LONG BEACH
CITY COLLEGE

LBCC Technology Master Plan 2011-2016

“The best way to predict the future is to invent it.”

Alan Kay, 1971

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TECHNOLOGY OVERSIGHT TASK FORCE MEMBERS
2010-2011

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EXECUTIVE SUMMARY

The 2011-2016 Technology Master Plan directs and provides a framework for technology direction, strategy, acquisition and deployment district wide. This Executive Summary highlights the key features of the plan that will guide and focus District action for initial implementation.

The 2011-2016 Technology Master Plan supports:

- A Long Beach City College technology plan vision providing a seamless integration of technology throughout our entire environment. (Page 7)
- A technology oversight task force to address changes in technology directions and strategies.

This task force is not intended to review smaller projects that are within the localized funding of a particular department, but is intended to address those projects that have impact to the institution outside of a local department due to the scope, size, or nature of the project. This task force will meet one to two times per year to set and review priorities for implementation of these projects. Strategic changes in technology directions will be addressed through this committee to keep technology priorities up to date.

- Embedding of Guiding Principles into all technology projects as an LBCC trademark of assurance, quality and reliability. (Page 12)
- Standardization of practices, procedures and business processes for a more uniform and timely delivery of service. (Page 21)
- Centralization of staff, functions and resources, wherever possible, to optimize service delivery, promote increased production, and encourage teamwork with greater efficiency and synergy. (Page 23)
- Maintaining existing resources as a priority in any replacement/refresh cycle to protect the District's investment in technology. (Page 19)
- Flexible protocol that allows the Technology Master Plan to accommodate emerging needs and allow for a prompt institutional response through reorganization of priorities to account for District action. (Page 16)
- Emphasis on transparency, accountability, outcomes and strategic planning reflected in budget management based on established criteria and project review processes. (Page 27)

INTRODUCTION

The Technology Master Plan for Long Beach City College 2006 – 2011 began with a model to assess and identify all areas of the college that use technology. This version guided the implementation of the first replacement cycle enacted 2006 - 2007. The first iterations of this plan were a thorough assessment of the college's inventories and needs as well as developing plans for equipment purchases and upgrades. It has been an active plan informing the decision-making process for annual capital outlay, VTEA, and other funding allocations.

The next iteration of the Technology Plan Master plan covered 2009-2014. This plan covers the period from 2011 to 2016 with the intent of having a Technology Master Plan that is updated yearly and always covers the current and next four years. The Technology Master Plan provides a framework for managing the College's technology assets from one year to the next as new computer hardware replaces old, new software technologies are introduced, new classrooms are added requiring multimedia support, Distance Learning continues its exponential growth, the demands for networking increase, and staff productivity is enhanced with the implementation of new administrative applications. The purpose and scope of the Technology Master Plan is to allow more flexibility, broader input into prioritization and the ability to adapt to the changes and breakthroughs in technology. Providing a framework to incorporate opportunities for innovation will keep the District current and poised for the future.

The Technology Master Plan is embedded in the college planning process and reflects the key planning venues in the institution that guide all planning activities:

1. The Board of Trustees' Goals (Academic Years 2007-09)
2. The Superintendent-President's Goals
   18 Month Agenda for the Advancement of Student Success and Community Development (January 2007 – June 2008)
   12 Month Agenda for the Advancement of Student Success and Community Development (July 2009 – June 2011)
3. Educational Master Plan 2005 – 2010
4. 2020 Unified Master Plan
5. Distance Learning Plan

The Superintendent-President's Agendas for The Advancement of Student Success and Community Development specifically addressed the development of a Technology Master Plan:

> "Through the educational master planning process, develop a plan to address current technology replacement and maintenance needs, as well as longer-term administrative, classroom instructional and distance learning technology needs and support structures." (2007 – 2008)
>
> "Continue to thoroughly and strategically develop plans to realign human resources and better position our technology infrastructure and distance

learning programs to meet the increasing demands of our students." (2008 – 2009)

The Board of Trustees Goals for 2007 - 2009 further reaffirmed the institution's focus on a technology agenda. Specifically, within their second goal to Measure and Improve Fiscal and Infrastructure Stability:

"Review technology plans with timelines and budgets for:
Administrative support
Instructional and student support services"

Furthermore, in this regard, the Board has also set goals to adopt board budget guidelines that include:

"a sound reserve for technology replacement and support"

The 2005- 2010 Educational Master Plan outlined four overarching goals to guide institutional initiatives and practices over the period covered by the plan. The Infrastructure overarching goal sets the stage for the work of the Technology Oversight Task Force (TOTF) as it discharges its mandates and establishes expected outcomes in accordance with its obligations to the college wide planning process. The work of the Technology Oversight Task Force also embraces the remaining three overarching goals of Learning, Equity, and Teamwork and Organizational Development as it strives to fulfill its mission of providing institutional support for the technology infrastructure.

The Technology Oversight Task Force is charged with the continued updating of the Technology Master Plan (TMP) to provide direction for an integrated approach to sustaining the need, application, and assessment of technology college-wide. The Technology Master Plan represents an institutional attempt to structure an integrated approach to sustain and advance the application and usage of technology on campus. The Technology Master Plan introduces a methodology for identifying, assessing, and prioritizing equipment replacement, infrastructure upgrades and recommendations to better manage and utilize technology from an institution perspective.

The Technology Assessment Matrix (see Table 1) identifies three college areas and seven tracts:

1) Instruction
2) Information
3) Student Services

1) Equipment
2) Staffing
3) Software Licenses/Contracts
4) Training and Support
5) Development
6) Accessibility
7) Collaborative and Social Networking

LBCC Technology Plan Vision: Seamless Integration of Technology into Our School Environment

LBCC 2015: A Day in the Life of an LBCC Student

Esteban is a new student who starts at LBCC next week. He works part time at the City office downtown and plans on attending Long Beach college full time, and plans on taking classes both on-campus and online as much as his work schedule and family obligation permit.

PRIOR TO FIRST DAY OF SCHOOL

It is early in the morning; Esteban is sitting in the bus on his way to his office. He uses his mobile phone to take care of the following LBCC related tasks before reaching work.

7:00 A.M. Checking open enrollment on MyLBCC Website to see if some of the classes he wanted to take have openings now.

7:10 A.M. Accessing financial aid online to set up the schedule of payments.

7:20 A.M. Setting a reminder on his phone to take the assessment test this evening, at 7 p.m. Accesses LBCC Knowledge Base to learn more about the assessment test.

7:25 A.M. Replying to email confirming his interest in Anthropology Club membership.

7:30 A.M. Scheduling a meeting on the DSP&S i-Calendar to verify his learning disability status.

During his morning break at the office, Esteban uses the computer at his workstation to do the following:

10:00 A.M. Chatting online with an LBCC counselor to finalize his Ed Plan and transfer to UCLA.

10:20 A.M. Using VoIP to call the Honors program to inquire about his eligibility status.

10:30 A.M. A pop-up note from his friend Rose on My LBCC Facebook: "Remember orientation mtg with the President's and ambassadors 2nite@6. C U there."

Taking lunch at his desk, Esteban is doing the following:

12:05 P.M. Logging-on to Yahoo messenger to chat with a student mentor about the value of signing for Supplemental Instruction for his Math class.

12:20 P.M. Accessing the LBCC bookstore site to check if the material for his English 1 class is ready for pick up. He also checks for the download availability of the e-books for his History class and astronomy classes.

12:25 P.M. Watching music videos made by LBCC students and streamed on the college's Website then visiting the art department's exhibit on the latest collection of students' visual art.

12:30 P.M. e-Faxing a note to the western wall in Jerusalem wishing for a successful experience at LBCC.

After work, Esteban goes to the local coffee shop and connects to the citywide WiFi using the wireless access on his new laptop (acquired through LLP, the LBCC Laptop Loan Program) to do the following:

2:00 P.M. Visiting the LBCC career Website to upload his resume and apply for three positions: at the ITDC helpdesk, the Foundation, and horticultural center.

2:10 P.M. A pop-up note from LBCC Project Launch: "You may qualify for federal support; click to check your eligibility status."

2:20 P.M. Checking the childcare calendar on LBCC Child Development Center's calendar hoping to find availability for his kid to stay at the Center when he needs to attend classes on campus this semester.

ON THE FIRST DAY OF CLASSES:

During the break between his two morning classes, Esteban stops at the lab by his classroom, to do the following:

9:50 A.M. Logging on to Viking food services to order his lunch ahead of time and avoid long lines at 12 noon.

9:55 A.M. Checking the status for his petition to join the online Math 110 class. He is delighted to see that his has gotten a permission number, so he registers online and logs-on to the class to download the syllabus and say hi to his fellow online students.

During his History 11 course on campus at the smart classroom in the South Quad building:

10:15 A.M. Using his mobile phone to find data on the Web and inform the class discussion about inequality of wealth worldwide. His specific assignment is to find information about Southeast Asia. Other students research other parts of the world for the same question.

10:30 A.M. Esteban and his fellow students are sharing their findings on the class blog; their posts are displayed on the big screen and used for the class activity

10:50 A.M. Taking a snapshot of page and Web address of knowledge database that his instructor and classmates created together in class. He plans on using this picture as part of the mid-term class journal assignment.

After picking up his lunch at the LBCC cafeteria, Esteban is enjoying a sunny day with his laptop. He is sitting on the grass at the north quad in front of an electronic display that is continuously showing information about student services available now at the college. Esteban is using his laptop and the LBCC WiFi to do the following:

12:15 P.M. Taking notes on some of the student services he saw on the college's electronic display

12:30 P.M. Accessing the library electronic databases to download an article he needs for his English class tomorrow.

12:50 P.M. Posting a response on his History class discussion forum, following notes he took when he watched the instructor's vodcast last night. He is also reading and responding to other student postings. He is also checking the latest RSS feeds and the Google alerts for his module assignment due in three weeks.

1:20 P.M. Reading a chapter in his history class e-book, he is checking the meaning of terms on the class electronic vocabulary assistant, sharing his thoughts on the blog corner for this chapter, and assessing his comprehension of the chapter

using the course's open multimedia courseware links and the meaningful feedback tailored to his needs.

1:40 P.M. Visiting the Computer lab at the Math Success Center to arrange his sessions with the instructional specialist.

2:30 P.M. Logging on to his English class' wiki to make changes on the paragraph of the short story he is writing with three other students as part of this week's assignment

3:00 P.M. Using CCC Confer, he is participating in a live presentation conducted by his fellow students in the Astronomy class.

It is late in the evening; Esteban is at home. After fixing dinner for his wife and daughter, he is on his computer to do the following:

11:00 P.M. Taking a virtual fieldtrip at the New York Tenement Museum to learn about life among the working poor in 1890. He is tagging some photos and bookmarking information to explain why this historical information matters to him today.

11:30 P.M. Noticing his Math teacher has just logged on, he starts a chat, asking the teacher if he can help him with a brief problem he is still stuck with in the class assignment

12:00 A.M. He just realized that he forgot to schedule his appointment with the nurse to arrange for his prescription. Logging on the LBCC Health Services, he is adding himself to tomorrow's schedule.

2:00 A.M. After finishing all his homework, he is updating his progress report on his employer's Website and the promotional program that his boss has arranged with LBCC.

PRIORITIES FOR 2011 - 2016

The Technology Master Plan is meant to provide a framework and general direction to assist in the implementation of technology initiatives campus wide. To assist the College Planning Committee in the annual formulation of institutional priorities with respect to technology maintenance and deployment to feed into the budget planning process, the following priorities are submitted as a guide:

Consolidation/Centralization

Provide resources to support the consolidation/centralization of technology functions and personnel campus wide that can yield significant economies of scale and optimize the workforce and support a team approach for technology management.

Infrastructure/Networking/Telecommunications

Provide the necessary support to maintain and advance the infrastructure that supports college wide connectivity and access.

Computers

Provide the necessary support to maintain existing resources. Where applicable, follow the replacement cycle established by the Plan. Provide the necessary support to continue to maintain past investment by upgrading current resources that can be recycled according to established inventory and criteria. (Page 20)

Applications, Systems and Environments

Provide support that allows the continued maintenance and advancement of applications, systems and environments. (Appendix 3 - IITS Application Development and Support Projects 2011)

Instruction/Student Services/ERD

Provide support to maintain the e-learning environment campus wide. Continue to provide support for ongoing development and growth to address demand and emerging needs for multimedia and online resources. (Distance Learning Plan – http://ie.lbcc.edu/documents/DL_Plan_Rev9_25_2008.pdf)

The Web

Provide resources to maintain and advance the LBCC Web environment. (Page 21)

New Technology Projects

Provide support to projects that have undergone successful review and scrutiny under established guidelines for creating new labs or multimedia environments. (Page X – IITS Project Information Plan template, Page X – Applications Development Project Plan)

As these broad priorities are applied, it is expected that the principles and guidelines set forth in the Tech Plan will be honored. They represent a holistic, overarching umbrella and a distinguishing characteristic by which all LBCC technology practices, initiatives, projects and operations will be known. The underlying premise behind this priorities protocol is to preserve and maintain what we currently have and to grow strategically as resources allow. This plan along with the priorities outlined is to be considered a living document and, as such, bears flexibility of action along with the ability to respond to unexpected emergencies that can shift the priority focus at any time. These priorities are submitted with the understanding that the degree and extent of implementation will be determined by the availability of funding sources.

GUIDING PRINCIPLES

The guiding principles below are defined and intended to help provide distinguishing characteristics for all LBCC technology deployments. As such, these principles are of equal value. The "**Guiding Principles**" evaluation is included in the broader "**Guidelines and Criteria for New Technology Projects**".

Standards and Policies

Adhere to existing technology standards to ensure technology will be compliant with all legal regulations and standards.

Quality

Commit to a management approach continually assessing the quality of technology usage to improve and deliver superior products and services at the lowest possible cost.

Learning and Teaching

Using a comprehensive strategy of development, maintenance or procurement, integrate technology into the curriculum in support of learning and teaching to mediate instruction in all types of courses for purposes of (a) engaging students and faculty in learning and teaching environments that are dynamic, interactive and accessible; (b) providing 24/7 access (c) facilitating comprehension, sharing, application and transfer of knowledge; and (d) promoting the achievement of student learning outcomes and student success. (See Appendix II)

Security

Provide for a secure environment for academic and administrative activities, electronic infrastructure, services, information and business continuance.

Usability

Design technology and the services it provides to be convenient**,** effective**,** intuitive and accessible for all users. Accessible means the degree to which a product, service, system or environment is usable. It is strongly related to the approach of universal design or inclusive design, which is about making things accessible to as many people as possible regardless of ability.

Effectiveness

Successful implementation and use of technology requires effective leadership, strategic planning and budget management that optimizes resources; employs an adequate number of well-trained technology support staff; and provides consistent and high quality functioning equipment and systems.

Service

Provide excellent service and maintain a high level of user satisfaction in its delivery to students, faculty, staff and the community.

Currency

Embrace innovation and new technology while maintaining a solid reliable technology infrastructure to pursue strategies that support technology planning and remain current with technological advances.

Ubiquity

Establish and maintain a state of the art technological connectivity for the entire college community with equitable and accessible standards of support for all.

GUIDELINES AND CRITERIA FOR NEW TECHNOLOGY PROJECTS

A systematic way of allocating resources and making decisions as to which projects get funded or allocated is needed in the course of supporting, improving, and developing technology at LBCC.

The Technology Plan's Guidelines and Criteria define some of the factors that need to be considered in introducing new technology features into the College. The number of these guidelines that a project addresses is an important view of the project. The criteria listed below are not exhaustive to discern the viability of projects.

Commitment to Staffing Requirements

Decisions to acquire new equipment (hardware/software) must include an analysis of the staff support requirements and should not be approved without the accompanying commitment to provide funding for the necessary staff support (additional full-time, additional part-time, available existing staff, or outside contract options.

Scope of Need

There should be a need identified and documented for the project. The scope of the need should be defined.

Guiding Principles

How does the project fit into the Technology Plan Guiding Principles?

Cost / Benefit

The project should be defined to an extent that an estimate of the cost can be calculated in three factors: time to complete, person hours of time, and fiscal cost. The benefit of the project should be estimated. This could be savings, number of students or faculty affected.

Large Context

Projects should be looked at from the larger context of the entire school and the allocation of resources that can accomplish the most. Can this project be consolidated with similar requests?

Local Context

What is the impact of doing or not doing this project to the local department level? Is it critical for a program for the department? Departments and Schools should have some budget to do smaller projects with some autonomy.

Criteria also need to be employed to make a differentiation between staff time only projects as distinct from projects requiring funding. How these projects are prioritized would also require a different approach.

PLANNING AND OUTCOMES

The following section of the Technology Plan focuses on the original Technology Planning Taskforce Charges as a guide and a structural organization to discuss the goals and purpose of technology planning at LBCC. Each charge captures an element of technology planning that leads to a comprehensive view of how technology is managed and deployed at LBCC.

CHARGE # 1

Policies, strategies, and standards that address the instructional and information technology on campus and from a distance, including telecommunications systems, electronic learning resources and tools, access, security, disaster recovery/business continuance and the operating workforce needed for these purposes.

OUTCOMES

- Technology used in college areas conforms to college policies, regulations, guidelines, and standards in their acquisition, development, integration and delivery processes. All technology-related college policies and their implementation practices are free of biases and reflect an inclusive approach.
- Electronic learning resources and tools are integrated into college instruction practices, student services, and information technologies.
- Centralization of, and resource sharing among, support staff in technology-related areas is employed when applicable for cost-effectiveness and streamlining of staff support efforts.
- Centralization of, and resource sharing among, training and professional development staff in all college areas is employed when applicable for cost-effectiveness and streamlining of training efforts.
- Centralization of, and resource sharing among, help desk staff and functions in all college areas is employed when applicable for cost-effectiveness and streamlining of technology support efforts.
- College areas integrate social networking/media and Web 2.0 technologies into their plans and practices, generating cultural change that promotes student-centered approach.

Technology evolves at an exponential rate. As our environment evolves, our needs change and there always seems to be something bigger, better and more efficient on the horizon. Although a need for better use of existing resources may exist, it is important to monitor the latest technology trends and developments. Areas such as open source software, converging audio/video and information technologies, evolving wireless standards, mobile computing, distributed computing, and voice recognition deserve our attention. Adopting new technologies should be done with planning and consideration, however planning and consideration should not stunt innovation. Therefore, it is imperative that we rely on clearly delineated policies, strategies and standards to guide the process of evaluation and implementation of current and emerging technologies.

Technology Oversight Taskforce

In 2010, a Technology Oversight Task Force was formed to address the demand for new applications, changes in technology strategies and enhancements to existing systems. This task force is not intended to review smaller projects that are within the localized funding of a particular department, but is intended to address those projects that have impact to the institution outside of a local department due to the scope, size, or nature of the project. This **group will meet one to two times per year** to review priorities for implementation of these projects. All requests for strategic changes in technology directions should be funneled through this committee to establish implementation priorities.

The Task Force and the Associate Vice President of Instructional and Information Technology Services (IITS) will use the **"Technology Priority Guidelines"** described in this Technology Plan for allocating funding and staffing resources for current and future systems.

CHARGE # 2

Hardware, software, and telecommunications infrastructure (including replacement cycles) and their costs.

OUTCOMES

- Centralization of hardware/software/network/ telecommunication resources is practiced for cost-effectiveness and efficiency.
- Consistent and reliable on-going source of funding for equipment upgrades and replacement is established.
- Centralized procurement and maintenance is practiced for college-wide workstations, development stations, labs, and classroom equipment.
- Centralized development, procurement, maintenance and usage are practiced for the use of all applications and software college-wide.
- Centralized procurement and maintenance is practiced for the use of all servers college-wide.
- Backup / recovery and disaster preparedness procedures are implemented for technology in all college areas. Identify and collaborate with an out of area institution/facility for security and emergency purposes.
- All electronic and technology-related physical environments follow usability principles are fully inclusive and accessible to all students and college staff.

Long Beach City College has identified technology and its uses as central to the success of its students and employees. In order to maintain its competitive edge, LBCC must support a robust, reliable infrastructure for the effective and efficient delivery of information, instruction, training, and all technology based services. Technology has become an essential component in the operations of the college from the delivery of a distance education curriculum, to direct classroom support, to the college's business

affairs. Information itself is a strategic organizational asset and must be carefully managed and protected.

Success at using information technology requires not just a one-time investment but constant updating of hardware, software, methods, and support models. Life-cycle replacement funding should be built into planning at every level of investment in information technology (including instructional labs, personal computers, multimedia, departmental and institutional servers, applications, network hardware and software).

Equipment Life-Cycle Recommendations:

Equipment Type	**Proposed Replacement Cycle**
Computer Lab – Type A	2 years - Cycle to other areas
Computer Lab – Type B	2-4 years - Cycle to other areas
Computer Lab – Type C	4-6 year cycle
Production Servers for PeopleSoft and VMWare Virtual Server Cluster	Every 3 years - (Servers to be leased)
Storage Area Network	Add storage yearly. Upgrade SAN every 3 years via leasing.
Network Equipment	5 to 8 years depending on network load, congestions and equipment obsolescence.
Infrastructure, Network and IP Servers that cannot be virtualized	Every 4-5 years
Technical Support Staff Computers	Every two years - Cycle these computers to less demanding tasks or users
Multimedia (AV) equipment	Use until its demise. Build up mode to equip every instructional space with AV equip. Bulbs need replacement every 1000 hours.
Faculty & Staff Computers	Every four years
Voice Over IP (telephony)	Replace Call Manager Servers every 5 years and phones as they break (maintenance)
Cable Plant	10-20 years life span depending on technology. Upgrade to hybrid fiber.

Academic Computer Labs Replacement Cycle

Virtualization technology (virtual desktop interface or VDI) should be explored as a means to extend the life cycle for computer lab equipment. Computer lab environments can be delivered from servers over the campus network to any machine. Providing virtual labs will slow the need for ever increasingly powerful desktop workstations for computer labs. Virtual labs will also allow for distance learning students to have remote access to desktop environments identical to those found in the physical computer labs on campus. Virtual desktops will allow for the longer use of current equipment since local hardware requirements will not grow as quickly. Delivering computer lab environments virtually will allow for "zero client" environments that utilize much less expensive desktop hardware and that require little to no maintenance. These can be systems without local hard drives that boot directly to the virtualized environment.

To ensure student success it is critical to maintain current and fully functioning computer labs. Through the development of this plan, criteria were established based on discipline-specific needs and type of computer lab. A timetable for replacement cycles is suggested with the understanding that available funding may cause cycles to be extended out as funding is available:

Three-tiered approach tied to instructional content requirements based on specialized equipment specifications needed to run discipline specific software.

- **Type "A" Lab Criteria** – This type of lab uses technology to teach technology. The software programs used by these departments are the most robust of the college and require top of the line hardware. **2 year cycle**
- **Type "B" Lab Criteria** – This type of lab runs discipline specific software that requires moderate to higher-end hardware for proper usage. This type of lab does not require running the latest in operating systems. **2-4 year cycle**
- **Type "C" Lab Criteria** – This type of lab runs basic and low-level applications that do not tax the system resources. This type of lab does not require running the latest in operating systems. **4-6 year cycle**

§ Refresh cycle introduced to circulate replaced computers to other labs or support areas to assure currency of usage.

§ Proposed purchase of 5 year warranty to extend life of equipment.

Faculty & Staff Computer Replacement Cycle

Replacement cycles are suggested with the understanding that cycles may need to wait until funding is available. A strategy of purchasing new computers and upgrading existing computers will be employed with a focus on replacing and upgrading the oldest models first.

§ Proposed purchase of 5 year warranty to extend life of equipment.

CHARGE # 3

Enhancements for college planning and operations such as planning/review system, technology-mediated learning and teaching, student services systems, administrative information technologies to support data warehouse, data and imaging archiving, web interface for college communications and functions

OUTCOMES

Instruction

- Instructional technology is integrated seamlessly into the curriculum of courses on-campus and other modalities across LBCC disciplines and their course offerings via a comprehensive e-learning environment used for courses offered in all modalities.
- An original LBCC e-learning zone system ("the e-Zone") functions as the central gateway for accessing DL and Web-enhanced courses.
- An original LBCC e-learning course environment is used for DL and Web-enhanced courses and access through the e-learning course environment is developed and upgraded on an-going basis to promote student learning and success.
- DL courses are developed through collaboration between department representatives and the ITDC; they are ready to be assigned to instructors for customization and delivery based on the strategic DL course offering plan in each department/school.

  Distance Learning Plan Oversight Task Force
  http://ie.lbcc.edu/CPC_DL_Oversight.cfm
- Student-centered Open Courseware are developed on an on-going basis to promote instructional resource sharing among faculty and to ensure optimum student access to meaningful courseware integrated into class activities, or used in supplemental learning and supplemental instruction activities. The above includes, but not limited to, interactive multimedia, Web-mediated instructional activities, database-generated instructional programs, and the use of Web 2.0 collaboration and communication features (e.g. collaborative writing, blogging, community bookmarking, blogging, instructional material tagging, and RSS feeds for research)
- A functional e-portfolio system is used on both the course and the departmental and institutional levels for instructional and assessment and institutional purposes.
- Individualized, hands-on, students and faculty e-training and professional development environments are developed as needed for various institutional practices and processes.
- e-Tools for instructional research and marketing of Web-mediated courses, informed and populated by real time data (e.g. from data warehouse, PS) are developed as needed for institutional practices and processes.
- Campus virtual system environment is developed to deliver consistent computer lab desktop environments for distance learners.

Information

- Communications systems (VOIP) for desktop videoconferencing, emergency information distribution, wireless telephones, calendar-based information distribution etc. are used in manners that serve all college areas productively
- Enterprise Resource System (ERP) is continuously enhanced and upgraded with internal/external features needed for on-going purposes serving all related college areas
- College areas focus and provide total cost of ownership (TCO) analysis on acquiring new or additional technologies that enhance the value of existing technologies (e.g. website content management system, portal, electronic signature, laserfiche, etc.) The IITS Project Information document is used to help departments account for the total cost of technology projects such as new computer labs. (Appendix VI.)
- Routine business and governance of technology are supported by secure and robust web resources available anywhere and anytime.
- College critical business systems are appropriately redundant and recoverable with minimum downtime. Formalized disaster/recovery/business restart plans are in place.
- Campus virtual systems environment is expanded and strengthened as needed to support all related college areas.
- A security plan has been created and updated on annual basis.
- Information technology development is regularly integrated into the college plan processes.

Student Services

- Web-mediated student services are equivalent and complementary to the on-campus services; they are offered and accessed to fit the changing needs of student populations and the community at large.
- A student-centered environment provides students with an individualized, reliable, meaningful, and secured access to services needed throughout their college experience from recruitment to transfer and career advancement and everything in between.

Planning and Operations

The Technology Planning Oversight Committee will review and recommend priorities for all new and existing projects according to the parameters of the Technology Master Plan. The Committee will also utilize information from the Program Review and Planning process.

- Planning for technology is aligned with Educational Master Plan, Superintendent/President's Eighteen and Twelve Month Agendas, and Board of Trustees Goals, 2020 Unified Master Plan, and Distance Learning Plan.

- When approving budget for technology at LBCC, ensure that all areas and tracks identified in this plan are considered.

To maintain the institution's competitive edge as well state-of- the-art teaching, learning and working environments, instructional and information technology provides the backbone for college planning and operations that delivers and supports new systemic approaches. For example, one of the College's most substantial technology investments has been in our Enterprise Resource Planning system (Peoplesoft). As LBCC end users become more familiar with the operation of these systems, opportunities are discovered for business process improvement and system utilization, which helps College operations to be more efficient and cost effective.

Planning and review systems will assist the college in data collection for more efficient and college wide planning process. Examples include: TracDat is utilized for Program Planning and Review data collection and reporting; TutorTrac is utilized for reporting progress on Student Learning Outcomes and tracking student time and attendance; A Data Warehouse built on Cognos software is utilized for analysis and reporting from Peoplesoft and other data sources. Cognos also provides the platform for Enrollment Management what-if analysis and reporting. Dashboards will be developed to provide timely information on important District metrics.

The e-learning environment at LBCC as well as online student services delivery and library online resources have opened up a new world of exploration on a 24/7 basis for anytime, anywhere, anyone access. Administrative information technologies have also made it possible to have a data-driven environment that informs all of the college's decisions and actions.

CHARGE # 4

Needed levels of support staff, staff development and training for all members of the college community, self-serve learner services.

OUTCOMES

- Centralized or localized staffing needs analyses and staff support requirements accompany any technology-related acquisition, development, or service in all college areas.
- LBCC staff is trained based on localized needs of specific professional areas, their function and needs.
- Trainers are hired based on the localized staffing plan.
- Trainers from specific areas collaborate on training and development and delivery as commonalities are evidenced.

In order to ensure that all of the technology programs and systems at LBCC function efficiently and effectively, an adequate level of staffing is paramount. In today's world, the pace of change in technology is swift. Regardless of the substantial technology inventory that already exists at LBCC, it is likely new technologies will be continually

acquired. Some of these technologies may replace existing older technologies. Some may come to LBCC as part of an upgrade of an existing system; however, some may be entirely new to the LBCC environment. Even the best technology is useless without talented, creative people to implement, maintain, and provide training for it. It is essential to provide adequate staffing support for all areas of the technology. Funding decisions for new technology often fail to include the longer term financial commitment for staffing. While listed as an outcome under policies, strategies and standards; it is important to reiterate that options for resource-sharing and cross-training should be evaluated and implemented whenever or wherever applicable for cost-effectiveness and streamlining of staff support efforts. Staff development and training is a key factor in the success of any staffing plan for technology support.

Technologies develop and evolve at a rapid rate of change, and keeping up with and implementing the improved technologies is an ongoing challenge for any institution. Continuing training opportunities are a critical component to the success or failure of technology.

CHARGE # 5

Facilities remodels, construction, and utilization plans to properly support the colleges instructional/information technologies and telecommunications systems.

OUTCOMES

- Facilities remodels and construction projects implement and effectively utilize all applicable District technology standards.
    - Green technologies such as energy efficient, recyclable products will be utilized wherever possible.
    - Design/development of new facilities incorporates resource sharing/centralization practices (e.g. shared peripherals such as combination printer/scanner/copiers wherever logical and effective).
- All technology facilities are scheduled efficiently and effectively utilized to support college wide needs.

Current planning, construction and remodel of new buildings scheduled for completion by 2020 will impact the campus technology profile with state of the art delivery systems. Working with staff from IITS, facilities, the Bond Team, PlanNet consulting and Hill Partnership architects, the District has created a District Standards document. This documents the technology requirements for smart classrooms, offices, computer labs, conference rooms, etc. It also documents requirements for IITS spaces such as building telecommunications spaces. These new technologies and spaces will need to be properly supported through ongoing maintenance and staff support. Likewise, network and telecommunication systems will need to expand to accommodate greater demand and new communications modalities. These projects are listed below to serve as evidence of the increase in technological systems that will have an impact on the need for additional resources to support, maintain, troubleshoot and repair these systems:

- Tech Phase I - Welding and other trades with Multimedia Classrooms and open learning center/computer lab which will add 6 new multimedia/computer projection systems and 4 new computer labs (82 computers). (Complete.)
- South Quad Complex—32 multimedia classrooms, large multipurpose room, Board room with broadcast capabilities, conference rooms. This building will have 3 computer labs (1 new lab with 40 additional computers, replaces 2 existing labs), 34 new multimedia/computer projection systems, 1 new videoconferencing system and a built-in three camera broadcast/recording system. (Complete.)
- PCC Multidisciplinary Academic Building remodel project will modernize and upgrade the AA, BB, DD and EE buildings. This project will add 27 new multimedia/computer projection systems, and 2 videoconferencing systems. Current plans do not add new labs but upgrade existing computer labs. (2010-2012 Two phase implementation)
- Building O1 remodel will provide space for the Bond Management Team as well as 3 units within IITS (User Support & Web Development, Application Development & Support, Network Services), including a new data center with backup generator.
- Building A remodel will provide a state of the art Student Services Center.
- North Loop Infrastructure project provides new pathways and fiber and copper as well as other infrastructure services (chilled water, hot water, gas, electricity).
- Parking structure will include 20 emergency (blue light) telephones and parking permit dispensers utilizing the campus wireless network.
- Continued implementation of Measure E 2020 Unified Master Plan.

CHARGE # 6

Alternatives and phase-in plans

OUTCOMES

- Older classrooms are installed with multimedia systems over a period of time and supported by portable equipment as new construction is completed.
- A consistent recycle/refresh program for multimedia equipment is phased-in over time as new resources become available.

Multimedia Equipment Services and Support is faced with the issues of not enough equipment to meet the current demands and therefore is still in an inventory growth period. Equipment is utilized until its demise. It is the goal to eventually have all classrooms outfitted with permanent multimedia projection systems based on the District standard. This implementation will stretch over a number of years taking into account the new construction and remodel of existing buildings. Therefore, a combination of new equipment purchase and upgrade of old is recommended. Portable equipment will continue to be a part of the inventory for the foreseeable future to meet needs of classes in interim areas and surge spaces, as well as needs beyond the classroom. Over time this method will be phased-out in favor of permanent technology solutions.

FUNDING STRUCTURES AND STRATEGIES

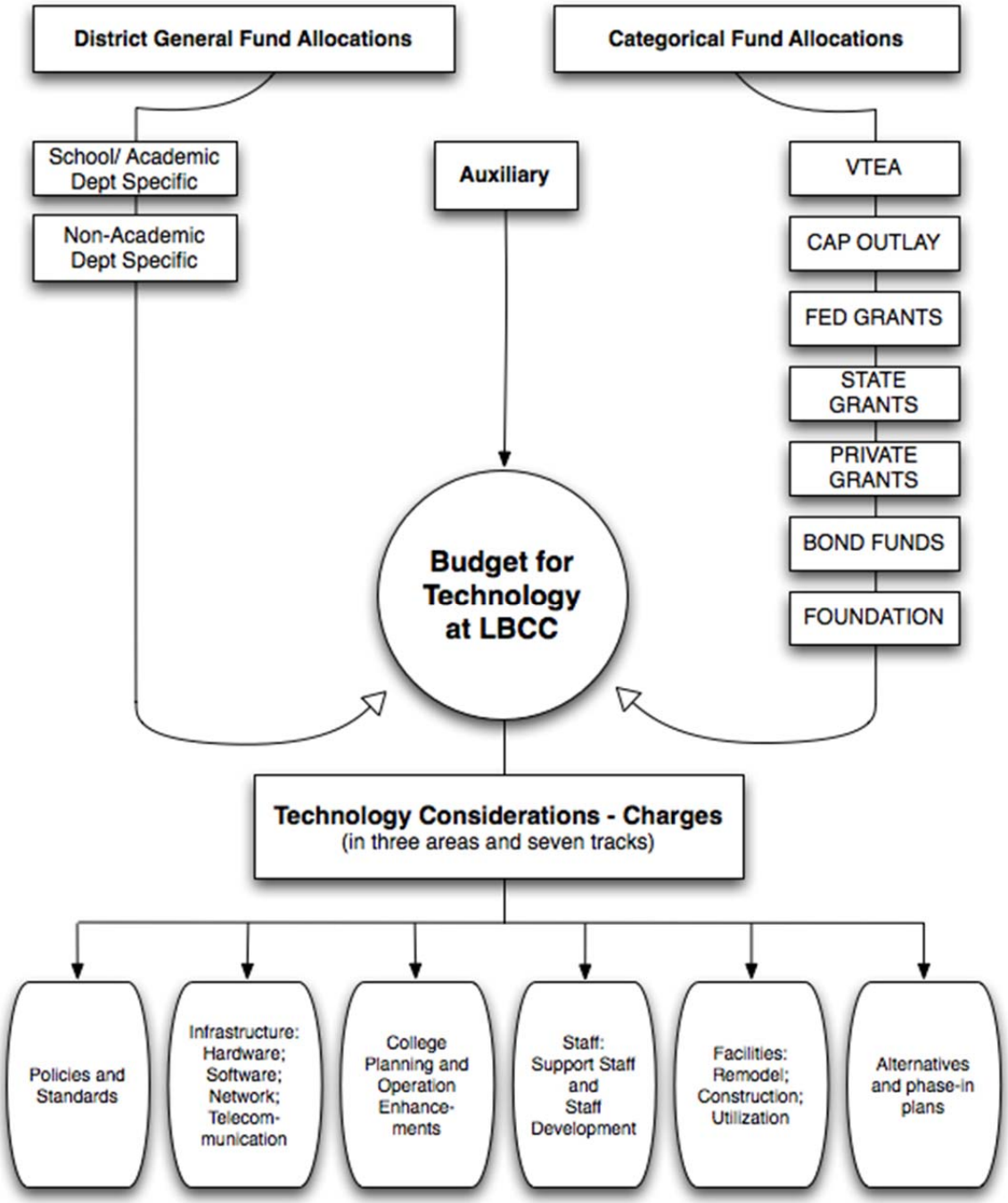
Leveraging Resources for Maximum Benefit/ Funding Structure Array

Technology planning has transitioned from a "catch up" phase to a maintenance phase within the last two years. The premise under which the Technology Master Plan (TMP) was based implies that one time expenditure of funds to jump-start the implementation strategy will require an ongoing, sustainable district funding source to achieve total cost of ownership. As equipment ages, goes out-of-warranty and to allow for maintenance and repair, recurrent license costs and fees, and other related considerations, the TMP aims to circumvent crisis mode management of campus technology and instead develop a comprehensive and sound plan based on yearly assessments and review. The program planning and program review processes throughout the college will also inform the priorities for technology funding.

An innovation phase can now be considered which will broaden the nature of the planning approach. It is this arena of innovation that the new Technology Master Plan ventures into. Technology planning for the future outlines a strategy that is flexible, adapts to evolving conditions, and is scalable. A new model that provides a framework which allows for a user-centric, initiative-driven process is proposed.

It is critical when establishing budgets for procurement and acquisition of technology that a comprehensive approach is established. While the previous plan addressed funding cycles for equipment, it did not address a broader perspective that is needed by looking at all funding sources as well as all funding needs. The Evaluation Report from 2008 Accreditation Team visit stated, "... the challenge will be to develop an ongoing source of technology funding to realize the benefits of the extensive technology planning" and went on to state, "The team recommends that the college commit to technology funding which is responsive to college planning."

The following is a visual representation of all considerations:


District General Fund Allocations
Categorical Fund Allocations
School/ Academic Dept Specific
Non-Academic Dept Specific
Auxiliary
VTEA
CAP OUTLAY
FED GRANTS
STATE GRANTS
PRIVATE GRANTS
BOND FUNDS
FOUNDATION
Budget for Technology at LBCC
Technology Considerations - Charges
(in three areas and seven tracks)
Policies and Standards
Infrastructure: Hardware; Software; Network; Telecom-munication
College Planning and Operation Enhance-ments
Staff: Support Staff and Staff Development
Facilities: Remodel; Construction; Utilization
Alternatives and phase-in plans

CPC Charge for the Technology Oversight Task Force (Appendix I)

A technology oversight committee should be formed to address priorities and changes in technology strategies. This **committee will meet one to two times per year** to evaluate and set technology practices and strategic priorities as part of the annual updating of the Technology Master Plan.

Charge

Update the Technology Master Plan on an annual basis.
Use the "Technology Priority Guidelines" to evaluate and develop a list of strategic technology directions and provide advice for setting priorities.
Assure that Technology Master Plan supports the overall goals and strategies of LBCC.

Membership

- Co-Chair - Associate Vice President of Instructional and Information Technology Services
- Co-Chair - *Academic Senate faculty appointee (preferably an individual with IT expertise)
- Administration - Academic Dean
- Administration - Non-Academic Administrator
- *Faculty (appointed by Academic Senate)
    - One Faculty member at large
    - One Faculty member whose primary assignment is at PCC
    - CCA: CCA representative
    - AFT: AFT representative
    - ASB: ASB representative
- Resource Persons - Instructional and Information Technology Services:
    - Deputy Director, Network Services
    - Deputy Director, Academic Computing & Multi-Media Services
    - Director, Application Development & Support
    - Director, Distance Learning

Reporting Structure

This committee will report to the College Planning Committee (CPC); in consultation with the committee, reporting milestones will be determined by CPC and the co-chairs of this committee.

* up to two 3-year terms
Revision approved by CPC - 12-03-2009

Technology Assessment Matrix: Identifying technology use across the Institution (Appendix II)

Area	Instruction	Information	Student Services
Equipment	Network equipment Instruction labs Classroom AV equipment Media production & support Learning Resource Center Instructional servers Virtualization	Network equipment Training & conference rooms Office computers and printers Wireless network AV equipment Servers (DL, Lib, ACIT, CBIS, etc.) Virtualization	Network equipment Registration computers Student self-service ID/Debit card scanners Monitors for students Communication Student portal Virtualization
Staffing	Instructional lab support Instructional aides Instructional Technology Support for Faculty & DL Classroom support	Business Systems Analyst Media Support Staff Network Administrators Telecom Technicians Helpdesk User Support Techs DB & System Administrators Application Analysts Web Developers	IITS Support Staff Student Helpdesk DL Helpdesk
Software Licensing	Library databases Video content - distance learning and Web enhanced courses Course development software. Academic Computing	PeopleSoft, COGNOS, SPSS, Library (Voyager), TutorTrack Laserfiche, MIS Reporting, EPOS Software (phone registration), E-mail/Outlook, MS Office Suite, Web tools Software (ColdFusion, Adobe Suite), etc	Assistive Technology Web tools such as Dreamweaver Scantron System. Human Performance Lab system

Training and Support	Integration of instructional technology into the curriculum Faculty technology support - FRC & Helpdesk. Distance learning support for faculty & students. Classroom Technology.	Media Production Staff Training Help Desk	Faculty & staff Helpdesk and workshops Student Helpdesk New Faculty Training Faculty Support Center On-Call
Development	Instructional Technology: Development of course-specific technology-mediated instruction Development of distance learning and Web-enhanced instruction Mobile applications	Websites Online Administrative Systems (Forms, Procedures, and Content Management) Mobile applications	Administrative Systems Student Portal Academic Advisement Connect the FSA Atlas to PeopleSoft interface Mobile applications
Accessibility	Distance Learning & Web-enhanced courses Instructional media (e.g. video, podcasts, streaming media, etc.). Classroom and Computer Labs.	Purchased software, web applications, media and hardware purchases In-house applications Web accessibility standards, policies and administrative regulations	Student Services web pages Accessible equipment in all Labs
Collaborative & Social Networking	Video on-demand Web 2.0 (e.g. RSS feeds, wiki, blogs), Wireless connectivity Mobile applications	Data warehouse information Wireless environments Bandwidth Remote access Mobile applications	Wireless connectivity Bandwidth Facebook/Twitter/YouTube Mobile applications

Application Development & Support Projects

Appendix III

Project	Priority	Date due	Dept Sponsor	Notes
Academic Advisement implementation		Fall 2011	A&R	project plan required
TES -course equivalency system usage			Articulation/A&R	meeting on 11/10/09 to discuss TES bus. Process; 508 compliance issue
Enable waitlisting with auto enroll			A&R	initial project plan created
16 week calendar	in progress	Fall 2012	OAS	project plan/timeline needed
Office Hours project	completed	Spr 2011	OAS	completed
Assessment/Orientation before enrollment		Fall 2012	Matriculation	design in progress
Data Warehouse changes		initial rollout started Jan 2011	Institutional Effectiveness	
Automated load sheet		started; waiting on HR- Jan 2011	HR & OAS	Completed 1st phase in early 2009. Waiting for final testing by HR & OAS
Payroll salary advance taxation	on-hold	waiting on Payroll	Payroll	Joan: project on hold 11/09
Leave Award Calculation Moves to Next Rate in Wrong Fiscal Year- Correction for years 2008, 2009 and 2010 – negotiated item.			Payroll	
Benefits Administration System to include changes to coverage codes, uploading enrollment, etc.			Payroll	

Retirement File Corrections to include total review, correction of lump sum reporting, S2S retirement type, etc. STRS accepting zero errors and charging penalties.			Payroll	
Tax Form XMLP Options – to be developed for 2011 W-2			Payroll	
turn on Financial Aid self-service (to do list)		date desired 2/28/11	Fin Aid	modif request submitted 1/31/2011
Verification Improvement Process (reduce number of students selected for FA verification)		cancelled	Fin Aid	
College Promise	Fall 2011	in progress	Scholarship Office	project plan completed: system design started
Implement Credit History module			Cashier's Office	project plan required
Financials upgrade to 9.1	May 2011- in progress		Fiscal Services	upgraded database to be provided shortly
PCS enhancements- rollup of vacancies			Fiscal Services	requirements needed

Breakdown of LBCC Computer Labs and Classrooms – Appendix IV					
Computer Labs & Classrooms	**Department**	**Function Description**	**PC**	**MAC**	**COMBO**
LAC-A115 (Temp Location M105)	DSPS High Tech Lab	Specialized equipment & staff for Disabled Students	27		
LAC-A156 (Temp Location M219)	Counseling (Transfer Center)	Within Counseling area, staffed by Student Assistant to work with students on Transfer	8		
LAC-B101	Electrical	Discipline specific classroom with Computers-attached to specialized equipment (Traffic lights, CNC machines etc.	31		
LAC-B105	Electrical	Discipline specific classroom with Computers-attached to specialized equipment	13		
LAC-B200	Electrical/Cisco Lab	Discipline specific classroom with Computers-attached to specialized equipment	35		
LAC-B202	Electrical/Cisco Lab	Discipline specific classroom with Computers-attached to specialized equipment	35		
LAC-B213	Electrical	Discipline specific classroom with Computers-attached to specialized equipment	18		
LAC-B300	Architecture/Drafting	Discipline specific Classroom with Computers (high end software --Revet, CAD etc.)	35		
LAC-B302	Architecture/Drafting	Discipline specific Classroom with Computers (high end software --Revet, CAD etc.)	37		
LAC-B308	Architecture/Drafting	Discipline specific classroom with Computers-attached to specialized 3D Modeling Equipment	8		

Computer Labs & Classrooms	Department	Function Description	PC	MAC	COMBO
LAC-C204	Nursing	Discpline Specific Computer lab located in Nursing building with trained staff.	28		
LAC-D103/D106	Math,	Discipline Specific Computer lab	11		
LAC-D117	Math	Discipline Specific Computer lab/Classroom	35		
LAC-D118	Math	Discipline Specific Computer lab/Classroom	29		
LAC-D201	Biology	Discipline specific classroom with Computers-adjacent to wet lab area, trained staff		38	
LAC-D214	Biology	Discipline specific classroom with Computers- Biology lab		9	
LAC-D217	Botany	Discipline specific classroom with Computers- Botany lab		8	
LAC-D226	Microbiology	Discipline specific classroom with Computers- Microbiology lab		9	
LAC-D301	Chemistry	Discipline specific classroom with Computers- Chemistry lab	31		
LAC-D312	Geology	Discipline specific classroom with Computers- Geology lab	12		
LAC-D314	Physics	Discipline specific classroom with Computers- Physic lab (Adjacent to stockroom with specialized equipment)	12		
LAC-D318	Physics	Discipline specific classroom with Computers- Physic lab (Adjacent to stockroom with specialized equipment)	12		

Computer Labs & Classrooms	Department	Function Description	PC	MAC	COMBO
LAC-D319	Chemistry	Discipline specific classroom with Computers- Chemistry lab	22		
LAC-D324	Geology Museum	Geology computer lab with rock specimens, etc for independent student work.	10		
LAC-E Basement	International Students		6		
LAC-E Basement	Career Center	Computers located inside Career Ctr- student need specific help from counselors located in area.	6		
LAC-E Basement	Writing Center	Open Lab Success Center	19		
LAC-F103	Fashion/Music/Film	Multi-Discipline Classroom	2	15	
LAC-F122A	Fashion (Gerber Lab)	Discipline specific classroom with Computers-attached to specialized equipment	9		
LAC-G120	Music	Discipline specific classroom with Computers-attached to specialized equipment (Keyboards, midi machines etc.		12	
LAC-G123/Recording studios	Music	Discipline specific classroom with Computers-attached to specialized equipment (Keyboards, midi machines etc.		5	
LAC-G132	Music	Discipline specific classroom with Computers-attached to specialized equipment (Keyboards, midi machines etc.		19	
LAC-G145	Radio/TV	Discipline specific classroom with Computers-attached to specialized equipment Video recording studio		10	

Computer Labs & Classrooms	Department	Function Description	PC	MAC	COMBO
LAC-K123 - Digital lab	Art	Discipline specific classroom with Computers-adjacent to specialized equipment		6	
LAC-K127	Art	Discipline specific classroom with Computers-with high end software		24	
LAC-K137	Art	Discipline specific classroom with Computers-attached to specialized equipment	14		
LAC-L134 Library Research	Library	Campus wide open access	55		
LAC-L103 Library Classroom/Lab	Library	Could be used by all depts if scheduling permits? Can convert from lab to standard tables for lecture.	40		
LAC-L173 Faculty Resource Center	Distance Learning	Specialized computer lab & staff for campus wide use--			20
LAC-L181 Faculty Training Room	Distance Learning	Specialized computer lab & staff for campus wide use--			20
LAC-L182 Video Conferencing Center		Specialized computer lab & staff for campus wide use--	36		
LAC- L205 Learning Center NEW	Learning & Academic Resources	Campus wide open access	30		
LAC-L251 Open Access Lab	Learning & Academic Resources	Campus wide open access	176	10	
LAC-L255 Classrm/Lab	Learning & Academic Resources	Used by all depts as scheduling permits. Can convert from lab to standard tables for lecture.	40		
LAC-L254 CPAS Classrm/Lab	Learning & Academic Resources	Used by all depts as scheduling permits		40	
LAC-L252 ITSSC	Learning & Academic Resources	Specialized computer lab & staff for campus wide use--		30	
LAC-M103	English/Foreign Language	Discipline specific with Computers-attached to specialized equipment	35		

Computer Labs & Classrooms	Department	Function Description	PC	MAC	COMBO
LAC-M107	CAOT	Discipline specific classroom with Computers	29		
LAC-M109	CAOT	Discipline specific classroom with Computers	26		
LAC-M112	CAOT	Discipline specific classroom with Computers	28		
LAC-M114	CAOT	Discipline specific classroom with Computers	30		
LAC-M116	CBIS	Discipline specific classroom with Computers	30		
LAC-M115	CBIS	Discipline specific classroom with Computers	30		
LAC-M117	CBIS	Discipline specific classroom with Computers	30		
LAC-N101	ACIT Training Room	Open to college for use-meetings & trainings	12		
LAC-N115	CBIS	Discipline specific classroom with Computers	32		
LAC-P111	English	Discipline specific classroom with Computers			29
LAC-P125 Viking	Viking	Discipline specific classroom with Computers		13	
LAC-P126	Journalism	Discipline specific classroom with Computers		20	
LAC-W122	Assessment/Student Services	Assessment Testing	42		
LAC-Q106	Athletics	Discipline specific classroom with Computers	9		
LAC-W145	DSPS	Specialized equipment & staff for Disabled Students	5		

Computer Labs & Classrooms	Department	Function Description	PC	MAC	COMBO
LAC-T2373 NEW-SQC	Accounting/Social Science	Could be used by all depts if scheduling permits?	40		
LAC-T2374 NEW-SQC	Accounting/Social Science	Could be used by all depts if scheduling permits? Can convert from lab to standard tables for lecture.	40		
LAC-T2372 NEW-SQC	Public Services	Could be used by all depts if scheduling permits? Can convert from lab to standard tables for lecture.	40		
PCC-AA123	Project Launch	Computers located inside Project Launch office-student need specific help from counselors located in area.	8		
PCC-AA128	Career Center	Computers located inside Career Ctr-student need specific help from counselors located in area.	6		
PCC-AA201	CAOT	Discipline specific classroom with Computers	40		
PCC-AA202	CAOT	Discipline specific classroom with Computers	31		
PCC-AA205	CAOT	Discipline specific classroom with Computers	52		
PCC-AA206A	ESL/Assessment/Other	Multi-Discipline Classroom	30		
PCC-AA206B	DSPS	Specialized equipment & staff for Disabled Students	6		
PCC-BB223	ESL	Discipline specific classroom with Computers	30		
PCC-BB231	ESL	Discipline specific classroom with Computers	30		

Computer Labs & Classrooms	Department	Function Description	PC	MAC	COMBO
PCC-BB233	ESL	Discipline specific classroom with Computers	38		
PCC-EE249 (Temp MDAB)	CBIS	Discipline specific classroom with Computers	40		
PCC-EE251 (Temp MDAB)	CBIS	Discipline specific classroom with Computers	16		
PCC_EE253 (Temp MDAB)	CBIS	Discipline specific classroom with Computers	24		
PCC-EE258 (Temp OO Building)	Photography/Art	Discipline specific classroom with Computers-adjacent to specialized equipment	6	8	
PCC-LL102 Videoconferencing Center	Library	Could be used by all depts if scheduling permits? Can convert from lab to standard tables for lecture.	40		
PCC-LL104LIBResearch Center NEW	Library Research Center & Ref Pod	Campus wide open access	56		
PCC-LL124 Faculty Resource Center NEW	Faculty Resource Center	Faculty and Staff computer lab for Distance Learning & training.	14		
PCC-LL 216 Open Acc Lab NEW	Learning & Academic Resources	Campus wide open access			58
PCC-LL 212 Supp Instruction NEW	Learning & Academic Resources	Could be used by all depts if scheduling permits? Can convert from standard tables for lecture to lab with Mac laptops.		30	
PCC-LL 206 Learning CTR NEW	Basic Adult Education	Campus wide open access	25		
PCC-HH104	Child Development Center/Camera Observation System	Discipline specific classroom with Computers-attached to specialized equipment-Observation cameras	12		

Computer Labs & Classrooms	Department	Function Description	PC	MAC	COMBO
PCC-II136	Career Technical Eduction	Could be used by all depts if scheduling permits? Can convert from lab to standard tables for lecture.	27		
PCC-II137	Career Technical Eduction	Could be used by all depts if scheduling permits? Can convert from lab to standard tables for lecture.	8		
PCC-II138	Career Technical Eduction	Could be used by all depts if scheduling permits? Can convert from lab to standard tables for lecture.	27		
PCC-JJ Aviation	Aviation	Discipline specific classroom with Computers-adjacent to specialized equipment	20		
PCC-JJ Auto	Automotive	Discipline specific classroom with Computers-adjacent to specialized equipment	4		
PCC-MM110	Tech Center	Multi-Discipline Classroom	23		
PCC-MM117	Sheetmetal	Discipline specific classroom with Computers	4		
PCC-MM120	Carpentry	Discipline specific classroom with Computers	6		
PCC-MM124	Trades Shared Lab	Multi-Discpline Classroom	27		
PCC-MM130	Advanced Transportation	Discipline specific classroom with Computers-adjacent to specialized equipment	10		
PCC-RR141	Diesel	Discipline specific classroom with Computers-attached to specialized equipment	4		
PCC-Trailor 3 Assessment	Assessment/Student Services	Assessment Testing	10		
PCC-Trailor 4 Workforce Training	Economic Development/WTC	Economic Development Testing and Training	24		

Computer Labs & Classrooms	Department	Function Description	PC	MAC	COMBO
		Totals	**2038**	**306**	**127**
		Total - LBCC			**2471**

Applications Development Project Plan
Appendix V

Project Name: _____

Prepared By: _____

Date Submitted: _____

Summary/Background
Provide a summary of the project.

Business Need/Problem
Identify the technology need and or problem that needs to be solved.

Project Objectives and Vision
Provide a brief, concise list of what the project is to accomplish.

Project Description and Specifications
Describe the strategy to deliver the project and what is envisioned in terms of a deliverable. Provide a step by step description with screen shots if necessary. If your area is collaborating with other areas or individuals, please include any dependencies. Include additional pages if necessary.

Start Date: _____

Completion Date: _____

A Signatures

The signatures of the people below relay an understanding in the purpose and content of this document by those signing it. By signing this document you agree to this as the formal Project Plan.

Name/Title	Signature	Date

Appendix VI

IITS Project Information Worksheet

Prepared By:	
Date:	

Approval Signatures

Name _____

Dean/Director _____ Date _____

Name _____

Vice President _____ Date _____

Name _____

Associate Vice President, IITS _____ Date _____

Name _____

Director, Facilities _____ Date _____

Final Customer Sign Off*

Name _____

Title _____ Date _____

Name _____

Title _____ Date _____

Name _____

Title _____ Date _____

Submit signed document to:

Instructional and Information Technology Services

N-109

* Should be completed as a final signoff to the project.

Project Information

Project Name:	
Project Description:	

Project Start (estimated):	
Project Finish (estimated):	

Costs	What are the costs associated with this project? List costs being covered internally (e.g. Facilities budget)

First Year Costs:					
Hardware	$	-	Consulting	$	-
Software	$	-	External Labor	$	-
Support Contract	$	-			
Other	$	-			
Expense Total	$	-	**Labor Total**	$	-
	First Year Cost:	$ -			
Recurring Costs:					
Hardware	$	-	Consulting	$	-
Software	$	-	External Labor	$	-
Support Contract	$	-			
Other	$	-			
Expense Total	$	-	**Labor Total**	$	-
	Total Cost:	$ -			

Funding Source Describe the source of the project funding and any constraints (categorical funding, specific dates, etc.)	
Budget String(s)	

Dependencies	Please account for the following, if applicable.

☐ **HVAC**

☐ **Electrical**

☐ **Data/Network/Telephone Connectivity**

- **Additional server/storage requirements**

- **Software**

- **ADA requirements**

- **Furniture**

- **Staffing** – (e.g. for a computer lab – who will maintain the equipment, who will supervise the lab, etc.)