Berkeley City College Technology Plan

Five Year Plan   2009-2014
Peralta Community College District
Berkeley City College Technology Planning Committee

Berkeley City College

Technology Action Plan

Table of Contents

Berkeley City College

Technology Committee
Membership

Reporting directly to the Roundtable, the Technology Committee serves the purpose of the shared governance decision-making process at BCC. The committee is composed of representatives from all constituency groups.

2012- Membership

Co-chairs:

May Chen, Ph.D.	Vice President of Student Services
Leonard Chung	Instructor, Computer Information Sciences/Business

Members:

Fabian Banga, Ph.D.	Department Chair, Modern Language; Distance Education Coordinator
Linda Berry, Ed.D.	Vice President of Instruction
Joshua Boatright	Department Chair, Librarian
Ramona Butler	Secretary, Student Services
Shirley Fogarino	Public Relations Officer; Instructor, Business
Bryan Gibbs	Multimedia Services
Vincent Koo	Campus Network Coordinator
Roberto Gonzalez	Alternate Media Specialist
Brenda Johnson	Dean, Student Support Services
Lee Marrs	Department Chair and Instructor, Multimedia Arts
Loretta Newsom	Admissions and Records Specialist
Siraj Omar, Ph.D.	Department co-chair, Science; Instructor, Chemistry
John Pang	Supervisor, Business Office
Student representative	

Executive Summary

The Berkeley City College (BCC) Technology Plan is part of the college's integrated institutional planning. This working document is developed to assist the College in accomplishing goals and objectives stated in the BCC's Education Master Plan so that the College will be able to continuously improve its institutional effectiveness and fulfill its mission.

The vision of BCC's Technology Plan is below.

> *Berkeley City College uses technology to support teaching and learning, enhance accessibility to educational opportunities, personalize student services, and provide effective administrative processes to meet the changing needs of the college community.*

This Plan provides a roadmap for addressing project prioritization and key issues in the deployment of technology in instructional, student services, and administrative units.

Through a shared-governance process, BCC utilizes SLO assessments and prioritized needs identified in Annual Program Updates (APUs) and Program Review to:

1. Assess and prioritize needs for technology updates, upgrades, and expansions; phase out obsolete equipment/hard- and soft-ware;
2. Identify and evaluate funding sources on-campus, through grants, in the district office, and in the community, and allocate funds to implement strategies that reflect the vision and accomplish technology objectives;
3. Support the technology staffing plan through staff development training so that IT personnel are well-trained to implement and support new technologies at Berkeley City College.

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Berkeley City College
Technology Action Plan

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Introduction

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The objective of Berkeley City College's (BCC) Technology Action Plan is to provide a roadmap for addressing project prioritization and key issues facing technology deployment and use at BCC.

The Technology Action Plan for BCC functions as a guide to the allocation and use of technology resources in support of student learning and institutional effectiveness at Berkeley City College. The purpose of the plan is to further the mission, vision and strategic directions of the college, and to align relevant sections of the Peralta District Technology Plan for the campus. It is to be reviewed and updated every three years in conjunction with the college's updated Educational Master Plan.

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College Mission

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Berkeley City College's mission is to promote student success, to provide our diverse community with educational opportunities, and to transform lives. - Adopted by the Peralta Board of Trustees April 12, 2005

BCC's mission statement defines the institution's broad educational purposes, its intended student population, and its commitment to achieving student learning. The College is committed to use its technology resources to support student learning programs and services and to improve institutional effectiveness.

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Technology Action Plan

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Vision

Berkeley City College uses technology to support teaching and learning, enhance student access to educational opportunities, personalize student services, and provide effective administrative processes to meet the changing needs of the college community.

a. BCC commits to enhancing the operation and effectiveness of the institution through technological services, professional support, facilities, hardware and software updates and upgrades.

b. BCC provides quality training in the effective application of its information technology to students and personnel.

c. BCC systematically plans, acquires, maintains, and upgrades or replaces technology infrastructure and equipment to meet institutional needs,

d. BCC distributes and utilizes technology resources to support the development, maintenance, and enhancement of its programs and services.

Integrated Technology and Institutional Planning

Through a shared governance process, BCC's technology planning is integrated with the college's institutional planning process. The Technology Action Plan was developed and vetted through the process of developing Annual Program Updates and Program Reviews, and was distributed at various Council/participatory governance committee meetings. The outcomes of this plan reflect the college's strategic directions. BCC systematically assesses the effective use of technology resources and uses the results of evaluation as the basis for improvement.

Guiding Principles

These guiding principles provide overall direction for the goals, strategies, and implementation of the Technology Action Plan. The successful application of technology at Berkeley City College will:

- integrate instruction, student services, business, and other BCC functions;
- integrate technology planning, budget, and expenditures;
- sustain continuous institutional effectiveness;
- foster student learning and success;
- consider ease-of-use and security before adoption;
- encourage creativity and innovation, along with efficiencies and sharing of resources;
- commit to universal design with respect to accessibility for persons with disabilities;
- include collaborative input for decision-making;
- address staffing needs to match college technology infrastructure;
- integrate with college plans and program reviews;
- evaluate progress on an ongoing basis;
- support the college mission.

Major Technology Components

Major components to be included in this plan include audio-visual, software, hardware, network, telephone services, computer lab support, distance education needs and expansions, instructional technology and assistive technology. Part of the data for identifying technology needs may be found in BCC's 2008 distance education annual report and in the Chuck McIntyre report.

Technology Action Plan – Goals and Action Plans

A.   **Access:** Provide secure computer and internet access to learning resources and support services.

1. Identity management (District): Develop and implement a user account system that requires students to individually log into Peralta network resources such as lab computers, library databases, and all other publically accessible computers. Conduct college business using Peralta user accounts, rather than personal email. [ACCJC Standards: IIC1d, IIIC1d.]

2. Computer lab operations:
Develop college standards to adequately staff and support current and future proposed student computer labs, including high tech lab for persons with disabilities. To extend access to technology, BCC continues to enhance and implement plans to offer workshops and open labs/computers for instructor, staff, and students. [ACCJC Standards: IIC1c, IIC1d, IIIA2, IIIC1a.]

3. Computer lab hardware and software:
Conduct ongoing evaluations of the adequacy of student computer lab hardware and software to meet the needs of instructional programs. These evaluations, including Annual Program Update data and an inventory with identified computer age serve as important criteria for prioritizing replacement of lab hardware and software. The college will develop, update, and upgrade to provide accommodations and assistance to students with disabilities, ensuring equal and timely access to college programs and services while facilitating achievement of their educational goals. [ACCJC Standards: IIC1d, IIIC1c.]

4. Online and hybrid courses and programs (shared with District): Increase computer and internet access for students, faculty, and staff, providing technical infrastructure and support for additional online and hybrid courses and programs; offer general education courses to enable distance education students to obtain an AA Liberal Art degree. [ACCJC Standards: IB7, II2d.]

5. Online learning and support services (shared with District): Provide enhanced and expanded online access to learning resources and student support services to assure equitable access and meet identified student needs, including fully utilizing SARS functions, counseling, tutoring, library, etc. Ensure that online/hybrid students have

capability of providing feedback on classes and services provided. [ACCJC Standards IIB3a, IIC1c.]

6. Virtual desktop computing: Develop and implement a server-based virtual desktop environment that enables authorized network access to specialized instructional software from any college computer.[1] [ACCJC Standards: IIICd.]

7. College-wide hardware and software: Support updates, upgrades, and expansions, including hardware and software in Instruction, Student Services, Business Office, and President's Office.

<u>**Action Plans:**</u>
- Link program approval and planning to technology feasibility and sustainability review.
- Enhance online support services for online and on-site students.
- Virtualize laptops and desktops on campus.

B. **Instructional Technology:** Support the success of all students through the development of instructional technologies, including the delivery of instructional media.

1. Instructor support: Provide faculty training and support for the development and delivery of instructional technology resources to students on and off-campus. [ACCJC Standards: IIC1b, IIIC1a.]

2. Online lectures: Develop standardized and automated processes for capturing on-campus lectures to publish online. [ACCJC Standards: IIIC1d.]

3. Smart classrooms (shared with District): Complete the installation of updated standardized projectors/players, audio and control systems in all relevant classrooms. Develop standards for maintaining and upgrading smart classrooms. [ACCJC Standards: IIIC1c.]

4. Student response systems: Develop and support an institutional standard for student response systems in the classroom. [ACCJC Standards: IIIC1d.]

<u>**Action Plans:**</u>
- Complete Smart Classroom upgrades.
- Conduct training for effective use of smart classroom equipment.
- Use digital technologies to enhance learning, stream content from smart classrooms to student's mobile devices, and post videos of instruction on web venues.

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[1] The core of the concept of computing virtualization is that desktop computers are replaced by much less expensive thin client work stations (typically without internal memory, storage, or processors), several of which are attached to a single server that replaces the processor, memory, and storage typically found on desktops that makes them much more expensive. Small units of virtualization hardware and software are used with each thin client work station to allow this to work seamlessly.

C. **Campus Computing:** Improve technology systems to increase institutional efficiencies and provide long-term support for campus computing needs.

1. **Network application support:** Develop standardized procedures for requesting network applications and services. Use the BCC Help Desk to centralize user support requests for network applications. [ACCJC Standards: IIC1d, IIIC1a.]

2. **Computer hardware and software standards:** Maintain up-to-date computer hardware and software standards for institutional purchasing and support. Replace computers at least once every 4 to 5 years to ensure adequate computing resources for students, faculty, staff and managers. [ACCJC Standards: IIC1d, IIIC1c, IIID1a.]

3. **Printer standards and support:** Develop standards to govern the purchasing, installation and support of office and lab printers. [ACCJC Standards: IIC1d, IIIC1d, IIID1a.]

4. **Institutional software licenses:** Provide institutional licensing and ongoing funding for widely used software such as office-productivity, online courses, antivirus protection, and website content management. [ACCJC Standards: IIIC1a, IIID1a.]

5. **Policies and procedures (shared with District):** Support continuous improvement and development of policies and procedures for college-wide technology requests, usage, services and support. [ACCJC Standards: IIIC1a.]

Action Plans:
- Identify software licenses to be purchased and managed by District.
- Publish specifications for computer purchases using special funding and/or general funds.

D. **Network Infrastructure:** Upgrade and maintain the network infrastructure to support comprehensive wireless, voice, video, and data communications (shared with District).

1. **Wireless access:** Build on the existing wireless infrastructure to implement comprehensive wireless access for students, employees and authorized guests throughout all college locations. [ACCJC Standards: IIIC1d, IIID1a.]

2. **Network management:** Implement network management tools to monitor and control all critical network resources. Develop emergency response procedures for network outages or attacks. [ACCJC Standards: IIIC1a, IIID1a.]

3. **Network storage:** Provide secure and centralized network storage, backup and recovery services to meet the needs of the college. Develop a data archiving and retrieval process. [ACCJC Standards: IIIC1a.]

4. **Disaster recovery:** Develop a disaster recovery plan to restore access to critical

information resources in case of a catastrophic outage. Determine ways to proactively minimize risks. [ACCJC Standards: IIIC1a, IIID1a.]

Action Plans:
- Complete installation of wireless access across campus.
- Ensure remote back-ups of on-site servers are adequate and operational.

E.   **Technology Support:** Provide ongoing training and technology support services to meet the needs of students, faculty, staff and managers.

     1. Help Desk (shared with District): Develop a responsive and comprehensive Help Desk that handles all technology support requests in a timely and efficient manner. [ACCJC Standards: IIIA2, IIIC1a.]

     2. Service level expectations: Develop service level expectations to describe support and service levels based on current staffing levels. [ACCJC Standards: IIC1d, IIIA2, IIIC1a.]

     3. Technical staff and management (College and District): Develop a staffing plan for technical staff and managers to support the complexity and size of the District and colleges.[2] The plan should be part of a college-wide staffing plan and requests. [ACCJC Standards: IIC1d, IIIA2, IIIC1a.]

     4. Technology training for operations and support: Provide ongoing training and support in the use of productivity technologies for faculty, staff and managers. [ACCJC Standards: IIC1b, IIIC1b.]

     5. Technology training for learning and instruction: Provide ongoing training and support in the use of technologies for students, faculty, staff and managers. [ACCJC Standards: IIIC1b.]

Action Plans:
- Annually update and upgrade charge and make-up of Technology Planning Committee and align functions with streamlined planning processes.
- Assign technical staff to specific college service areas.
- Offer and conduct staff and faculty training regularly.

Staffing and Leveraging Resources

The 2010 Program Review and 2011 Annual Program Update process have identified needed supplies, equipment, and furniture that are associated with technology updates, upgrades, and

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[2] Please see 2011-12 BCC staff plan at web.peralta.edu/pbi/files/2010/.../Summary-of-BCC-Priorities-for-PBC.docx

expansions. The reports also specifically illustrated staffing needs for technology support of projects and expansions.

General Funding Objectives

- Staff and operations computer replacement on a five year cycle; general student labs replacement on a five year cycle.
- New and expanding labs and technologies to undergo feasibility and sustainability review and college-wide approvals.
- Unique programmatic needs to be funded and supported through individual program review / resource prioritization.
- Peralta District responsibilities and relationships with college technology staff and programs to be clarified.

In this plan, BCC proposes to identify sources through the following three major funds:

1. BCC annual budget: general and categorical funds. BCC assesses its available funding annually and regularly, and utilizes funds to support college-wide needs through the program review prioritization process.

2. Measure A funds: BCC utilizes Measure A funds to augment technology based upon the Three-Year Measure A Expenditure Plan guidelines.

3. Other funds: BCC works with the District Office to identify other funding sources such as grants to regularly expand, upgrade, and update computer and related technology on campus.