

Lawson State Community College To Expand and Extend Learning: Academic Technology Plan 2006-2009

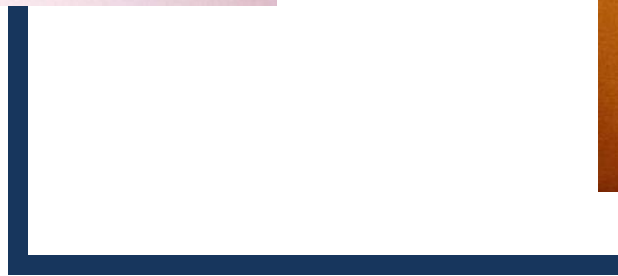
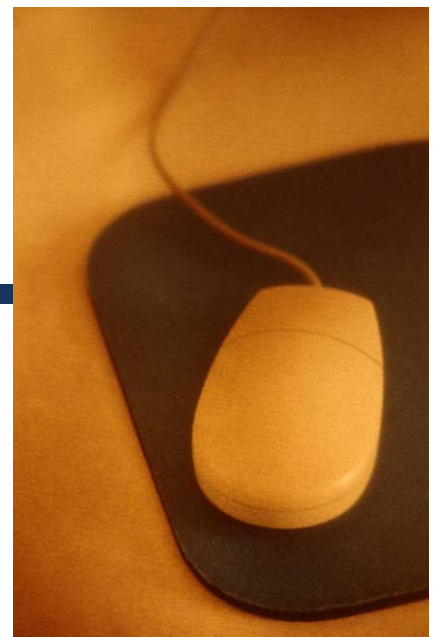


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Introduction

Information technology is vital to the mission of Lawson State Community College (LSCC). Not only must the teaching and administrative components of the College reflect the growing technological character of the world, but our students must be educated adequately to become familiar with the technologies that support their disciplines and their careers.

Technology offers the opportunity to improve access to necessary and relevant information while at the same time promoting communication skills vital in any field. The Lawson State Community College experience, enhanced by current information technologies, provides students with necessary transferable skills for literally any career, technical or otherwise.

Technology also gives LSCC increased capabilities to serve the workforce, community and economic development needs of the district, by providing outstanding academic programs, vocational and customized training, and professional development programs.

This plan is conceived as a working document that will serve as a map for the development of technology at the college for the next three years. Because technology changes rapidly, it is anticipated that adjustments will be made throughout the life of the plan. It is the intention of the college to monitor progress toward plan objectives and to report on changes as necessary.



Executive Summary

This technology plan focuses on the development of technology resources at Lawson State Community College over the next three years (FY2006-2009). The objective is to create an integrated and highly functional environment of electronic information services that can be delivered through a high-availability network to all classrooms, laboratories, libraries, offices and remote locations. The scope of this plan is defined as technology resources used to deliver information technology services for academic and administrative needs.

The principle goals contained herein are the following:

- Goal 1 Incorporate, update and replace technology in the classroom.
- Goal 2 Ensure all faculty, staff and students continue to have access to technology and wireless communications that supports instructional and administrative needs.
- Goal 3 Increase availability of online resources for students, faculty and staff.
- Goal 4 Provide technology training and to improve faculty and staff competencies.
- Goal 5 Continue to implement a 5-year technology budget and to provide a continuous and reliable funding stream.



Goal 1

Incorporate, update and replace technology
in the classroom

Goal 1.1: To incorporate whole class multi-media presentation methodologies into classroom teaching by providing access to multi-media instructional equipment and software tools in the classroom and laboratory.

The integration of multi-media into the classroom enriches the learning experience for students. The presence of a multi-media projection system in a lecture hall or classroom dramatically changes the teaching environment of that facility. To utilize this technology, faculty need to be trained in the use of the technology and in the principles of instructional design of the multi-media specific to their discipline.

Recommendations:

1. Continue to develop classrooms with full multi-media projection system (FY2006-2009).
2. Provide workshops for faculty and staff on the use of classroom technology (FY2006-2009).
3. Provide and support mobile computer labs to enhance small group collaborative teaching methodologies without requiring access to traditional classroom computer labs. (FY2006-2009).
4. Continue to work with organizations in the state to provide faculty workshops and curriculum specific-enhanced computer-mediated activities such as the use of Blackboard, e-mail and other collaborative software (FY2006-2009).
5. Provide technical support to ensure that equipment is maintained and in workable condition at all times.

Goal 2

Ensure all faculty, staff and students continue to have access to technology and wireless communications that supports instructional and administrative needs

Goal 2.1: To ensure that all Lawson State Community College students have access to the latest instructional technology, including adequate computer and Internet access.

Computer and Internet technology has become commonplace in the world and in the classroom. Students need to have adequate access to these resources either through the home or through the college. Lawson State is committed to providing students with the technology they need to succeed in the classroom and with the skills they need to succeed in the workforce.

Recommendations:

Increase access to computer technology and the Internet by increasing the number of computers in the Learning Resource Centers and the Open Computer labs (FY2006-2009).

1. Ensure necessary funding is available to provide adequate computer and software resources to meet the above recommendations (FY2006-2009).
2. Formalize a Student Technology Assistant Program to support extended open lab hours (FY2007-2009)
3. The Learning Resources Center (LRC) serves the college community as an Information Commons area. This will ensure that students have access to all instructional software used or taught at the college. In order to accomplish this recommendation, the college must provide appropriate software licenses for computers located in the campus LRCs and the LRC staff must be trained to support this instructional software (FY2006-2009).
4. Expansion of computer labs is essential to fulfill this goal. It is recommended that two new computer labs be added on the Birmingham campus and that more computers be added to the Bessemer campus (within their library).
5. By December 2009, the campuses of LSCC should be wireless with full connection access for all students, faculty and staff.

Goal 3

Increase availability of online resources for students and staff.

3.1 Web Development and Access

Goal 3.1.1 To provide students with on-line access to needed college procedures and processes.

Recommendations:

1. Provide on-line applications, financial aid, and related student services forms (FY2007/IT/SS).
2. Develop an integrated portal page to access on-line services such as BlackBoard, Student Suite, and Student Email (FY2008).
3. Develop an online student catalog and handbook that is linked to the webpage (FY2007).
4. Develop an online forms page linked to Admissions and Records (FY2008).
5. Develop an online schedule booklet (FY2007).
6. Create step-by-step directions for completing online STARS reports (FY2008).
7. Create step-by-step directions for completing online registration (FY2008).
8. Promote online registration and online payments (FY2008).
9. Create an online catalog (FY2007).

Goal 3.1.2 To improve administrative and communication functions among the college faculty, staff, and administration.

Recommendations:

1. Develop an efficient policy and procedure for the posting of job openings on the Lawson State Community College website (FY2008).
2. Develop a college-wide calendar of events to be managed and accessed on the web site, including room reservations, committee meeting's schedules, and vehicle registrations (FY2006).
3. Develop a department site for all faculty departments (FY2006).
4. Develop a help desk web site that will list hours of operation, FAQ and contact forms for students, faculty and staff (FY2006).
5. Develop a job postings site that will list all current positions at the college (FY2007).
6. Increase web site performance by decreasing the amount of images that load per page (FY2006).
7. Develop an advising site for students, faculty and staff (FY2007).
8. Re-design the career services web site (FY2007).
9. Post an online Faculty and Staff Handbook on the L-Drive (FY2007).

3.2 Distance Learning

Growth in online courses has been much stronger. Currently, more than 25 LSCC 100-200 level courses can be taken online in the content areas of Biology, Computer Science, Economics, English, Office Information Technology, and Medical Assisting.

The Distance Learning Committee continues to oversee distance learning initiatives at the College. The committee's charge, which is to establish and monitor procedures for all aspects of distance learning, is carried out by members drawn from key administrative areas of the College and the College's faculty.

Goal 3.2.1 To determine evaluation and assessment guidelines for distance learning modes of delivery.

Recommendations:

1. Develop a set of criteria to determine the effectiveness of the College's officially adopted platform of delivery for online courses. (FY2006-2009).
2. Develop a set of criteria to determine the effectiveness of the College's online delivery system (FY2006-2009).

Goal 3.2.2 To provide facilities and equipment with efficient support and maintenance to meet the demands of distance education.

Recommendations:

1. Expand the utilization of student assistants in providing support and service to faculty and students involved in distance education (FY2006-2009).
2. Continue to use the Help Desk to report technical problems with equipment and electronic resources.
3. Promote the use of the Help Desk system throughout the college community.

Goal 3.2.3 To provide support services to students enrolled in distance learning courses.

Recommendations:

1. Review the current registration process to ensure that students enrolling in distance learning courses are aware of course requirements and have the information they need to get started in their courses (FY2006-2009).
2. Review and expand BlackBoard Help Desk services for students taking online courses (FY2006-2009).
3. Review the current procedure for offering orientations to students enrolling in online courses (FY2006-2009).
4. Provide an online LRC orientation (FY2006-2009).
5. Explore the feasibility of establishing minimum competencies for students enrolling in distance learning courses (FY2006-2009).

Goal 3.2.4 To establish marketing strategies to promote distance learning courses and programs.

Recommendations:

1. Create a new marketing brochure providing information about online courses and programs (FY2006-2009).
2. Promote online courses strategically in the schedule booklets (FY2007)
3. Modify existing marketing brochures to indicate online options (FY2006-2009).
4. Review presentation of distance learning options in the college schedule (FY2006-2009).

Goal 3.2.5 To provide necessary support, training, and equipment to faculty developing and teaching distance learning courses.

Recommendations:

1. Provide in-house basic and advanced training in Blackboard (FY2006-2009).
2. Provide training in distance learning pedagogy (FY2006-2009).
3. Identify sources of funding for training (FY2006-2009).
4. Establish and maintain an online, peer-reviewed distance learning information and resource center for faculty (FY2006-2009).
5. Explore the feasibility of assigning student assistants or mentors to distance learning faculty (FY2006-2009).
6. Offer trouble-shooting assistance with Blackboard (FY2006-2009).

Goal 3.2.6 To identify and earmark funding for distance learning initiatives.

Recommendations:

1. Determine feasibility of charging a fee for distance learning courses.
2. Review fees charged to outside institutions using LSCC distance learning technology.
3. Review and recommend how distance learning related fees or other income should be allocated.

Goal 4

Training and competencies

Goal 4.1: To provide faculty, staff, and administration with appropriate support, training and access to the required facilities and equipment needed.

Recommendations:

1. Provide faculty with hardware, software and peripheral equipment necessary for use of technology. This equipment may include, but is not limited to, whiteboards, video-conferencing, audio chat rooms, scanners, LCD/DLP projectors and facsimile machines (FY2006-2009).
2. Provide faculty with an on-going support for developing and delivering courses by computer and online (FY2006-2009).
3. Encourage administrators to understand the possibilities of technology and the use of the Internet as a support tool (FY2006-2008).
4. Assist administrators in understanding the technological and computer hardware/software needs of their staffs (FY2006-2009).

Goal 4.2 To provide sufficient training and support to foster self-sufficiency of faculty and staff.

Recommendations:

1. Provide faculty and staff with training necessary to help them understand and effectively use Internet technologies (FY2006-2009).
2. Create a new training academy that will focus on building the technical skills of faculty and staff via the Center for Teaching Excellence and Learning.
3. Expand and formalize the use of student assistants to provide support and service to faculty, staff, and administrators (FY2006-2009).

Goal 4.3 All students will be required to demonstrate basic computer literacy skills.

Recommendations:

1. Have considerations made in placement testing to accommodate assessment of student computer literacy (FY2006-2009).
2. Develop and formalize a method of addressing the needs of students who demonstrate a lack of basic computer literacy skills (FY2006-2009).
3. Maintain the all students must successful pass WKO107, CIS130 or CIS146 as part of their graduation requirements.
4. Require that 100% of all classes taught at LSCC require the use of Blackboard (FY 2007).

Goal 5

Continue to implement a 5-year technology budget and to provide a continuous and reliable funding stream

Goal 5.1 To provide a rolling five-year academic computing infrastructure plan and a continuous and reliable funding stream for this plan.

Recommendations:

1. Work toward developing a continuous funding plan for the five-year Academic Technology personnel budget (FY2006).
2. Funding for technology will increase only slightly, necessitating re-allocation of funds. (FY2006-2009).



Infrastructure

An information technology infrastructure is the system of hardware, software, facilities and wiring that enables the connection of voice, data and video devices and the transfer of voice, data and video information from device to device. The guiding principles for infrastructure decisions should always be flexibility and availability. A well-planned infrastructure should enable the implementation of a full plug and play concept for technology. Students, faculty and staff should be able to access all appropriate information resources, whether they are voice, video, or data from any campus location and from any remote device with access to the College. The resources' specific locations should be irrelevant to the client's access and the view of the resources should be one of desktop perspective. This is the true essence of client-centered computing, distance learning, telecommuting, and personal electronic assistance. Technology is a tool whose value is proportional to its accessibility; thus it is imperative that an infrastructure have near-perfect availability. This level of quality must be designed into the infrastructure through alternate routing, robust component selection, and well-conceived disaster-backup-recovery plans.

Overall Network Infrastructure. Lawson State consists of three geographically separate campuses. Each campus is designed as a Local Area Network (LAN), connected together in a star topology, via single or multi-mode fiber, to form a Wide Area Network (WAN). With the West Campus serving as the hub, the WAN provides a multi-service environment for voice, video, and data traffic.

Local Area Networks (LAN). Each campus LAN is structured similarly, they are comprised of a central Main Distribution Facility (MDF) supporting both a CAT5e (copper) cable plant and multi-mode (100BaseFX) and (1000baseSX) fiber for distance sensitive connections to Intermediate Distribution Facilities (IDF). IDFs are positioned throughout each campus to allow for optimum use of CAT5e UTP cabling. This design greatly reduced initial installation costs, while providing a high performance data network. Each campus is capable of supporting Fast Ethernet (100BaseTX) to the desktop.

Internet Access. The college needs adequate access to information and research available on the Internet, along with email services which provides an effective method of communication for all. At present, the college utilizes a single fiber-optic metro-ethernet connection to the Internet. This level of usage will change, as a result of student demand for increased research time and greater use of web based instruction. National averages show many institutions doubling their need for bandwidth every 12 to 18 months. With these considerations, the college will need to evaluate bandwidth

usage on a regular basis and be prepared to increase available bandwidth, as appropriate.

Servers. The college provides several network-based services available to all staff and faculty, and students. A list is included to define areas of service.

Electronic mail (e-mail) service. Internet based mail and calendar services for staff, faculty, and students (two servers).

File Server. Service for remote file storage on servers, providing fault tolerance and backup for crucial data files

Backup services. Central server device used for backup of critical data files which provides another level of fault tolerance.

Remote access service. A virtual private networking (VPN) server for remote access to all on-campus resources, including e-mail, web-management activities, and file servers.

Website service. Main website for the college in addition to several faculty and staff websites.

Document Imaging Server. A server combined with an optical disk array, used to store digital images of faculty, staff, and student records.

Blackboard/Tegrity Server. Used for the development and delivery of online content.



Schedule and Final Impact

This chapter provides detailed cost estimates for each fiscal year involved in the plan. The plan begins in 2006 and extends until 2009. While this plan serves as an important guide for the use of technology to improve teaching, learning and administrative functions, it will require careful priority setting when resources are scarce. This plan should be the subject of appropriate grant requests. Realization of this plan will achieve several curricular goals of the College, including the expanding and extending of learning to both current and new learners.

