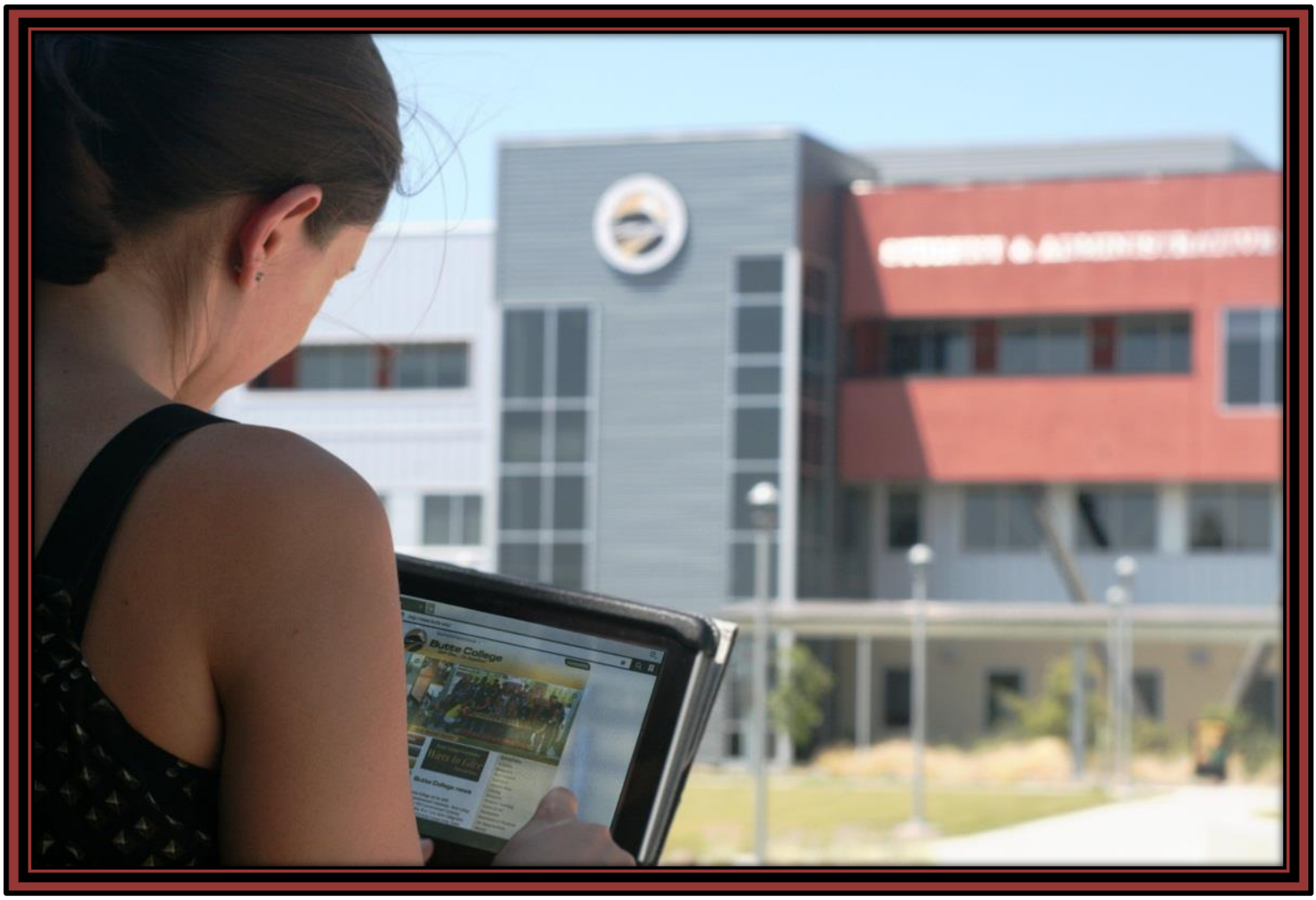
BUTTE COLLEGE



Technology Master Plan 2014-2020

Board Approved February, 2015

President's Message

The faculty and staff at Butte College have always focused on student access, equity, success, and completion. This Technology Master Plan maintains this focus by developing technology strategies that support the successful implementation of the goals and objectives in the college's Educational Master Plan and the college's core processes.

This plan is based on the guidance from the Educational Master Plan, a review of the accomplishments of the previous Technology Master plan, and the results of technology assessments. The plan was developed by a Technology Master Planning Committee that consisted of representatives from each constituency group, technology staff, and experienced users. This team was chartered by the Technology Council and that body provided overall oversight for the plan's development.

The Technology Master Plan establishes has five goals and a variety of strategies, priorities, timelines, and measurements to support the achievement of these goals. The goals are:

- Continue to use technology to support student learning and student success;
- Continue to use technology to support faculty and staff success;
- Maintain the integrity of the system by improving the reliability and security of technology systems and critical infrastructure;
- Maintain and improve the accessibility of computer resources and classrooms;
- Establish and sustain the organization and processes needed to provide outstanding technology support to the faculty, students, and staff

After the Technology Master Planning Committee developed a draft plan, it coordinated this draft with the Technology Council subcommittees. After the input of these groups was incorporated the plan was reviewed and approved by the Technology Council the college's four constituency groups. After this the plan was approved by administration and then went to the Board of Trustees for final approval. This process ensured that our Technology Master Plan reflects broad-based input and is aligned with the college's Educational Master Plan.

Our process to review and refine this plan will be key to its successful implementation. The Technology Council will review progress annually, refine the plan as needed, and will report on the status of implementation to the wider campus community.

The implementation of this plan will enable the college to leverage technology to maintain its focus on student access, equity, success and completion.

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Mission Statement

This mission statement defines why the college exists, and the values describe what the college community collectively believes. The Butte-Glenn Community College District Educational Master Plan is designed to accomplish the mission and is grounded in our values.

Butte-Glenn Community College District Mission Statement:

Butte College provides quality education, services, and workforce training to students who aspire to become productive members of a diverse, sustainable, and global society. We prepare our students for life-long learning through the mastery of basic skills, the achievement of degrees and certificates, and the pursuit of career and transfer pathways.

Core Values

Students First. Student success is our purpose and the focal point of decision making and resources allocation.

Excellence. We strive to offer the highest quality in education and service through continual self-assessment, evaluation, professional development and ethical commitment.

Respect. We value each other and engage openly and considerately with one another's ideas, philosophies, and perspectives.

Diversity in community. We value individual attributes, capabilities, and differences; and we foster the collaboration and social responsibility that create a vital institution with a global perspective.

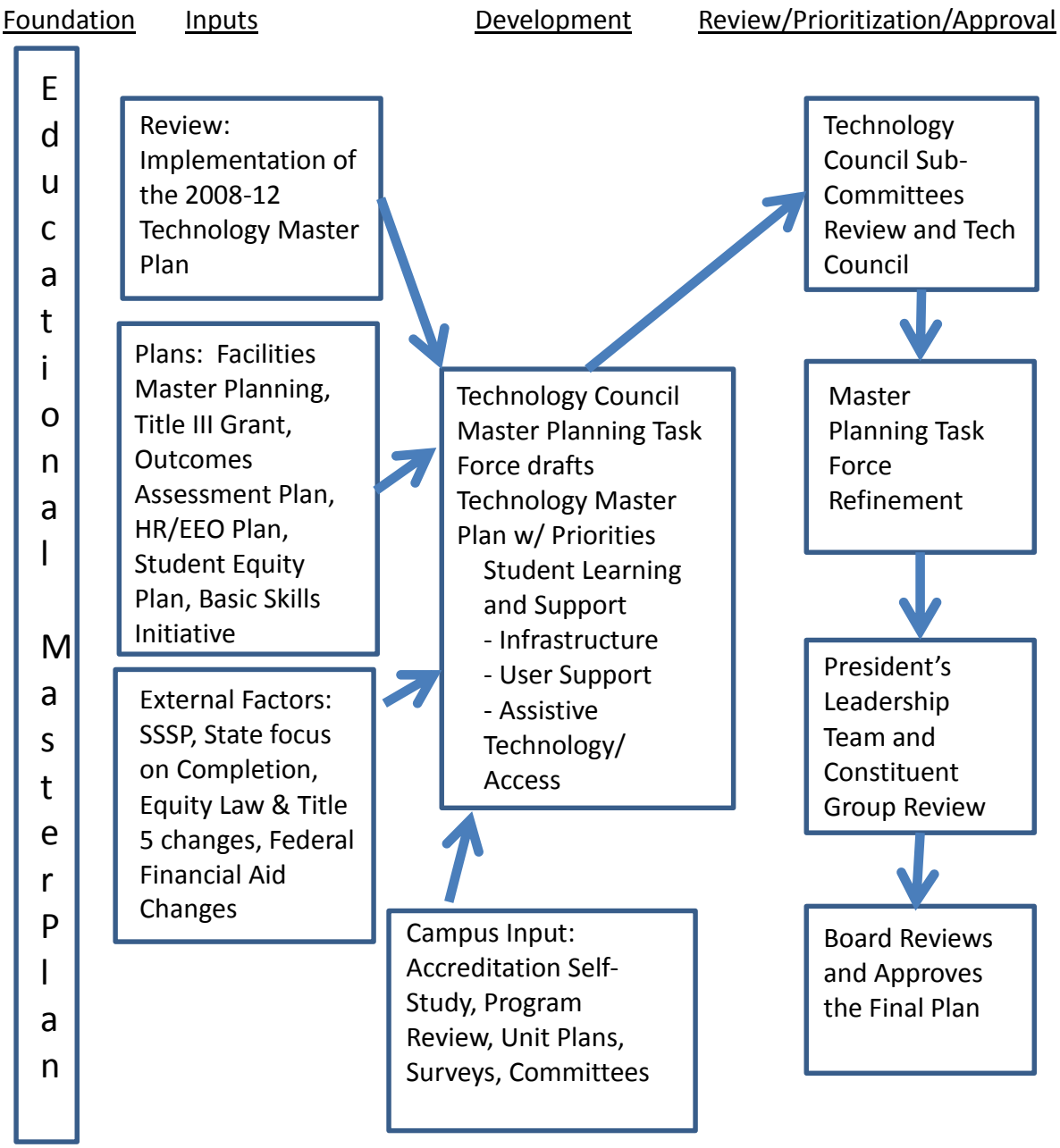
Communication. We value professionalism in our interactions and cultivate an open, friendly environment of fairness and integrity.

Accountability. We are accountable to one another and for our responsibilities. As responsible stewards of the public trust, we use our resources effectively to fulfill the mission and obligations of the college.

Sustainability. We promote and model practices that will result in positive outcomes for our human and natural environments.

Technology Master Planning Process

The flowchart below shows the process that was used to develop the Technology Master Plan. This process was based on the Educational Master Plan. Inputs included a review of the implementation of the 2008-2012 Technology Master Plan, requirements from the Educational Master Plan, Facilities Master Planning, results of the Technology Assessment, Network Analysis, and accreditation self-study. The Technology Council reviewed the inputs and established a task force to develop a draft plan. This draft plan was reviewed by the Technology Council and its subcommittees. After the feedback from these groups was incorporated the refined plan was reviewed by the President's Leadership Team and the constituent groups. After it was approved by the President the plan went to the Board of Trustees for final review and approval.



Inputs into the Technology Master Plan

The Technology Council reviewed the following inputs prior to developing the Technology Master Plan.

Implementation of the 2008-2012 Technology Master Plan. Major achievements from the 2008-2012 Technology Master Plan include improvements in organization, systems reliability, and student/staff support. While many of the objectives in this plan were achieved others were not and, after evaluation, some of these yet-to-be-achieved objectives were included in the 2014-2020 Technology Master Plan. The complete review of the 2008-2012 Technology Master Plan is in Appendix B.

Technology Surveys. In spring 2014 the Technology Master Planning Committee (TMPC) conducted an online survey of all employees and a direct survey of students to gather input as to the needs and desires for Butte College technology. The survey questions were directed at making technology more efficient and user friendly. These questions are attached in Appendix C. This survey resulted in many specific responses which were translated into solutions that could be implemented in the plan. Many of these recommendations are included in the 2014-2020 Technology Master Plan.

Strategic Initiatives. In 2012-2013 the college developed six new strategic initiatives to guide future development. These are: Enhancing a Culture of Completion and Academic Achievement; Supporting Student, Faculty and Staff Success; Using Data-Informed Processes for Continuous Improvement, Maximizing Resources to Support Student Learning; Modeling Sustainability; Enhancing a Culture of Inclusiveness. The Technology Master Plan is grounded in these initiatives. The strategic initiatives can be found on the college's Planning, Budgeting, and Assessment web page.

Educational Master Plan. The Educational Master Plan provides the current Strategic Direction for the college. This direction provides the current implementation strategies for the six strategic initiatives. The Technology Master Plan provides the technology component for implementing these strategies. The complete Educational Master Plan can be found on the college's Planning, Budgeting, and Assessment web page .

Accreditation Self-Study. The Accreditation Self-Study provided a few recommendations for technology. These recommendations, after review by the Technology Council, were included in the Technology Master Plan. The complete Accreditation Self-Study can be found on the college's Accreditation web page.

Facilities Master Plan. The college is currently implementing its 2002 Facilities Master Plan and is in the process of developing a new Facilities Master Plan to guide future on and off-campus development. The 2014-2020 Technology Master Plan integrates the college's technology efforts with the requirements in both of these plans.

State Student Success Initiative. California is focusing the community colleges on improving student equity success and completion. This has resulted in numerous changes to processes and Title 5. The college must similarly maintain this focus and comply with the resulting changes.

Influences on the Technology Master Plan

Butte College is committed to a continuous process of planning, evaluation, and improvement. This process occurs in the context of internal and external environmental trends that influence how the college plans, budgets, assesses, and implements its plans. These environmental trends will be reviewed and revised during its annual plan updates. A brief description of these influences is below.

Completion Agenda. The National completion agenda and state student success initiative are focusing the college on completion and equity. These initiatives are largely being implemented through changes in law and regulation. Examples include the Transfer Model Curriculum, changes to registration priorities, and stricter adherence to federal financial aid requirements. These changes will significantly impact college operations. During the next five years pressure to improve completion and equity will continue and performance funding is a real possibility. Other strategies included in the state Student Success Initiative are increased data sharing, improved alignment with high schools, clearer career and transfer pathways, and more effective tools to help students navigate these pathways. Page 12 Draft Educational Master Plan

Impact of Technology. The College will increasingly depend upon technological solutions in order to satisfy the demand for more varied and effective student learning programs and services. According to the latest accreditation survey over 75 percent of current students have access to high speed internet away from the college. This would suggest that our students are increasingly capable from a technology standpoint and will demand technological options to navigate college processes.

Pace of Technological Change. Technology changes rapidly and the college must show flexibility as it implements technology solutions. Additionally, this trend requires streamlined procedures for planning and implementing projects and a comprehensive training program for technology staff and technology users.

State Reporting. Prior to 2013 the state used Accountability Reporting for Community Colleges (ARCC) to report the performance of the system and the colleges on a variety of metrics. On the 2012 ARCC Report, Butte College had the highest percentage in its peer group for Improvement Rate for Credit Basic Skills and Success Rate for Credit Vocational Programs. Butte College has consistently improved its overall performance on this report. This indicates that the college is focused on student success. In 2013 the state released the Student Success Scorecard to replace ARCC. The Scorecard is designed to focus on completion and progression through momentum points. There are currently some issues with the practices at Butte College and the way these are measured on the Student Success Scorecard in the area of Remedial Education. Overall, Butte College performance on the metrics in the Scorecard, with the exception of Remedial Education, mirror those of the state. Page 14 Educational Master Plan

Enrollment Management. For the past several years there was more demand for classes and services than the college could provide. The two most frequent recommendations from the Fall 2012 Student Accreditation Follow-Up Survey were to provide more classes and to make it easier to see a counselor. However, with the passage of Proposition 30 and changes in the labor market the college is beginning to experience difficulty filling classes. Depending on state funding priorities (COLA vs Growth), 2013-2014 could be an inflection point at which the college goes from limiting access to maintain its financial viability to pursuing growth to capture available state funding. Page 13 Educational Master Plan

Funding Challenges. There are several impacts on Butte College's funding. These include changes in FTES which impacts state apportionment funding, the sensitivity of the California state budget to economic changes, and the resulting impact on California Community College budget allocations. Acquiring new funding sources will be required to maintain quality programs and services.

Greater Articulation and Coordination throughout K-16. Fiscal restraints and accountability pressures require stronger articulation and coordination of programs and services across the entire K-16 public education system. Butte College can expect more of its students to enroll in more than one institution while pursuing their educational goals.

Demographic Shifts within the Service Area. The population in the District's service area will continue to become older and more diverse. Between now and 2030 the population growth rate for those over 50 will be approximately triple that of other age groups. By 2030 Hispanics will make up 24 percent of the population in Butte County and 40 percent of the population in Glenn County. Per capita income will remain below the state average.

Under-Prepared Students. Trends in Butte College assessment test results, in addition to state and national research, indicate that there will be increasing numbers of academically under-prepared students enrolling at Butte College in the next decade.

Increased Competition for Higher Education and Training Markets. Approximately 40 percent of Butte College's 18-24 year-old students are from outside the service area. This dependence on out-of-area students makes Butte College particularly vulnerable to competition both inside and outside of the service area. This competition comes from adjoining community colleges; on-line providers of higher education; private career and technical schools; and California State University, Chico.

Impact of California State University, Chico. These impacts include the size of the college, the programs it offers, and how it focuses these programs to meet student needs. Over 80 percent of the Butte College students who transfer to a CSU transfer to CSU Chico. At the same time, hundreds of CSUC students co-enroll at Butte College.

Community College Value. There is an exceptional return on investment for every dollar invested in a community college education. Students who complete a vocational degree or certificate typically double their income within three years of completion.

Community College Benefits. Butte College provides Butte and Glenn counties a variety of benefits, including high quality learning opportunities, a more educated workforce, higher wages, greater tax revenues, improved citizenship, and the ability to attract economic development.

Globalization. The breaking down of global barriers allows companies to benefit from the largest and least expensive workforces, raw materials, and technology. To be competitive in the global economy, communities must strive to create and maintain a well-educated and highly trained workforce.

Focus on Sustainability. As science, market forces, and quality of life issues converge, educational institutions are increasingly focusing on sustainability. This trend will make significant resources available for higher education institutions that focus on providing skills needed to succeed in the emerging green economy.

State Influences. Butte College is actively participating in three large grants for student access, equity, success, and completion.

The **Online Education Initiative** will fulfil these goals:

- Increase the number of college associate degree graduates and transfers to four-year colleges
- Improve retention and success of students enrolled in Online Course Exchange courses
- Increase California Community Colleges education for the underserved and underrepresented including individuals with disabilities and those with basic skills needs
- Increase ease of use and convenience of the online experience
- Decrease the cost of student education
- Significantly increase demand for online course delivery

Education Planning Initiative project.

- Provide transcript, articulation, and curriculum inventory elements to colleges with existing Education Planning and Degree Audit Systems;
- Provide a low cost/no cost solution to those colleges without an Education Planning and Degree Audit system;
- Develop a student services portal that will customize and sequence matriculation information and activities for student success.
- Help college counselors leverage technology to reach more students.

The goal of the **Common Assessment Initiative (CAI)** is to develop a comprehensive, common assessment system that will reduce unnecessary remediation, align to state legislation, and provide state-wide efficiencies for the academic placement process within and between California colleges. To that end, the following needs will be addressed:

- Alignment with Legislation
- Coordination Within and Between Colleges
- Ensure Student Success in Placement
- Succeed Despite Funding Challenges
- Effective Management of Solutions

Technology Master Plan Goals

The Technology Master Plan contains the following goals:

Goal 1. Use technology to support student access, equity, success, and completion.

The first priority for the college's technology team is to support student access, equity, success and completion. It does this by providing technology systems that empower students to learn; collaborate with faculty, staff and each other; and track progress toward achieving their goals in access, equity, success and completion.

Goal 2. Use technology to support faculty and staff.

The college's core processes rely on the flexible application of technology. The college's technology team will continue to work with users across the campus to identify processes that could be automated, to automate processes based on need, and to continuously improve processes that are automated.

Goal 3. Maintain the integrity of the system by improving the reliability and security of technology systems and critical infrastructure.

As the college increasingly uses technology to support student and staff success the reliability, continuity, and security of these technology systems becomes increasingly important. The college will maintain and improve the reliability, continuity, and security of its technology systems and infrastructure so that these systems are always available when needed and operate at maximum capacity.

Goal 4. Maintain and improve the accessibility of computer resources and establish accessibility standards for technology purchasing and software implementation.

The college has a responsibility to provide access to its computer resources and classrooms to all of the students it serves. To this end the college is committed to complying with the accessibility standards in Section 508 of the Rehabilitation Act.

Goal 5. Establish and sustain the organization and processes needed to provide outstanding technology support to the faculty, students, and staff.

Technology systems are only as effective as the people who operate them. The technology team will organize itself to maximize its effectiveness and will train those who operate and support the college's technology systems so that the college gets the maximum benefit from these systems.

Strategies, Priorities, Responsibilities, Timeframes, and Outcomes

This section provides the strategies for meeting each goal and the overall outcomes intended from the implementation of these strategies. It also establishes the priority (high or medium), timeframes and implementation responsibilities for each strategy. The outcomes for each goal are after the table listing the strategies, priorities, timeframes, and responsibilities. Items marked with an asterisk (*) are defined in the glossary at Appendix A.

Goal 1. Use technology to support student access, equity, success, and completion

The first priority for the college's technology team is to support student access, equity, success, and completion. It does this by providing technology systems that connect students to the college, empower them to learn; collaborate with faculty, staff and each other; and track progress toward achieving their goals.

Strategy	Priority	Timeframe	Status	Responsibilities
1. Enable students to bring their own devices (BYOD) and connect to the WiFi network	High	2014-2015		Network Team
2. Implement persistent sign on for students wireless to provide continuous access across campus	High	2014-2015		Network Team
3. Expand use and training of students on District's current Learning Management System	High	2014-2015		Technology Mediated Instruction
4. Redesign the Student MyBC Portal* and the college website and implement governance procedures for their use	High	2014-2015		Website/Portal Project Team
5. Support the institution to improve Digital Literacy via workshops and access resources	High	2014-2015		Information Systems & Network Teams
6. Support use of digital materials	High	2014-2015		Network Team
7. Create and enable Guest Access for LMS	High	2014-2015		Technology Mediated Instruction
8. Support the implementation of the Educational Planning module to include Image Now and Degree Audit	High	2014-2016		Information Systems & Network Teams
9. Support the implementation of the common assessment grant	High	2014-2016		Information Systems & Network Teams
10. Support electronic communication (Ed Plan 2a, c, d	High	2015-2016		Network Team
11. Improve WiFi service throughout campuses	High	Ongoing		Network Team

12. Implement a Butte College Mobile App to serve as a link to meet student needs	Medium	2015-2016		Information Systems & Network Teams
13. Implement online Document Sharing for students using Office 365	Medium	2015-2016		Information Systems & Network Teams

Outcomes

1.1 By June 2015 the college will develop and begin implementing technology accessibility standards that will address BYOD, Smart Classroom, labs, and technologies and educate students about these access standards. (Strategies 1, 2, 3, 4, 6) (Ed Plan 1.F.4)

1.2 By June 2015 the college will routinely assess students for digital literacy and direct students that need support to the resources they need to become digitally literate and capable. (Strategies 5, 6) (Ed Plan 5.B.3)

1.3 By September 2015 the Butte College will improve the WiFi systems that enable students and staff to routinely and effectively communicate using multimodal means including the Student and Staff Portal, a Mobile App and digital displays in high traffic locations. (Strategies 4, 6, 8, 9, 10, 11, 12, 13) (Ed Plan 1.F.3)

1.4 By June 2016 the college will have updated MyBC, redesigned the website, and established web standards and an ongoing system for ensuring compliance with these standards (Strategies 4)

1.5 By June 2016 the college will provide students with the capability to develop educational planning scenarios for approval through counseling. (Strategies 8) (Ed Plan 1.F.1)

1.6 By June 2016 the college will routinely use its communication system in a focused and integrated way to give students actionable information at critical times in their progression (Strategies 4, 6, 8, 9, 10, 11, 12, 13)

1.7 By June 2016 the college will select a LMS for the future. As part of the selection process we will consider the CCC Technology Center direction. We will train students on use and set it up to allow for Guest access. (Strategies 3, 7)

Goal 2. Use technology to support faculty and staff

The college's core processes rely on the flexible application of technology. The college's technology team will continue to work with users across the campus to continuously improve and automate processes.

Strategy	Priority	Timeframe	Status	Responsibilities
1. Establish the college's organizational structure in Colleague	High	2014-2015		Information Systems and Human Resources
2. Align processes with Student Support Services Program (SSSP) MIS reporting requirements	High	2014-2015		Information Systems and SSSP Committee
3. Expand use of District's current Learning Management System and train faculty in its use	High	2014-2015		Technology Mediated Instruction
4. Develop and implement reporting to support the implementation of the Student progress and achievement model and other elements of the Educational Master Plan	High	2014-2015		Information Systems
5. Implement Image Now	High	2014-2016		Image Now Project Team
6. Redesign the Student MyBC Portal* and the college website and implement governance procedures for their use and also include translations	High	2014-2016		Website/Portal Project Team
7. Implement online Document Sharing for Staff and Faculty using SharePoint and Office 365	High	2015-2016		Information Systems & Network Teams
8. Establish a Training Program and Matrix to provide technology training for faculty and staff	High	2014-2016		CTO and Information Systems
9. Improve and expand the use of existing and new Software Applications	High	Ongoing		Information Systems
10. Automate processes based on priorities established through the technology governance process (e.g. graduation applications, budget transfers, accreditation, flex reporting, travel, personnel forms)	High	Ongoing		Information Systems

Strategy	Priority	Timeframe	Status	Responsibilities
11. Implement the Datatel Colleague priorities recommended by the Butte College Datatel Users Group (BC DUG)* and approved by the Technology Council *	High	Ongoing		Technology Council, IT, TMI, Auxiliary and Network Services
12. Support the integrated implementation of an online program review, unit planning and student learning outcomes	High	Ongoing		Information Systems

Outcomes

2.1 By June 2015 the college will implement systems to establish management reports based on the college's organizational structure and reports tied to support student progress and achievement models. (Strategies 1, 2, 4)

2.2 By June 2016 the college will have implemented Image Now, supported the automation of the transcript evaluation process, and aligned MIS reporting with SSSP requirements. (Strategies 2, 4, 5, 9)

2.3 By June 2015 the college will implement systems to establish priorities for improving and documenting software and automating processes, plan and implement projects, track progress toward meeting priorities, and evaluating the effectiveness of each project. (Strategies 5, 7, 10) (Ed Plan 3.C.1-5)

2.4 By June 2015 faculty and staff will be educated on effective practices to reduce paper usage by methods such as the use of MyBC, document sharing, the LMS, and creating electronic forms for routine processes. (Strategies 5, 6, 7) (Ed Plan 5.B.3)

2.5 By June 2016 the college will implement upgrades and changes to applications and infrastructure that will support requirements from the Educational Master Plan, Outcomes Assessment Plan, Enrollment Management Plan, Basic Skills Initiative, as well as specialized and emerging requirements from instructional areas and Student Services. (Strategies 4, 9, 10, 11, 12) (Ed Plan 1.F.1 & 3.A.1-3)

2.6 By June 2016 the college will establish a training program and matrix to provide job specific technology training for faculty and staff to include in-house, external, online, and multi-media methods. (Strategies 8) (Ed Plan 3.B.1-3)

Goal 3. Maintain the integrity of the system by improving the reliability and security of technology systems and critical infrastructure

As the college increasingly uses technology to support student and staff success the reliability, continuity, and security of these technology systems becomes increasingly important. The college will maintain and improve the reliability, continuity, and security of its technology systems and infrastructure so that these systems are always available when needed and operate at maximum capacity.

Strategy	Priority	Timeframe	Status	Responsibilities
1. Develop and implement an institutional IT security plan that includes user education and Security Audit	High	2014-2016	Ongoing	Chief Technology Officer, IT-Desktop and Network Services
2. Implement disaster recovery* in Chico	High	2016	In Progress	IT-Services, Network Services
3. Continue to maintain and improve the reliability of Computer Systems*	High	Ongoing		IT-Services
4. Provide technology infrastructure and support for the priorities in the Educational and Facilities Master Plans	High	Ongoing		IT-Desktop and Network Services
5. Complete plan to provide redundant fiber to each building	High	Ongoing	In Progress	IT-Desktop and Network Services
6. Establish and implement a Life Cycle Replacement plan* for all technology equipment per developed standards	Medium	2016		Chief Technology Officer
7. Support the college's sustainability efforts by implementing green computing* and significantly reducing Printing	Medium	Ongoing		IT- Desktop and Network Services

Outcomes

3.1. By June 2015 the college will implement a network infrastructure plan that ensures redundant fiber connections to each building and a security plan that closes the vulnerabilities identified in the security audit. (Strategies 1, 2, 5)

3.2. By June 2015 have all staff & Faculty Security Awareness Training (Strategies 1)

3.3. By January 2017 the college will establish disaster recovery for Web Advisor and the website in Chico and maintain 99.5 percent uptime on Web Advisor. (Strategies 2)

3.4. By June 2017 the college will establish and begin implementing a Life Cycle Replacement plan that will reduce overall district cost for all technology equipment and supports the standardization of hardware and software. (Strategies 7) (Ed Plan 1.F.2)

Goal 4. Maintain and improve the accessibility of computer resources and classrooms

The college has a responsibility to provide access to its computer resources and classrooms to all of the students it serves. To this end the college is committed to complying with the accessibility standards in Section 508 of the Rehabilitation Act.*

Strategy	Priority	Timeframe	Status	Responsibilities
1. Maintain technology accessibility standards in student computer labs and smart classrooms	High	Ongoing	Ongoing	Chief Technology Officer, IT Manager
2. Develop, implement and educate appropriate employees regarding documented accessibility standards for all technology	High	Ongoing	Ongoing	Chief Technology Officer, IT Manager
3. Establish and implement documented plans for accessibility for individual devices (BYOD)	High	Ongoing	Ongoing	Chief Technology Officer, IT Manager
4. Develop and implement change management for computer labs and classrooms	High	Ongoing	Ongoing	Chief Technology Officer, IT Manager

Outcomes

4.1. By June 2015 the college will create a repository for, and a yearly audit of, accessibility declarations, relating to Section 508 of the Rehabilitation Act, provided by third-party technologies in use at the college. (Strategies) (Ed Plan 1.F.3)

4. By June 2015 the college, through the cooperation of relevant stakeholders, will implement an information campaign, and facilitate training, for faculty, managers and staff regarding the availability and access to technologies provided by the college, including support systems for BYOD, smart classrooms, and labs. (Strategies) (Ed Plan 1.F.4)

Goal 5. Establish and sustain the organization and processes needed to provide outstanding technology support to the faculty, students, and staff

Technology systems are only as effective as the people who operate them. The technology team will organize itself to maximize its effectiveness and will train those who operate and support the college's technology systems so that the college gets the maximum benefit from these systems.

Strategy	Priority	Timeframe	Status	Responsibilities
1. Evaluate the organizational placement of institutional technology functions, realign functions as needed, and create appropriate supporting job classifications	High	2016-2017	In Progress	Chief Technology Officer, IT Manager, Human Resources
2. Implement Individual Development Plans (IDPs) for all IT personnel to ensure that IT personnel have the appropriate skills and to establish redundancy in critical areas	High	Ongoing	Ongoing	Chief Technology Officer, IT Manager, Human Resources
3. Establish a sustainable Technology Training Program, in conjunction with Professional Development, by developing systems to identify employee technology training needs and flexible strategies to meet these needs	High	Ongoing	In Progress	Chief Technology Officer, IT-User Support Services, Professional Development, Technology Council
4. Assess and implement applicable IT service management best practices, standards and processes	High	Ongoing		Chief Technology Officer, IT Manager

Outcomes

5.1. By June 2015 the college will develop and begin implementing a comprehensive technology training program that: (Strategies 1, 2, 3) (Ed Plan 3.B.1-3)

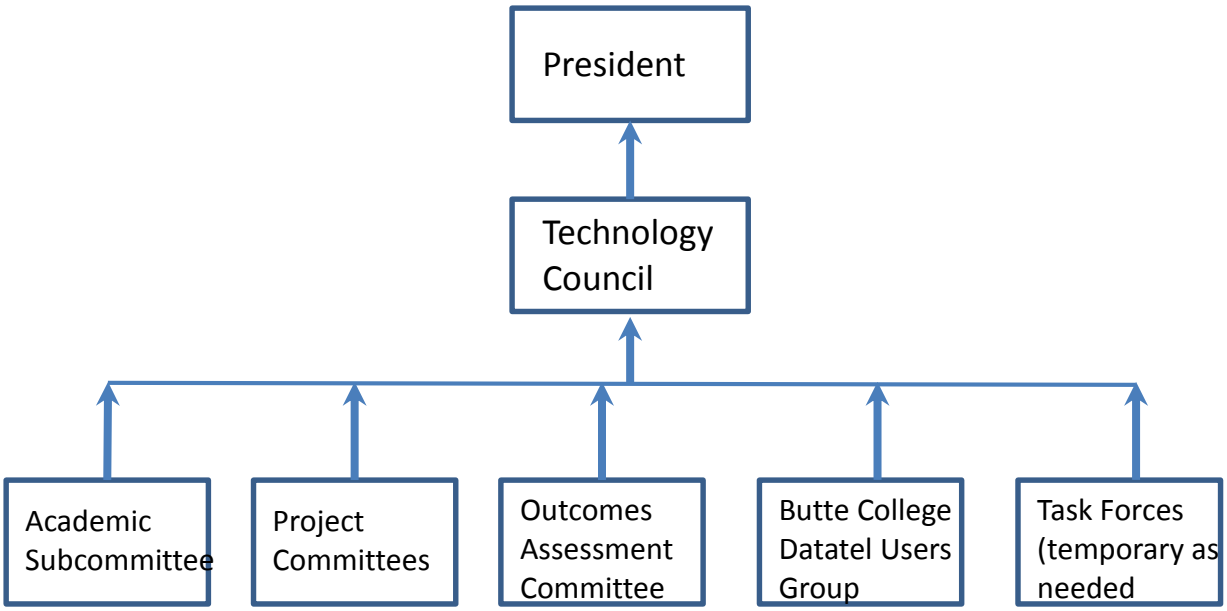
- Is coordinated with Professional Development
- Includes individual development plans (IDPs) for each staff member
- Systematically assesses faculty and staff technology training needs
- Provides ongoing and flexible technology training that meets these needs
- Results in increased satisfaction and productivity as measured using quantitative and qualitative means

5.2. By June 2017 the college will organize its technology functions to centralize control and establish redundancy in critical areas, and to establish job classifications that support this organizational structure. (Strategies 2, 4)

Making the Technology Master Plan a Reality

The college will use its existing technology governance structure and the unit planning process to implement the Technology Master Plan.

The diagram below shows the technology governance structure and the way recommendations flow from the Academic Technology Committee *, Project Committees*, Outcomes Assessment Committee*, Butte College Datatel Users Group (BCDUG)*, and task forces to the Technology Council.* Constituency groups (Academic Senate, Classified Senate, Management Association, Butte College Associated Students) are represented on the Technology Council and each of the other groups as appropriate.



The Technology Council is responsible for prioritizing and refining the recommendations from the Academic Technology Committee, Project Committees, Outcomes Assessment Committee, BCDUG, and temporary Task Forces and passing these along to the Administration. It may also generate recommendations on its own.

Recommendations from the Technology Council are included in the unit plans for the technology departments as is appropriate. The unit plans, and the subsequent prioritization of funding requests from unit plans at the areas and the institutional level, are the mechanism for funding the Technology Council recommendations.

The Technology Council will review the Technology Master Plan each year and will refine it as needed. The results of this refinement will be reviewed by the constituent groups and shared with the entire college community.

Appendix A. Glossary of Technology Terms

Academic Technology Committee. A subcommittee of the Technology Council which provides recommendations on technology matters that impact instruction.

Analog. Measuring or representing data by means of one or more physical properties that can express any value along a continuous scale. For example, the position of the hands of a clock is an analog representation of time. This contrasts to "digital" which represents data through numerical means.

Blackboard 9. Blackboard 9 is a learning management system that provides the structure for courses, regardless of modality.

Broadband. A type of high-speed data transmission in which the bandwidth is shared by more than one simultaneous signal.

Butte College Datatel Users Group (BC DUG). A subcommittee of the Technology Council which provides recommendations on matters pertaining to Datatel (See below).

California Virtual Campus (CVC). A California Community College System Office initiative that ties together on-line offerings from participating colleges and universities. Through the CVC students are able to take courses from any of the participating colleges and universities.

Case Management. A software program that is funded through the Title III grant to better enables staff to assist students with specific issues. Essentially this program will automate the existing Early Alert system.

Computer Aided Design (CAD). The use of computer programs and systems to design detailed two- or three-dimensional models of the physical.

Connect-Ed. A service that provides email, text, and voice communications to any group of students, faculty, and/or staff in the college's database. This service is currently used for emergency notification and can be used for enrollment management.

Datatel. The college-wide computer software system used to manage and coordinate all of the resources, information, and functions of the college from shared data sources.

Degree Audit. A software program that enables students to track progress toward attaining a degree or certificate and register for the courses needed to maintain progress toward meeting this goal.

Disaster Recovery. The process, policies and procedures related to preparing for recovery or continuation of technology infrastructure critical to an organization after a natural or human-induced shut-down.

E-Advising. A software program that builds on Degree Audit by enabling the student to collaborate online with a counselor or academic advisor about the plan he or she develops using degree audit.

E-Portfolio. A software program that enables a student to maintain his or her academic body of work online.

Green Computing. The study and practice of using computing resources efficiently. The primary objective of such a program is to account for the triple bottom line, an expanded spectrum of values and criteria for measuring organizational (and societal) success. The goals are similar to green chemistry; reduce the use of hazardous materials, maximize energy efficiency during the product's lifetime, and promote recyclability or biodegradability of defunct products and factory waste.

Learning Management System (LMS). Software for delivering, tracking and managing education or training. LMSs range from systems for managing training/educational records to software for distributing courses over the Internet and offering features for online collaboration.

Life Cycle Replacement Plan. A systematic plan to replace systems, such as computers, before they break or become obsolete.

MITEL Phone System. A high-tech company providing voice-centric Internet Protocol -based communications solutions for business. The company originally produced traditional phone systems but after a change in ownership in 2001 now focuses almost entirely on Voice-over-IP (VoIP) products.

Network Operations Center. A group of people equipped with the appropriate tools that ensures that the network is operating securely and at peak efficiency.

Planning, Budgeting, and Assessment (PBA) process. The PBA process links episodic planning efforts - such as strategic planning, educational master planning, other master planning, and program review - into the annual budgeting process. It also generates the demographic, performance, and program information required to drive the overall planning effort.

Project Committees. These are temporary task forces that are formed to implement specific technology projects such as the MyBC portal. These committees report to the Technology Council.

Reports Server. Was previously referred to as "the portal." This system enables users to obtain up-to-date information from the college's management information system from a variety of reports that have been customized to meet faculty, management and staff needs.

Research Committee. This is a committee that reviews and refines the college's research agenda and ensures alignment between the researcher and Information Technology.

Scheduling and Reporting System (SARS). This is the system used by Student Services to schedule appointments and to call students prior to their appointments.

Section 508 of the Rehabilitation Act. Under Section 508 of the Rehabilitation Act (29 U.S.C. '794d), agencies must give disabled employees, students and members of the public access to information that is comparable to the access available to others.

Student and Staff Portal. Commonly referred to as an intranet. This system provides single sign on to district technology resources and enables the student, faculty, or staff member to easily collaborate on line and customize the information he or she receives to his or her specific needs.

Student Communications Center. A centralized phone and computer center that will provide students with a one-stop information center when it is implemented.

System Administrator. The person primarily responsible for maintaining a multi-user computer system.

Technology Center. A California Community College System Office initiative that provides the technology support required to operate the California Virtual Campus and other technology components of the K-20 collaboration.

Technology Council. The participatory governance committee that provides oversight for technology at Butte College.

Thin Client. A way to configure a group of computers (e.g. a lab) in which the data processing occurs at a centralized server.

Voice over Internet Protocol (VOIP). A technology which allows telephone calls to be made over computer networks.

WebAdvisor. The student interface to Datatel.

Wi-Fi. The name of a popular wireless networking technology that uses radio waves to provide wireless high-speed Internet and network connections.

Appendix B. Assessment of the 2008-2012 Technology Master Plan

The 2008-2012 Technology Master Plan has been reviewed several times since it was approved in 2008. This document is the result of the review that the Technology Council conducted in fall 2012. The items highlighted in gray are items that were not completely implemented and were considered for inclusion in this Technology Master Plan.

Goal	Status	Notes
1.c. Television Announcements	Complete	The goal was to use the BCTV monitors to put information and announcements out in areas of heavy student presence; for example, advertising registration dates and programs. This was actually implemented in Fall 2011. Networked monitors are now being used to display updated student information that is managed by the Communications Office.
1.e. Online Class Evaluations	In Planning	Established as a priority by the Technology Council. Scheduled for implementation in Summer 2012 following the MyBC Portal upgrade to SharePoint 2010.
1.f. Implement Blackboard 9.1	Complete	The Academic Technology Committee evaluated BB and Moodle and recommended BB 9.1. BB 9.1 was piloted successfully in Spring 2011 and went into production use in Summer 2011.
1.i. Case Management	Complete	Retention Alert Project went Live on schedule in Spring 2011.
1.k. Broadband/Wi-Fi Throughout	In Progress	When this was first identified as a need, coverage on campus was uneven. We added upgraded wireless controllers to the 2011-2012 Augmentation Request and the expenditure was approved and funded by the Leadership Team. Upgraded Wi-Fi controllers purchased and are scheduled to be installed Summer 2012.
1.l. All Classes Evaluations	Pending	Work scheduled for Summer 2012 following SharePoint 2010 upgrade. Will pilot with online faculty in Summer 2012 and expect to move into production with all classes.
1.m. Degree Audit	In Progress	All degree and certificate programs have been entered into Colleague as of March 2012. We are currently working with Counseling, Assessment and A&R to do some discovery work on best practices with other districts who have implemented DA and are planning for a pilot effort with counseling staff in Fall 2012.
1.n. E-Advising	In Progress	The Datatel Colleague e-advising module was purchased and installed in TEST in 2011 and will be worked with counseling and assessment as part of their pilot of Degree Audit to determine implementation timeline.
3.d. Redundant Fiber	In Progress	Conduit is in the ground; looking for money to pay for the fiber. Obtained $ 200,000 in additional funding through Bond funds. Hired new Telephone Technician with Fiber pulling experience and are working now to start pulling redundant fiber.
3.e. SARS	Complete	Upgraded SARS to the latest current version in Fall 2011 and moved the system to a new, virtual server implementation. As part of that upgrade, we also eliminated sensitive private information (social security numbers) from the SARS database.
3.f. Disaster Recovery in Chico	In Progress	Plan altered with shift to SQL Server infrastructure. Working with DNS and Facilities to install natural gas-powered backup generators on the main server room and are upgrading production

		Colleague System to have fully redundant server infrastructure as part of the shift to SQL Server. Will complete in June.
3.i. Green Computing	In Progress	We are auto-shutting down labs; we are working on implementing software to shut down the rest of campus (some exceptions).

4.c. Education on Accessibility Purchasing	Complete	Held training for faculty and staff by HTCTU staff in Spring 2012. Transitioned responsibility for 508 compliance from DSPS to IT in Spring 2012.
5.d. Evaluate Placement of Technology	In Progress	We have acquired an application called LabStats which will give us hard data on the use of our technology.
5.f. Maintain/Improve Technology Training Program	Complete	Now called Professional Development. Our Manager of User Support has worked with CSEA to develop and deliver on a staff training plan.

Live and Ongoing

Goal	Status	Notes
1.a. Implement the Portal	Live	Continuously being improved. Portal upgraded to SharePoint 2010 in March 2012.
1.b. Implement Connect-Ed	Live	Shifted from Connect-Ed to Regroup for more functionality and lower costs. Fully integrates with Bb. Text message integration tested with TMI in Fall 2011
1.d. On-line Matriculation	Ongoing	Established as a priority by the Technology Council. Orientation, assessment counseling, etc. See Goal 2.a. Will be expanded through implementation of Degree Audit and e-Advising.
1.g. Add/Expand Computer Labs	Live	We need to get buy in from the math lab for the thin clients; Computer Commons, CAD lab, and Math Lab are all Live**.**
1.h. Improve Cell Coverage	Live	We now have good Verizon coverage from the new cell tower. We have talked with AT&T, but they are not ready to install additional tower for campus; however, they have improved the overall campus network coverage. We can get a cell tower put up for approximately 100k.
1.j. Communications Center	Live	The Call Center is up and operating.
2.a. Implement TC Priorities	Ongoing	See project list in Tech Council Team site: https://mybc.butte.edu/groups/Technology_Council/default.aspx
2.b. Establish TC Priorities/Automating	Live	Process in place and operating through Technology Council.
2.c. Support Institutional Researcher	Ongoing	The research subcommittee is meeting continuously and has made good progress.
2.d. Automate Processes	Live	
2.e. Update/Improve Reports Server	Live	Shifting to SQL-based server as part of Data Base Conversion. Conversion work included detailed review and rewrite of all Reports Server reports
3.a. WebAdvisor Reliability	Live	Improved in Oracle version and upgrade to SharePoint 2010 in March should keep us reliable and stable going forward.
3.b. Implement Network Operations Center	Live	NOC established and co-located with Manager, Network, Desktops, and User Support Services in Spring 2012.
3.c. Provide Infrastructure for Facilities Master Plan	Live	ARTS, SAS, Student Center, and Skyway Center are now live.

3.g. Life Cycle Replacement Plan	On Hold	The plan has been established and is waiting for funding. Will need updating if funding is found
3.h. IT Security Plan	Ongoing	Pieces have been implemented, education will be ongoing. We are working on PCI compliance, which will address this.
3.j. Replace Mitel Phone System	Done	
4.a. Maintain Technology Accessibility	Ongoing	We are doing this as part of our standard operating procedure; we maintain 10% accessibility in computer labs.
4.b. Develop and Implement Accessibility Standards	Live	The standards exist.
5.a. Establish/ Implement Permanent CTO	Live	
5.b. Reports Server Training	Live	
5.c. Leverage Technology Center	Ongoing	Next leverage point is Federated Identity and Shibboleth.
5.e. Implement IDP's for IT/Redundancy	Live	IDP's are Live. Redundancy is not always possible; ITS is only one person deep in some cases. We develop redundancy where ever possible.
5.g. Review Technology Master Plan Each Year	Live Ongoing	We will start working through things that have not been Live and adding things to unit plans as appropriate. Plan reviewed November 2009 and May 2010; Nov 2010 and Dec 2011

Additional Goals

Goal	Status	Notes
3.k. Increase security and security awareness	In Progress	Who has access to what; review once a year. Protection protocols. Regular and ongoing training. We are working on PCI compliance which will address this.
3. l. Increase data ownership skills	In Progress	Provide data management skills and training. Review data element dictionary from Chancellor's Office. In process
3.m. Increase access to mnemonics	In Progress	Some satellite areas have access but managers do not. We are working on PCI compliance which will address this.

Appendix C

Butte College - Preliminary Technology Survey (For Butte College Employees)

Please keep this anonymous survey near where you work, and *jot down ideas as they may occur.* Soon we'll be sending out a link to allow you to enter this information electronically.

Your comments are key in our formulating the next Technology Master Plan which will guide the college in the years ahead.

1. Ever think, **"There must be an easier way to do this!"** or **"I could do this faster if only..."**? If so, please list and describe situations where these thoughts might apply (if you have a suggested solution, great, but that's not required!).

2. Do you ever, or often, think, **"I wish I had a (better) computer or other device so I could ..."**? If so, please list and describe things or situations to which this thought would apply.

3. Do you ever, or often, think, **"I wish I could contact someone right now to find out ..."** or **"I wish I could contact someone right now to tell them ..."**? If so, please list and describe things or situations to which these thoughts would apply.

4. If you work often with others (students or co-workers), do you ever, or often, think, **"Our collaboration would be very much improved if we could ..."**? If so, please list and describe things or situations to which this thought would apply.

5. Defining "technology" very broadly, ever think **"It would delight me if I had access to certain technology or training so I could ..."**? If so, please list and describe things or situations to which this thought would apply.

Anything else you'd like to say about technology or technology training not covered above? Let us know below. And thanks!