

LANEY COLLEGE TECHNOLOGY MASTER PLAN

Spring 2010

Laney College is committed to becoming a leader in educational technology. Guided by planning, prioritization and a belief in shared governance, we plan to implement state-of-the-art technology in a variety of areas, both college-wide and for individual departments and programs. Due to historical neglect and the current budget crisis, we have a considerable challenge ahead.

We believe in a culture of evidence. Our technology planning is based on information obtained from unit plans and program reviews, shared governance committees both at the campus and district level, department, division, and administrative committees, surveys, external research, and other sources of data. In the appendix to this report, we have included relevant documentation.

In order to plan for the future, we must know where we are at the present. Our current level of technology in several key areas is inadequate. We will discuss this further in “Where We Are Now.”

Prioritization is crucial to effective planning. We have organized our technology needs into nine high-priority areas; we will discuss each of these areas in detail.

At the same time, we recognize the significant leap in college and district technology integration that is required to be on the leading edge of educational uses of technology, an edge that supports and is honed by curricular innovation and student success.

In “District-Wide Technology Needs,” we discuss important technology needs that are primarily implemented at the district level.

In these difficult financial times with severe budget constraints, we will not immediately implement all our technology needs; however, we also will not base our long-range planning and prioritization efforts on short-term budget concerns. Instead, we will systematically plan for the future to insure that Laney College becomes a leader in educational technology.

ANALYSIS OF CURRENT STATUS

A variety of Laney technology needs have been filled in the past two years with funding from local bond Measure A, passed in 2006. This bond money has been used to begin major infrastructure upgrades, including Laney computer labs, networks, smart classrooms, a campus wireless project, and classroom refurbishments to support new technologies. As part of this upgrade, full-time faculty members received new computers, either Apple or HP, to replace obsolete ones. Approximately 300 computers were recently installed in the Laney Math, CIS, and Business computer labs. Two model smart classrooms are now in operation, with more on the way. In September 2008, the Faculty Senate approved bringing twelve more classrooms to both a basic and a more advanced level of smart technology. The District is in the process of refining and publicizing its three-level standards for what is now being called “Interactive Learning Environments Technology.” It is hoped that those standards will be applied in the next phase of smart classrooms installations, beginning in the 2009-2010 academic year.

The Peralta Board of Trustees has approved spending additional bond money for Laney infrastructure

upgrades. We have begun planning the renovation of the Laney Tower, which will include major technology upgrades, refurbishing of conference rooms, adding wireless capability, audio/visual presentation technology, and improving faculty offices. In addition, computer labs will be enhanced with audiovisual presentation capability, and it is our intention that Laney will become a fully wireless campus in the next phase of technology infrastructure upgrades.

Even with this progress, there is a long way to go. For example, all classrooms on the Laney campus should have a certain level of technology readiness, not just 12 “smart” classrooms. Some Laney classrooms have no Internet access and only a few have built-in ways for faculty to show PowerPoint and other computer-based presentations. In addition, despite repeated attempts by Laney to correct the situation, Laney computer labs have no air conditioning. As far as we know, Laney computer labs are the ONLY computer labs in the California Community College system, CSU, and UC systems with no air conditioning. In addition to upgrading classroom technologies, the college is also in the process of upgrading conference rooms. The plans for the newly renovated student center include four state of the art smart conference rooms with tele-presence technology.

PRIORITIZATION PROCESS

In order to plan for and implement Laney technology needs, we must prioritize. Although implementation of technology initiatives depends on budget availability, our long term goals are not driven by short-term financial constraints.

As described in “A Culture of Evidence,” our prioritization procedures are evidence-based and rely primarily on unit plans, campus-wide surveys, input from shared governance groups, and interviews with faculty, staff, and administrators.

After gathering and analyzing technology data^{i, ii}, we have determined that there are nine key areas with the highest priority technology needs:

- Smart Classrooms
- Wireless Campus
- Instructional/Computer Labs
- Personnel
- Distance Education
- Equipment Upgrades
- Library Technology
- Campus Network
- Security

LANEY HIGH PRIORITY TECHNOLOGY NEEDS

This section provides a detailed description of the highest priority needs established by the technology resource committee.

Smart Classrooms – As faculty increase their use of technology in the classroom, it is crucial to have equipment in all classrooms that provides Internet connectivity and allows both students and faculty to deliver PowerPoint Internet Access, and other computer-based presentations. Laney is currently behind comparable institutions in implementing smart classrooms. At present, projectors and other equipment must be wheeled around campus on carts to show presentations in most classrooms.

As mentioned in “Analysis of Current Status”, two model smart classrooms are in operation, with more on the way. In September 2008, the Faculty Senate approved bringing twelve classrooms to both a basic and a more advanced level of smart technology. The Peralta district is in the process of refining and publicizing its three-level standards for what is now being called Interactive Learning Environments Technology. A version of these standards is being applied in the current phase of smart classroom installations, beginning in 2010. These efforts point in the right direction, but it is our recommendation that this is not nearly enough and that the district needs to take a much more aggressive position.

While it is true that most, if not all, of the infrastructural aspects of an integrated technology system must be provided at the district-wide level, it is also the college’s responsibility to maintain an enlivened awareness about technology along with identifying opportunities to develop community partnerships and other creative ventures that will help support its equipment and software needs. Of necessity, this requires Faculty Senate advocacy and leadership in every district-wide shared governance body along with concerted, widespread and consistent effort within the college in every venue. At the core of teaching and learning we will focus on what technologies best facilitate learning and how to become adept at their use, with the outcome that students succeed in meaningfully larger numbers.

Accomplishing this outcome is predicated upon having an increasingly knowledgeable and tech-savvy faculty approach to the available tools, while maintaining currency in their fields and the demands of a full-time teaching responsibility. Obviously, more staff training will require more resources devoted to training, including support for educational technology collaboration and innovation. Faculty will require training in the use and operation of multimedia presentation stations and associated equipment. This need is a “hidden” cost that is explicit in our plan, for additional personnel to provide the essential support and training that makes these innovations possible (see section below on personnel).

Eventually, every classroom on campus will be a “smart” classroom. Given the accelerated pace of technology advances and current economic realities, the interactive

learning environments of tomorrow will evolve into ever more sophisticated technology enhancements that better represent the career expectations and requirements of the present as well as the future. We expect to continue expanding the number of these twenty-first century classrooms as part of the college's commitment to institutional effectiveness. This continued expansion relies on continually upgrading each user's skills, increasing the demand for a consistent, planned approach to training all staff in the application of technology.

Wireless Campus – Laney wants to be fully wireless by fall, 2010. A wireless campus will allow students to study with laptops from anyplace on campus and will facilitate the use of technology in classrooms, conference rooms, offices, the library, and elsewhere on campus. The availability of powerful laptops and a wireless campus will allow reconfiguration of computer labs and vastly improved access to computing for students who currently do not have Internet connectivity.

Several wireless surveys have been conducted at Laney. It is necessary to define “fully wireless” before we proceed. Major areas of the Laney campus are already enabled for wireless access. These are delineated in the Wireless 2010 Proposal, included in the appendix to this report.

Security, guarantees of performance, monitoring capability, sufficient management capability, and district-wide standards are critical prerequisites to successful wireless implementation. These and others are addressed in the Wireless 2010 Proposal.

Instructional/Computer Labs – Students use computers for all types of classroom activities and assignments, from writing papers to using specialized software to working with data. Our role at Laney College is to support our students and give them all the necessary tools they need to succeed. In order to accomplish these goals, we need to give them access to up-to-date technology and create an environment that will inspire them and foster their creativity. The recommendations below provide a framework towards these goals.

- **Dedicated Open Lab**

There is an urgent need for more student access to technology on the Laney Campus. The current patchwork of instructional labs does not sufficiently address this problem. A Dedicated Open Lab will greatly relieve the problem especially for students who have to interrupt their studies to make current lab hours, and the students who do not have access to computers except on campus. Approximately 40% of the students using the Welcome Center are continuing students in need of open lab space.

- **Upgrade Library Technology** – Library technology should be updated on a regular, systematic basis. A new student-friendly integrated library system that includes features such as federated searching and remote authentication is urgently needed. Reliable annual funding for online library databases must be provided in order to support the wide-ranging research and information needs of students.

- **New computers, hardware, and equipment**

Instructional labs need to keep up with technology through periodically acquiring new computers and related hardware to support instruction. . In today's fast paced technologic environment, a three years life cycle is a minimum requirement for computer replacement. It is essential that we have computer labs that have up-to-date computing equipment.

- **Phone Tree**

A phone tree is crucial to instructional labs and campus network operations. It is an easy and efficient method to quickly disseminate information to the college network IT staff for collective troubleshooting. It would create a communication protocol that can be used to improve campus-wide notification for example, during campus network shutdowns.

- **Software Library**

The creation of an online library with secure access for lab IT coordinators is needed so they can get immediate access to software, applications, and utilities when necessary.

- **Lab Support (some instructional labs have no tech support)**

There is still a shortage of technical support dedicated to certain areas of the campus. This sometimes negatively impacts instruction and student access. Greater IT support will increase the overall effectiveness of the technology community, and provide a system of accountability for designated areas.

- **Facilities**

Our facilities need to be upgraded so that they meet the minimum requirements that will allow our equipment to run effectively. This upgrade should include mounted projectors, proper cabling, and sound systems. Also, the lack of air conditioning or proper ventilation in most of the labs has shortened the lifespan of new equipment and has made it difficult or impossible for students to work in these labs on warm days.

- **DSPS**

Laney College Disabled Students Programs & Services (DSPS) is currently upgrading their aging technology by utilizing Measure A equipment funding. In 2010, DSPS will receive 46 new computers that will replace computers that are up to seven years-old, as well as printers, scanners, and miscellaneous other technological accessories to improve the efficiency of DSPS. Due to an increase in student use, the high tech center will expand in 2010 by more than 60% percent, from 12 to 20 stations. More students will have access to adaptive software and hardware, including software programs such as Kurzweil, Inspiration, Dragon, and Jaws. New wiring and internet accessibility further increase student access to technology. The alternate media center will be relocated to a larger facility, wired for more computers and internet access. This will allow the AMC to expand from three workstations to six or more

workstations, capable of simultaneous production. With proper staffing, this can increase the output of alternate media and decrease the amount of time it takes for students to receive their materials. The AMC has suffered severe staffing decreases over the last few semesters. The AMC requires the addition of at least one full-time instructional assistant to ensure that student materials can be produced and distributed in a timely manner and avoid legal liability. To further avoid potential lawsuits, the AMC needs a large print printer for enlargement requests for visually impaired students. Despite several attempts, the AMC was unable to purchase one through Measure A.

Personnel –In developing our highest priority technical needs, and indeed including all other current technological requirements, our departments and college most critically require personnel for implementation. It is essential to assume that the need for personnel be partnered with each individual priority identified. Unless our technology assets are planned for and incorporated, installed, maintained, repaired, upgraded, made available in a timely manner, replaced, they will quickly become of limited use to students, faculty, student services and administration.

Personnel needs matched to our priorities:

1. Infrastructure: Personnel must provide periodic replacement/acquisition/installation of hard/software, monitoring benchmark standards and quality control, administer access and keep up with emerging standards such as voice/video over IP protocols, data streaming, mobile/wireless, etc.

2. Instructional/Computer Labs: Personnel will deal with the same general infrastructure needs as above. They must also deal with access and records.

Besides this, lab personnel must have some specific knowledge in dealing with particular hard/software issues used by the various classes taught there. Instructional software and tools are changing constantly and thus, it is essential for computer lab technicians and staff to do system updates periodically, without interruption and long downtimes.

The Appendices include a very detailed study of Instructional lab needs. Though some of the technology may be outdated, the personnel needs for infrastructure and quality control are still relevant.

3. Security: With increasingly and widely known security issues and problems (data theft, system attacks/hacking, inaccessible networks), personnel must work with the department, campus, and/or district to learn about the requirements and critical needs in protecting data, computers, and networks.

Personnel are essential for developing/improving/managing security infrastructure, campus-wide security awareness/training, encrypting data, disaster recovery including emergency preparedness and readiness for continuity.

4. Campus network/Wireless: Personnel must deal with server acquisitions/operation/maintenance/upgrades of Internet and online services, connectivity including wireless implementation and management, increasing

bandwidth, storage/archiving and processing capacity.

5. Training: Personnel to train staff in the integration of technology into the curriculum and college management are essential to our strategic goals

Staff development must be provided (to tech personnel as well), and training is equally important for student access and use.

6. Library Technology: This is a key area with demands for personnel. The library needs additional librarians and classified staff to address areas such as information competency instruction, system administration, electronic resource access and maintenance of computers. These needs will become more urgent when the library moves to a new building.

7. Distance Education/Web Sites: The college and district have adopted open source software for both our Distance Education programs (Moodle) and our college web sites (WordPress, etc.).

Again we see critical personnel needs to provide support training, web masters, and input help. Furthermore, new software for curriculum and assessment reporting also has required the same set of support, training and upgrade requirements.

8. Smart Classrooms: This would require personnel with adequate training and knowledge of audio/visual systems, to acquire/install/maintain/upgrade/training staff for use.

Such specific knowledge will include more than just knowing how to run a projector or document camera. It will incorporate lecture capture technology, data streaming, management of ePortfolios, etc., all of which will move our classrooms into modern "learning environments" as opposed to outdated teacher-in-front-of-the-classroom models.

In aspiring to driving Laney into a 21st Century leadership position in Technology, we acknowledge that adequate personnel must go hand-in-hand along the way. Even though these stringent budget times make it a difficult path to maneuver, we commit to exploring all avenues to arrive at this goal.

The State Board of Governors has adopted a guideline called the "TCO" model (Total Cost of Ownership), which considers all costs required to fund technology. The guide bases the requirements of various technical support staff on the number of computers serviced, employees and FTES. Though this does not reflect on other technology needs, such as science and CTE labs, it does mandate essential staff for all computing done campus-wide. We recognize and agree with this model and will strive to work towards it. A copy of the guide is found in the Appendices.

Due to the State budget crisis and resulting funding cutbacks, classified staff is being reduced. This situation may worsen in the next few years. The TTIP study indicated that an institution of Laney's size needs at least 20 full-time IT workers. Laney employs less than half that number.

Distance Education – As more students use computers and more learning materials are available online, distance education has joined the mainstream of college class offerings. Community college students, many of whom have jobs and families to support, are attracted to online classes for ease of scheduling and remote access. Students with disabilities, elderly students, international students, and others, who have trouble physically getting to campus, also embrace the access offered by online education.

The Peralta district strategic plan encourages distance education and, as the result of lengthy deliberation by shared governance committees, the district has adopted MOODLE as its online course management software. MOODLE is open source software that allows Laney and Peralta to draw from the open source community for training and support. Peralta has already developed a series of MOODLE sites for distance education purposes (e.g., eperalta.org, eberkeley.org) and has procured domain names to enhance Laney College's distance education web presence (elaney.org, elaney.net, elaney.com). Each college in the district has a Distance Education (DE) coordinator at 25% release time. DE coordinators help faculty develop online and hybrid courses, maintain a database of all Laney distance education offerings, and perform related tasks. Beginning Spring 2010, all teaching faculty whether face to face or online, will be assigned a Moodle course shell. This will enable instructors to augment their classes with the variety of useful tools inherent in Moodle.

Laney College is expanding its online and hybrid class offerings. The Peralta Community College District's online offerings are posted on eperalta.org. Information about Peralta online courses can be found at [online-education-at-peralta-community-colleges-with-faqs-03-05-09](#)

Laney's Distance Education offerings for the current semester, including class name, instructor name and contact information, and type of class are available online.

Laney encourages distance education for students with disabilities. This is consistent with the California Community College Chancellors Office 2008 [Distance Education Guidelines](#)ⁱⁱⁱ, which states: "*One of the primary concepts of Distance Education (DE) is to offer students 'Learning anytime, anywhere.'* Therefore, all DE resources must be designed to afford students with disabilities maximum opportunity to access distance education resources "anytime, anywhere (p.4)."

At Laney, faculty who teach online courses must first take appropriate training in the use of [Moodle](#), the online course management system supported by the Peralta Community College District. In addition, Laney's Distance Education Coordinator works closely with the faculty in developing Moodle courses which are engaging and academically rigorous. Workshops, online training materials, and one-on-one meetings with Laney's DE Coordinator enable faculty to be successful with their distance learning classes. In order for a Laney course to be taught online, a Distance Education Addendum must first be approved by the Laney Curriculum Committee. Student Learning Outcomes and Assessment methods for online courses must adhere to the same standards as traditional

courses. Laney Student Services support our Distance Education efforts, as described in [student-services-for-distance-education-at-laney-college](#).

Online education can be a rewarding experience, but not all students are adequately prepared to use online technologies. For this reason, Laney College provides orientation and support services for students planning to take online classes. Students who are not prepared to use online technologies are advised to obtain appropriate training before enrolling for online courses.

The success of online education depends on student and faculty enthusiasm and on the use of technologies that can provide the same, rich educational interactions that exist in traditional, face-to-face classes. This includes lectures, labs, online discussion groups, multimedia presentations, and interactive online learning materials.

Distance Education and Student Services - In addition to instructional online or distance education, the college is dedicated to providing online student services. As online education expands so does the need for online student support to ensure student success. The college contracted with Cynosure, Inc. to develop an online orientation for new students. This orientation will highlight all academic programs and student services departments and will provide critical information to support students in achieving their goals. This service will be in place by Fall 2010. In addition to an online orientation, the college and the district matriculation committee are researching web based placement assessment tools. With the addition of web based assessment and an online orientation, the college will be able to provide two essential Matriculation components for new students. In addition, the college and the district matriculation committees will research web advising, tutoring, and other student support online systems. The goal is to implement a full compliment of online student support services for distance education students within two years.

EQUIPMENT UPGRADES

Staff Computers – Nearly 150 Student Access Project computers for faculty from 2008 will require replacement in 2011. Most staff computers will be replaced in the 2009-2010 period.

Library Technology - Technology is central to the mission and goals of Laney Library. Library resources and information competency instruction depend on a reliable, up-to-date technological infrastructure and a skilled staff.

Library technology should be updated on a regular, systematic basis. The most urgent need for the library is the purchase of a new integrated library system (including federated searching, remote authentication, cataloging, serials, acquisitions, circulation, reserve, media reservations, inventory control, electronic reserves, electronic resource management, reporting and link-resolver modules) for the District Libraries, and the migration of data from the existing system to the new system. The new system must serve the instructional needs of Laney College students. The search interface should

provide sufficient features and support to allow students to successfully search both traditional print and electronic resources. In order to ensure that the new system meets the technological and educational needs of a 21st-century community college, the librarians and District technology staff will need to work with a qualified library system migration consultant who can help them draft a request-for-proposal that will ensure that the new system meets the needs of the colleges.

The library needs ongoing, reliable funding for the online database collection. Online databases are an essential resource for teaching information competency skills and providing quality, up-to-date information to support class research and assignments. In addition to the existing research and information databases, the librarians recommend the purchase of the LearningExpress database. Among other things, the LearningExpress database offers college preparation practice exams and targeted remediation for academic skills. A number of California community college libraries have been able to use basic skills funding to purchase this unique tool and the librarians recommend including this in the basic skills funding priorities.

To support information competency instruction, the library needs to purchase and install a classroom management system for the library research lab (L-104). In addition, the library needs a portable document camera to enhance instruction. In an effort to find a way to meet the information competency general education outcome, the library has reinstated its hybrid Library Information Studies 85 course. The library is also developing a hybrid basic skills LIS course. Additionally, the library uses the library web page to support information competency instruction. When a new library web interface is developed, the library will create Internet resource guides based on the college curriculum and a new virtual interactive library tour.

Remote authentication for library subscription databases remains a high priority. For the short term, the library is implementing EZProxy. However, the library recognizes that EZProxy is an inadequate solution for the long term since it relies on manual maintenance by library support staff and is not a district-wide implementation. The most viable option for a district-wide automated remote authentication is to contract this service with the new integrated library system vendor.

With ever increasing reliance on technology and electronic resources, the library needs a new 1.0 Electronic Access Librarian position to enhance electronic access and services for distance and traditional students. Additionally, the library needs a 1.0 System Administrator position to maintain and oversee the library system and to provide ongoing training and assistance to library staff.

The library needs ongoing funding and support for the systematic upgrading of computer hardware and software for staff and student computer workstations. Due to heavy use and planned obsolescence (based on continual upgrades to library software), staff and student computer workstations should be replaced every three years.

Campus Network – In order to use technology effectively, Laney must have a secure, robust, and state-of-the-art campus network. A proposal to replace and upgrade existing network equipment has been submitted to the District and rejected as too expensive. It was submitted to the Laney Technology Committee as documentation for this report in the hope that it will be implemented over time. A portion will be done during the Voice Over Internet Protocol (VOIP) deployment in the Laney Tower. Another portion will be done as part of the Tower Swing Space process.

- The existing Category 5e data wiring in the Laney Tower will be expanded with Category 6 wiring during 2010-2011.
- Wireless will be extended throughout the entire Laney Tower during 2010-2011.
- The Athletic Facility will have wireless throughout.
- VOIP will be available in the Tower in 2011.
- Smart conference rooms will be available in the Tower in 2011.

Security - The Peralta Community College District will implement the second stage of a security project during 2010 and will finish other stages in the near future. Laney will use Measure A funds to expand network security with the purchase of hardware and software.

Security devices consume large amounts of network bandwidth. When coupled with streaming audio and video or download activity, security devices have the potential to seriously degrade network performance or even cripple the network.

DISTRICT-WIDE TECHNOLOGY NEEDS

In addition to Laney's high priority technology needs, there are other important technology needs that are addressed at the district-wide level but that need specialized attention from individual campuses.

Management Systems (PeopleSoft) – As a result of the 2009 Peralta Community College District Accreditation visit, the accreditation team found problems with the PeopleSoft, district-wide management systems and recommended that “the district immediately resolve the functional issues associated with the implementation of the district-wide adopted software management systems for student, human resources, and financial aid administration.” A subsequent PeopleSoft functionality online survey^{iv} administered to the Peralta community identified key problem areas that needed to be addressed. At the time of this writing, the Peralta IT department along with appropriate shared governance committees and constituent groups are working on resolving these issues.

Student Services and Enrollment – Student application for admission to Laney and registration for classes is done online through CCC Apply and Passport (PeopleSoft)

student administration systems. Using this technology, instructors can submit grades, view rosters, and communicate with students online. The newly refurbished Laney Welcome Center, staffed with student ambassadors and equipped with dozens of computers with Internet access, allows students who don't have off-campus computer access or who may have difficulty with the online registration process to register for Laney classes with personal assistance. During these trips to the Welcome Center, students also learn how to obtain counseling and other student services support. Despite clear advances in this area there are still deficits in the PeopleSoft student administration system. The District, with input from the colleges is currently working on fixing some of these issues. One main issue however remains with MIS reporting to the state. Currently Student Services MIS data is in both SARS and PeopleSoft. At present, there are frequent issues with accurate uploading of data to the California Community College data mart. The biggest issue with this is the direct link between MIS data and funding for the college.

Laney College provides tutoring instructional support by maintaining open entry/open exit computer and writing labs with faculty staffing. These services are described more fully in the Institutional Self Study Report (2009) Standard IIC (Student Learning Programs and Services)^v.

Laney College is advancing technology in education by focusing, not simply, on technology, but also on how to effectively integrate it into our classes. The innovative Universal Learning Design (ULD) project, created by a Laney professor, has developed a Universal Learning Lab at Laney. The Laney College Universal Learning Lab offers two levels of support. On the first level we support students in participating classes who are using text-to-speech technology (Kurzweil) as a component of their class. This software creates a multi-sensory learning experience. Using this tool, students edit papers, listen to their text books and access their teacher's embedded study support, a virtual "Teacher within the Text" linking teachers and students together in a dynamic, digital learning environment. These innovative textbooks provide students crucial study strategies and bridge the digital divide by transforming reading into an interactive, multi-sensory experience vital for today's technology-savvy learners. On the second level we provide a general drop-in lab for everyone.

This program is supported by the Laney college administration along with numerous faculty members across multiple disciplines. The ULD project is also being developed on other college campuses throughout the state, and has gained interest from countries in Europe (<http://collegeinfofocus.wordpress.com/>).

Enrollment, Assessment, and Curriculum Management – Laney enrollment management is accomplished with the support of modern database management tools, such as spreadsheets, pivot tables, graphs and basic statistical analyses. The Peralta district has developed a business intelligence tool that provides web-based query ability for extracting information that Laney administrators can use to make data-driven enrollment management decisions. The BI tool queries data from a data warehouse that is populated from the PeopleSoft databases. Although a step in the right direction, the BI tool still needs considerable expansion and revising before fulfilling its potential.

Particularly in the area of student services, there is a lack of information or queries designed to analyze effectiveness of services as well as overall program retention/persistence in programs such as DSPS and EOPS. Furthermore, there is a need for additional demographic data such as economic status.

Nonetheless, faculty engagement with enrollment management is increasingly essential (see Academic Senate for California Community Colleges publication, *The Role of Academic Senates in Enrollment Management*^{vi}, published in 1999 (and updated in 2009) especially during a time of budgetary crisis. A series of publications, conferences and webinars offered through <http://www.FacultyFocus.com> demonstrates the efficacy of online student retention strategies. The importance of these and similar strategies for enrollment management cannot be overestimated

For more than two years, the college has been actively engaged in an extensive campaign of changing its culture with respect to identifying and assessing student learning outcomes in the areas of student services and instruction. Based on the increasing need to monitor, track, assess and report on these outcomes, the Learning Assessment Committee (LAC) identified and recommended the purchase of an assessment reporting application to facilitate these processes institution-wide. To meet these needs, TaskStream (www.taskstream.com) was deployed in November 2008 and during an all day “retreat” the LAC offered the first of several planned training sessions on its purpose, functions and capabilities

In response to a similar need in the area of curriculum, and in alignment with other California community college districts, faculty recommended and the District purchased another web-based application, CurricUNET (<http://www.curricunet.com/pccd>), to enhance and streamline college and district-wide curricula management. This dramatic change in the way the college originates, develops, reviews and approves curriculum will necessitate an extensive investment in faculty and staff training. In order to transform the long-standing and complex paper-driven processes that we currently use, and based on the experience of other colleges/districts (<http://www.league.org/leaguetc/express/inn0211.html>), we can anticipate a 2-3 year period of intense developmental labor to fully actualize CurricUNET. This process will require faculty and administrative advocacy for continued District support determined by a well thought out transition plan.

Training – Laney faculty, staff, and administrators must receive training to use relevant software, equipment, and other technologies. While training is funded and usually managed at the district-wide level, we will discuss training needs here. We believe that although the district is aware of technology training needs, current efforts are underfunded and understaffed.

As new technologies are introduced, shared governance bodies recommend training opportunities to the college administration. Such training is directed at faculty, classified staff, administrators or students, depending on the nature of the technology and the source of the recommendation (the representative body).^{vii} The District IT Department

provided extensive training on the PROMT business management system soon after it was implemented and continues to offer periodic training sessions.

In previous years, with the support of TTIP funds, Laney provided training for some new technologies as they were introduced. Beginning Spring 2008, Peralta faculty provided course offerings to prepare faculty for teaching online, for teaching hybrid classes, and on using MOODLE. This approach allows faculty and others to become engaged with the software tools from a student perspective, e.g., a course on teaching with MOODLE uses MOODLE software to deliver course content.

With the recent implementation of the Passport student administration module, the District Administration hired RWD Technologies to conduct training for staff. RWD staff worked in conjunction with the college Passport Business Readiness Team (BRT), a task force composed of faculty and appointed by the Faculty Senate President. Faculty who attended the hands-on training became comfortable with the system. The number of questions from faculty to the BRT diminished significantly following the hands-on training.^{viii}

Similarly, a Passport Super User group recommended training and support for students registering on the new system.^{ix} The College provided additional training and support for students at the Welcome Center throughout the summer and fall registration periods. In conjunction with the hiring of a large group of new contract faculty, the Faculty Senate and Office of Instruction coordinated formal orientations on a variety of topics, including email, PROMT and the web editing software for new and returning faculty.^x The faculty hires who received the training are regular users of the email and PROMT systems and many of them regularly update their department and faculty web pages.

With launch of the new administrative Business Intelligence (BI) software that supports querying the PROMT system for enrollment data, it is important for the district to accelerate and expand beginning and advanced training for users of this product, as well as for the other business applications recently instituted.

As Laney increases its distance education offerings, more faculty will require training in how to use MOODLE course management software. Since MOODLE is open source, there is extensive, free online training and support. In addition to these resources, Laney recently hired a faculty member to be Distance Education Coordinator for 25% release time. . In December 2009, the DE Coordinator facilitated a Moodle training workshop, one of many more to be offered throughout the Spring 2010 semester. In addition, with the assignment of Moodle courses shells to all teaching faculty, this will increase the need for more training on utilization and navigation of Moodle.

From 2006 to 2008, a California Educational Technology Collaborative Ambassador Program introduced the college community to a large catalog of free and low cost training opportunities focused on Microsoft Office Suite, Adobe and Web 2.0 applications. Several faculty and staff took advantage of these opportunities to improve and develop their technology skills. The exponential rate of development in the system's

use of technology has put increased emphasis on the need for ongoing technology training for both faculty and staff.

The Universal Learning Design project conducts regular professional development trainings to promote college wide interest and trains faculty on the Kurzweil Text-to-Speech Software and annotating e-texts to support student learning.

In support of its distance education curriculum, marketing initiatives and student/customer relationship management, Laney participates collaboratively in the development of new web sites for each college in the Peralta district. As this project gathers momentum, we will use the extensive online training and support available through the open source community. However, in recognition of the need to support and guide staff in making the best use of those resources, in addition we are requesting funding for webmasters and trainers who will provide on-site training to faculty, staff, and administrators. At the time of this writing (January 2010), we were successful in procuring district support for one consultant to work with our faculty in developing sites that are interactive, fully functional, welcoming and informative, while adhering to award-winning principles of design for universal accessibility.

All the preceding technology changes, improvements and enhancements require knowledgeable users and a coordinated training strategy if they are to work well. At the same time the college is dramatically upgrading its technology infrastructure, so that we/it will have the ability to sustain these increasing demands. There is a continuing and expanding need for widespread training on efficiently using the tools now available.

Laney will work with the District to improve the efficiency and usefulness of district-wide training efforts, with an emphasis on more hands-on training opportunities. We will also work to ensure adequate staffing for training faculty in the use of new technologies as they are implemented. We will advocate for funding to increase our distance education efforts and to hire a Webmaster and trainer to support the open source web sites project, and we will begin to actively seek external funding sources for these necessary technology improvements.

No training is available for College Network Coordinators. This is a critical need as our network increases in complexity and size. Management, monitoring, security, and deployment become more and more difficult without training in both existing and future hardware and software.

No training is available for classified lab staff.

Web Sites – The Internet is becoming increasingly important in higher education. Today's college students routinely go online to accomplish a variety of tasks, such as:

- enrolling in classes
- communicating with professors
- communicating with students
- obtaining course information (syllabi, homework assignments, etc)

- using library resources
- taking online classes
- research
- checking a calendar of campus events
- blogging and podcasting
- social networking

The college web site is a focal point of student online activities. Colleges are realizing that quality web sites are essential for attracting and retaining students and that the costs of supporting these sites are crucial investments. A Laney Web Site survey^{xi} administered to Laney faculty, staff, and administrators in fall 2007 supported this view.

Laney is rapidly developing new college web sites using open source technology (see, e.g., <http://elaney.org/wp/instruction/>). This technology allows Laney faculty, staff, and administrators to easily develop and maintain their own web sites, with the support of extensive, free online training and technical support through the open source community, and will complement our distance education efforts (<http://elaney.org/wp/>). Cost efficiencies associated with an open source platform, including free software, technical support, and training fit in perfectly with difficult economic times. Laney faculty, staff, and administration will be empowered by their ownership of these new web sites and freed from the costs associated with the ongoing consultation necessary for a site developed by a commercial entity. A PowerPoint presentation included in the appendix to this report illustrates our plans for implementing the open source web paradigm^{xii}.

ⁱ *Equipment Needs by Department*, summarized from 2008-2009 unit plans for all departments

ⁱⁱ *Technology Campus-wide Needs DRAFT 12-11-09*

ⁱⁱⁱ *Distance Education Guidelines*, 2008, p. 4. Chancellor's Office, California Community Colleges, Academic Affairs Division, Instructional Programs and Services

^{iv} *PeopleSoft Functionality Survey Results*, 2009 document (exact title?)

^v *Laney College Institutional Self Study in Support of Reaffirmation of Accreditation*, 2009

^{vi} *The Role of Academic Senates in Enrollment Management*, 1999, and *Enrollment Management Revisited*, 2009 (in publication), The Academic Senate for California Community Colleges

^{vii} Representative bodies that have made recommendations for technology training include: District Technology Planning Committee, Laney Technology Planning Committee, District Academic Senate, Laney Faculty Senate, Laney Classified Senate, Laney College Council, Laney Business Response Team (Passport Implementation).

^{viii} Interview with Kathy Williamson, Laney BRT Chair (October 8, 2008)

^{ix} "Go Live Support" Email from Anita Black, District BRT Coordinator (March 20, 2008)

^x Series Flyers. (Fall 2005 Orientation and Training Schedule for Faculty.)

^{xi} *Laney Web Site Survey*, 2007

^{xii} *Peralta Web Sites: A New Approach*, 2009