved computer lab access
- 2.8. Develop plans and provide improved access and support for persons with disabilities
- 2.9. Develop and implement next generation telephone system and services
- a. Determine organizational location of voice/telephone system
 - b. Evaluate voice communication options
 - c. Issue RFP and acquire new telephone system capability
 - d. Execute

Strategic Goal 3: Administrative Information Services

3. Develop and implement enhanced administrative information software and services

- 3.1. Conduct external and internal scans leading to the identification of strengths, weaknesses, opportunities, and plans for development and improvement
- 3.2. Implement Banner version 6.0
- 3.3. Examine and improve existing work processes to take better advantage of Banner work-flows and improve college operations
 - a. Non Credit Attendance Accounting
 - b. HR Processes
 - c. A & R Processing
 - d. Finance and budget
 - e. Class schedule development
- 3.4. Implement “unused” Banner functions, such as:
 - a. Direct Deposit for Financial Aid
 - b. Degree Audit/CAPP
- 3.5. Develop and implement enhanced solutions for Student Development
 - a. Document imaging
 - b. Electronic transcript and degree audit
 - c. Educational plans and student tracking
 - d. Student identification cards with bar codes
 - e. Banner enhancements (TBD)
 - f. On-line orientation and virtual college tour
 - g. Transfer tracking
 - h. Lab networking
 - i. Improvements to SARS/GRID
 - j. Non-credit attendance accounting
- 3.6. Develop and implement enhanced solutions for Academic Affairs
 - a. Web-based grades
 - b. Wait Lists
 - c. Distance Learning course management
 - d. Scheduler’s Aid and Master Schedule
- 3.7. Develop and implement enhanced solutions for Administrative Support
 - a. EIS/Data Warehouse
 - b. Budget Module
 - c. Alumni Development

- d. Fixed Assets
- e. Facilities project management
- f. Financial Aid interfaces to auxiliary enterprises such as bookstore, etc.

Strategic Goal 4: IT Management and Operations

- 4. Develop and implement enhanced IT management and operations
 - 4.1. Conduct external and internal scans leading to the identification of strengths, weaknesses, opportunities, and plans for development and improvement
 - 4.2. Develop and implement processes and procedures for the acquisition and replacement of technology:
 - a. Review process
 - b. Approval of specifications and standards
 - c. Replacement procedures for aging technologies
 - d. Incorporate issues related to total cost of ownership – technical support, warranties, etc.
 - 4.3. Establish stronger “structures” to improve the delivery of IT resources to the campus community:
 - a. Implement service level agreements with user departments to improve customer service
 - b. Develop a cadre of *experts* in the user community to extend technical support and consulting services
 - c. Develop and implement a staff/users development and training program for the application and use of technologies deployed at CCSF
 - d. Establish a fully functional and responsive “one-stop shop” helpdesk that provides users the capability to submit their own work orders and see the status of open work orders via the web.
 - 4.4. Strengthen and improve IT operations and management
 - a. Provide higher reliability and availability of servers, install a comprehensive UPS and power generation system for the Computer Center
 - b. Install redundant servers for mission-critical applications
 - c. Refine the allocation process for consulting services to improve support for IT functions
 - d. Review and make recommendations on organization of ITS
 - e. Review and make recommendations on dispersed technical personnel and their relation to ITS

- f. Review and make recommendations on relation between LRC-managed technologies, BEMA-managed technologies, and ITS-managed technologies
- 4.5. Establish policies for the following areas
- a. Management/control of web content and publishing standards (College website, advisory committee, webmaster and organization and standards for development)
 - b. Network use and privacy
 - c. Copyright and intellectual property rights
- 4.6. Continue to enhance the shared-governance system for IT
- a. Establish a Technical Review Committee to develop and enforce web, hardware, software and network standards
 - b. Establish a high-level external technology advisory committee consisting of prominent vendors and community leaders
 - c. Integrate planning for all areas of IT with ITPC leadership for planning and policymaking
 - See TLTR Technology Plan (Appendix A)
 - See LRC Technology Plan (Appendix B)