

# **Information Services and Media Services Technology Plan 2011-2012 (1.3)**

## **Draft**

The context of the 2011-2012 budget year is different than the last time this document was updated in 2007. The biggest difference in the climate being the state of the current budget and economic climate. We are experiencing enrollment “through the roof” and are being asked to do more with less, including in the area of technology. In an effort to not introduce layoffs, every area is being scrutinized and being asked to be more efficient and effective. Technology is becoming more critical for people to communicate and collaborate and our students are expecting more in the way of technology offerings such as wireless access, mobile access for cell phones and improved online interactions. We are in survival mode and doing everything possible to maximize our existing investment in technology.

One of the Institutional goals in the area of infrastructure is to maintain, expand and take full advantage of technology and equipment in the pursuit of a richer learning experience for the students. The Information Services and Instructional Technology Committee (ISIT), a participatory governance committee, facilitates collaboration from a cross representation of campus constituent groups on technology-related issues in order to identify needs and requirements. The ISIT committee communicates its recommendations to the campus president and/or IT Director and takes issues raised by that committee back to its constituents. The recommendations of this committee are brought to the attention of the appropriate college governing committees for action.

Underlying all institutional goals is the need to maintain a robust information technology infrastructure and to continue to provide reliable, accessible, high-quality information technology services upon which academic programs, student services and operations can depend. The Media Services and Information Services departmental operational plans and goals are updated annually to address changing requirements for providing these services. These plans and goals are guided by the operational plans of other departments, both academic and administrative, and are a part of the College Educational Master Plan.

Technology is supported primarily by two departments located on campus. Information Services, which supports the data network as well as all computers, servers and switches and Media Services which supports all multimedia equipment used in classrooms as well as supporting the distance education, broadcast cable television and on-line classes.

## **Information Services:**

### Staff

The staff of the Information Services department is made up of five technicians, two network support personnel, one technical coordinator and a web site administrator. This staff provides support for both the Bakersfield College and Delano campuses. With over 2500 total computers and a plethora of other network attached devices, this department works hard to keep things running. The Information Services department is constantly looking for opportunities to improve efficiency, reduce waste and improve processes to make the technology experience better for the Bakersfield College students, staff and faculty.

### General Information

Bakersfield College has over 1000 computers in specialized computer labs supporting student learning outcomes in the areas of math, tutoring services, computer graphics, multimedia, drafting, business and health sciences. The college has two open computer labs with 160 computers in one (located in the Library), and 25 computers in the other (located on the 2<sup>nd</sup> floor of the Student Services building), for access by students as well as registered community members.

Bakersfield College recognizes the importance of keeping its computer labs equipped with as up-to-date equipment and software as is fiscally possible. A three to four year cycle has been unofficially agreed upon and has been followed as closely as budget will allow. Office computers, with the exception of some high-end users, can normally go longer than three years before replacing. Each department is responsible for reviewing its own needs for upgrading and utilizing a formal procedure for requesting replacement equipment. BC practices a “push down” process in which displaced computers may get placed on the desk of someone with an older computer. The Information Services department, in conjunction with the ISIT Committee, has established and publishes a minimum configuration for all desktops.

Bakersfield College actively participates in district-wide committees and decision relating to technology. The Director, Information Technology is a member of the IT Managers committee and plays two roles on the committee. The first role is as an advocate for the needs of Bakersfield College and communicating needs, priorities and ideas. The second role is to help solve district-wide technology problems and to set standards and provide recommendations for how technology is used within the Kern Community College district. Also, information is shared within the IT Managers committee relating to district office equipment and software upgrades. Those updates are then communicated back to the campus via the ISIT committee or in some cases campus-wide communications.

## **Media Services:**

### Staff:

Media Services' three full time employees facilitate the implementation of all media related-equipment including requests for setups, video production, Instructional Television broadcasts and interactive instructional and administrative videoconferencing. The staff of Bakersfield College Media Services is made up of one Media Services Coordinator, one Media Specialist and one Video Control Room Operator/Electronics Technician. Media Services staff covers all non-computer related multimedia equipment at the main campus, the Weill Institute and the Delano Center. We support the equipment provided for classes at Stockdale and Arvin high schools although we do not have an onsite person – we support the loaner equipment to each of those campuses.

### General Information:

Media Services consistently looks to best utilize resources, various replacement policies have been suggested to help support technology in the most effective way. Bakersfield College has media equipment stationed in most classrooms on campus and at remote sites and also offers equipment for faculty and staff check-out. When equipment is stolen, we replace with repurposed equipment. We do not replace equipment such as projectors with brand new units unless funding becomes available. A project is created for the ISIT unit plan and it's added to our request for replacement equipment.

Media Services schedules equipment in advance as requests are made to the office but also react to immediate requests for service and equipment. Media Services compiles an inventory which is kept and updated when equipment is serviced for the next semester. The information collected allows Media Services to quickly respond to any request and any service request made. Both the scheduling and the maintenance inventory allow Media Services to determine usage trends across campus. Media Services also provides equipment to all off-

campus sites such as the Southwest Center, the Downtown Center, and the Delano Campus. Utilizing the Global Viewer Enterprise software by Extron, staff can easily monitor from the desktop each classroom that is connected to our network infrastructure. Our goal is to have each classroom networked so that the turnaround time to troubleshoot a problem is minimal. This is an enormous task. When complete each classroom can be controlled from the Media Services offices and staff can remotely operate the classroom for the instructor.

Bakersfield College is a Regional Production Center for the California Community College Satellite Network now known as 3C Media Solutions. Bakersfield College has an extensive online program. Moodle is the Course Management System, utilized by a significant number of BC's Online classes. Media Services maintains and operates the Bakersfield College video production studio. The facility is available to all faculty and staff for the production of course materials and campus productions. We recently acquired Wirecast software that will allow us to screen capture during a video production and immediately upload the production once completed with titles and effects. This software will also allow us to create a virtual studio environment for our video projects.

Bakersfield College is part of the Kern Educational Telecommunications Consortium (KETC), allowing the shared resource use of a cable channel on both cable systems in the metropolitan Bakersfield viewing area. Kern Educational Telecommunications Network (KETN) is comprised of consortium members at the K-12 level and the community college and university level. Bakersfield College no longer has an Instructional Television program due to budget cuts and low student retention with this mode of delivery. We still maintain our presence on KETN by advertising with our BC Billboard that airs most weekly mornings and early evenings/afternoons. We have integrated a video server in lieu of playback machines to allow us more flexibility with scheduling and airing programming. Students are using the former review stations in the library for other classes. Interactive classes via videoconferencing are recorded solely for archival purposes and as reference, for viewing by only the course instructor. We also have added both an RSS server to record most interactive workshops and classes from our interactive enabled classrooms.

Bakersfield College's Media Services supports district-wide videoconferencing efforts, both instructional and administrative. Media Services supports the four distance education classrooms (two in Bakersfield and two in Delano) and develops and implements policies and procedures for instructional and administrative videoconferences. Media Services also supports the Instructional Television (ITV) component of Distance Education by engineering, facilitating and operating the broadcast facility. Closed captioning has been mandated for all live interactive distance education classes, and Bakersfield College has led the effort statewide.

The college has the capability of interactive videoconferencing over IP (Internet Protocol – an industry standard for data transmission) which has facilitated distance learning and enhanced staff development opportunities. BC's L147 and L149 assist enrollment management, but more

importantly, students at a distance to enroll in a course not available at their campuses. Interactive origination and/or receive sites benefit students in Delano, Porterville and Cerro Coso. The later sites directly interact with Nursing courses to meet the needs of all communities and the Allied Health program.

Videoconference equipment is updated on an approximate three-to-five-year basis unless there is a shift in technology that warrants an upgrade. Broadcast equipment is replaced as funding becomes available on all non-essential pieces. Replacement is immediate on technology such as audio-video routers and switchers and any transmission equipment. The district carries the annual maintenance contracts for the videoconferencing infrastructure, but the daily maintenance of media equipment is performed on campus by Media Services staff.

The multi-media equipment used to broadcast is selected and maintained by Media Services. All multimedia equipment used on campus, such as projectors, TVs VCR-DVD players is also selected by Media Services and is based on the flexibility and reliability of the equipment and the needs of campus departments as requested.

### Historical Projects

Goal	Objectives	Strategies	Timeline
Bakersfield College will adequately meet the technology needs of our administration, classified, faculty and students.	Improve access to our many technology systems.	Implement Sunguard’s Luminis Portal providing single-sign-on access to campus and district technology resources.	Implemented as of May 2011.
		Setup automatic account creation and enrollment into classes (driven from Banner) in Moodle.	Implemented as of May 2011 as part of the Luminis implementation.
		Setup automatic account creation and seamless login through the Luminis portal.	Implemented as of May 2011 as part of the Luminis implementation.

Bakersfield College will adequately meet the technology needs of our administration, classified, faculty and students.		Add more equipment to the network and thereby monitor it remotely using the GVE software.	Implemented GVE Fall of 2010 and continue to add equipment to the network as funding becomes available.
		Provide wireless internet access to our students and faculty.	100% coverage in student areas but only 50% coverage on the total campus. (continuing to improve)
	Provide tools for collaboration among people and groups.	Implement the SharePoint portal infrastructure and provision portals and permissions as needed.	Implemented Fall 2010.
	Provide relevant modern technologies for instructional purposes.	Upgrade all labs to the Windows 7 operating system.	Completed Summer 2011, with exception of a small handful of specialized labs.
Bakersfield College will provide immediate troubleshooting capabilities.	Utilize the GVE software to remotely monitor classrooms	Update classrooms as newer technologies and networking become available in classrooms	GVE went live in Fall 2010 and we continue to update and keep infrastructure current.
Bakersfield College will provide reliable infrastructure by maintaining, updating and planning for future growth.	Provide reliability for our back-end server infrastructure.	Migrate the majority of our physical servers to a VMware virtual server environment.	Completed as of Summer 2010.
Bakersfield College will provide support and training for administration, classified, faculty and students.	Provide effective customer support for our students and faculty.	Implement an external helpdesk for 24/7/365 support for students on Banner, Moodle and Gmail.	Implemented Spring of 2011.
	Provide training for employees.	Provide Luminis training for employees as part of the Luminis Portal launch.	Multiple training sessions completed in Summer and Fall 2011.

## Future Projects

Goal	Objectives	Strategies	Timeline
Bakersfield College will adequately meet the technology needs of our administration, classified, faculty and students.	Improve access to our many technology systems.	Consolidate our 4 district Active Directory domains to one Active Directory domain.	1-2 years
	Improve our ability to manage processes and approvals.	Collaborate district wide with the implementation of Workflow.	1 year
	Provide a system with better clarification for degree requirements.	Collaborate district wide with the implementation of Degree Works.	1 year
	Improve our ability to track facilities issues and scheduled maintenance.	Collaborate district wide with the implementation of School Dude.	1 year
	Efficiently provide access to internal web resources when accessing from offsite.	Collaborate district wide to implement the Unified Application Gateway for publishing internal web sites and applications for external use.	1-3 years
	Provide a system for maintaining contracts across the district.	Collaborate district wide to implement a Contract Management System.	1-2 years

Bakersfield College will adequately meet the technology needs of our administration, classified, faculty and students.	Provide a system for managing facilities projects across the district.	Collaborate district wide to implement the Primavera facilities management software.	1 year
	Provide a district wide purchasing management system.	Collaborate district wide to implement the Sciquest Purchasing System.	1-2 years
Bakersfield College will adequately meet the need for video and classroom materials production	Improve ability for faculty to present diverse materials to their classes	Utilize cutting edge software that will allow us to instantly make a DVD or stream live to the web with graphics.	1 year
Bakersfield College will provide reliable infrastructure by maintaining, updating and planning for future growth.	Upgrade outdated infrastructure.	Upgrade the current Exchange 2003 server to Exchange 2010.	1-2 years
		Media Services will continue to engage with the District office to update videoconference infrastructure both administrative and instructional classrooms. Collaborate district wide to implement new policies and procedures related to videoconferencing.	1-2 years
		Continue to upgrade switches and improve backbone bandwidth.	Ongoing
		Continue to upgrade labs on campus to maintain a 3-5 year rotation of new computers.	Ongoing
	Replace older technology with newer technology	Continue to update outdated equipment to meet needs	Ongoing
	Improve planning and maintenance of equipment.	Update inventory system to a more robust platform with reporting.	1-2 years



Bakersfield College will provide reliable infrastructure by maintaining, updating and planning for future growth.	Provide documentation on strategic technology initiatives.	Update this document each year.	Ongoing
	Develop web framework and design for college websites	Collaborate district wide in the implementation of a content management system.	1-2 years
	Standardize on a one card payment system for use across the district.	Upgrade the current CBORD system and move to the district office as part of the pay-for-print upgrade.	1 year
Bakersfield College will look for alternative funding sources to supplement budget	Look for alternative methods of funding equipment through grants and other funding possibilities	Seek grant assistance, look at campus available funding through such programs as VTEA, etc.	Ongoing
Bakersfield College will maintain presence on KETN (Kern Educational Telecommunications Network)	Look for alternative local programming to air on our channel. Continue to maintain BC Billboard and add new events as they become known.	Seek assistance from PIO and other departments to advertise events.	Ongoing
Bakersfield College will provide support and training for administration, classified, faculty and students.	Improve communication between campus and district technology staff.	Develop a specific procedure for communicating network problems, system outages and other key events.	1 year
	Media Services serves as the liaison with faculty and staff for Edustream and any potential lecture capture infrastructure or solution.	Continue to research the impact of lecture capture and report back to ISIT and other campus groups. Maintain campus accounts and manage presence with Edustream.	1-2 years and Ongoing for Edustream
	Media Services will foster collaboration with Information Services	Improve communication between the two departments	Ongoing

Bakersfield College will provide support and training for administration, classified, faculty and students.	Encourage and support innovation.	Develop a specific procedure or policy for introducing new technology into the campus environment.	1 year
	Consolidate help desk ticket systems across the district.	Collaborate district wide in moving all ticket systems to the Parature ticketing system.	1 year
	Provide support for all applications via the external help desk.	Collaborate district wide on the Phase II implementation of the external help desk.	2-3 years