

Technology Master Plan 2009-2011

Introduction

The following document contains an evaluation of the goals set forward in Imperial Valley College's Technology Master Plan for 2008-09. Additionally, it contains technology goals that emerged from the Educational Master Plan.

Based on the evaluation of the 2008-09 Technology Master Plan, it was determined that the technological goals originally outlined in that document focus too much attention on the administrative uses of technology at the college and not enough on the instructional needs of the students, faculty, and staff. Expanded training in computer and web applications, wireless access across campus, and network and server security and stability were seen by the Educational Master Plan Committee and by the Program Review process to be central to the college's future success, and they are central to the goals set forward in this document.

Additionally, it was determined that a clearer evaluation process needs to be established to ensure not only that essential goals are met but that those goals effectively serve the campus community. Goal #1, for example, is to establish a wireless network across campus. The evaluation, which will be conducted by the Distance Education Committee, will assess not only whether that network is installed but how effectively it meets the need for which it was designed: namely, to enable students and staff safe and secure access to the Internet from any point on campus. The assigned evaluators, in conjunction with the campus technology leads and the Educational Master Plan Committee, will develop the documents used to do the evaluation of each goal.

Finally, as this document has developed over the past few months, a consensus has emerged that the technological committee structure on campus needs to be evaluated. Currently, the Technology Planning Committee (TPC) focuses largely on administrative technology needs. Instructional needs are not perceived as a priority for this committee. It is our recommendation that the Technology Planning Committee's focus be redirected to both administrative and instructional technology needs and that two sub-committees be established under the TPC, one for Administrative Technology and one for Instructional Technology, to better advise the TPC in all areas of technology.

Representatives from the Technology Planning (Administrative) and Distant Education (Instruction) Committees will attend an annual Technology Retreat to collaborate on merging goals and objectives into one seamless IVC Technology Plan. The first retreat is scheduled for Fall 2009.

Evaluation of 2008-09 Technology Master Plan Goals

Goal #1: Providing the best possible computing environment and classroom technology solutions to all faculty members, staff, and students		
Objectives	Status	Comments
1A: Provide updated computing environment for faculty and students and ensure proper support	Ongoing	Still a priority
1B: Install audio/visual equipment in all classrooms	85% Completed	Installation and maintenance is still a priority; scheduled to be completed after the completion of the new building (Spring 10)
1C: Establish computer hardware standards for purchasing	Completed in Spring, 09	Plan needs to be updated as technology changes
1D: Establish and implement equipment replacement plan	20% Completed	Updating inventory a yearly activity that must be established
1E: Apply virtual desktop (NComputing) technology in the Reading/Writing Labs	Completed in Spring, 09	Accomplished through ACCESO
1F: Implement VM Ware Technology	Not complete	No longer priority according to the current Educational Master Plan
1G: Make a concerted effort to bridge common technology interests between IVC and ICOE	Ongoing	Measurable objectives need to be established
Goal #2: Providing distance education support		
Objectives	Status	Comments
2A: Build the CENIC fiber connection	20% Completed	Pending compliance issues resolved
2B: Develop a contingency plan for distance education course management system	Ongoing	
2C: Develop the transition plan for ending of the ACCESO project Title V grant	In process	End-date for ACCESO changed to June 2010 (from September 2009)
Goal #3: Ensuring the best effective use of the Banner ERP system		
Objectives	Status	Comments
3A: Maintain the Banner system	Ongoing	Must implement more robust training program
3B: Implement the XtenderSolutions System	Complete	
3C: Implement the Fixed Asset System	20% Completed	Scheduled completion date June 2010
3D: Implement the Argos Report System	Complete	
3E: Implement the Leave Balance System for	20%	Scheduled completion date

Employee Self Service (mock payroll)	Completed	
3F: Purchase the Oracle campus license	Completed on 4/24/2008	
3G: Implement the DegreeWorks System	60% Completed	Scheduled completion date
3H: Implement the Position Control System	20% Completed	Scheduled completion date
3I: Implement the Payroll system	20% Completed	Scheduled completion date
3J: Implement the Enrollment Management System	Ongoing	Interim program created by VP Academic Services and IT Programmer. Piloted in Fall 2009. Will be evaluated after Fall census.

Goal #4: Ensuring comprehensive faculty and staff training

Objectives	Status	Comments
4A: Provide updated computing environment for faculty and students and ensure proper support	Ongoing	Technology Training center offers classes in existing programs Basic academic need
4B: Update student computing labs with current hardware and software	Ongoing	Basic academic need

Goal #5: Implementing the campus technology modernization plan

Objectives	Status	Comments
5A: Rebuild the College's main web site	Continuously improved	Basic campus need
5B: Upgrade campus intranet wiring	Complete	Basic campus need
5C: Renew campus intranet network equipment	Complete	Basic campus need
5D: Renew campus telecommunication equipment	Complete	Basic campus need
5E: Deploy a campus-wide wireless data network	75% Completed	Validation of reliability in progress during fall 2009
5F: Update software and hardware on the infra structure computing systems	Ongoing	Basic campus need

Goal #6: Developing, reviewing, and revising technology related policies and procedures on a regular basis

Objectives	Status	Comments
6A: Establish the Computer and Network Use Policy	Complete	

2009-2011 Technology Master Plan Goals

Goal #1: Complete campus-wide wireless network

Goal #2: Establish clear guidelines for recovery planning, redundancy, increased security, and maintenance of existing systems

Goal #3A-D: Complete the installation of and training for key web applications

Goal #4: Support the increasing demand for a secure virtual library

Goal #5: Continue planning and implementation of smart classrooms

Goal #6: Continue with ongoing and systematic replacement of outdated hardware

Goal #7: Provide guidance to division chairs as to specificity and rationale for technology requests prior to the annual program review process

Goal #8: Develop plan to expand computer labs to meet student demands

Goal #9: Offer ongoing professional development specific to Etudes training and to Banner applications training

Goal #10: Develop a plan to use technology to support the college's "greening" efforts

Goal #1: Complete Campus-Wide Wireless Network

Details

A campus-wide wireless network was a priority of the 2008-09 Technology Master Plan that was not completed. It is also a key priority of the 2009 Program Review. Therefore, it is the first item on this year's technology master plan.

It was requested for classrooms and students on campus to increase access to the Internet and email anywhere on campus and to address the increasing number of distance education students.

With the development of the Student Portal, IVC now has in place an authentication system that could be used to ensure that only authorized users can take advantage of the wireless network.

Training

Once the wireless network is in place, then training on how to use it will be needed. This can come in the form of step-by-step login instructions (ideally using videos). Additionally, this training could serve as a prime opportunity to make faculty, staff, and students aware of the potential risks that are involved with using relatively public wireless networks.

The Technology Training center, in conjunction with the Webmaster and the Instructional Media Designer, will be in charge of training faculty, staff, and students in using the wireless network.

Administrator in Charge of Implementation

Dean of Technology

Evaluated By

As distance education students are identified as one of the prime users of this equipment, the Distance Education Committee should lead the evaluation.

Date of Evaluation

There is a distinct urgency to complete this goal as soon as possible. Therefore, the initial date of evaluation will be December 2009.

Currently, this goal is at 75% implementation.

Goal #2: Establish clear guidelines for recovery planning, redundancy, increased security, and maintenance of existing systems

Details

When the college's email server contracted a virus in Spring 2009, the college's email was down for two weeks and IT staff members were forced to devote that time to fixing the problem and reestablishing email services across campus. As this incident suggests, security and backup and recovery plans are currently not optimal.

Therefore, the college needs to establish a written backup/recovery plan to ensure that incidents like this never interrupt the college's services again. This plan should detail what method should be used to backup the college's data, when and how the backups would occur, and how and where to store the backup media. It should also include periodic testing of the plan to ensure that it is workable, that it contains an effective firewall system, and that it contains appropriate virus protection. Finally, it should contain alternative means of accessing email and other core online services should the campus's network go down in the future. UPS (Uninterrupted Power Supply) should be used to avoid some of the unscheduled power outage.

Instructor and administrators asked to report their Gmail or other email accounts to the instruction office. New malware enforcer installed campus wide in spring 2009. New server acquired in summer 2009 and rolling out implementation in fall 2009.

Training

Information Technology will determine training for these systems.

Administrator in Charge of Implementation

Dean of Technology

Evaluated By

Technology Planning Committee

Date of Evaluation

Recovery Plan to be reviewed when Technology Plan is reviewed

Goal #3A: Complete the Installation of and Training for Banner integration

Details

Imperial Valley College purchased the Banner ERP system in 2003, completed the migration, and went live in the spring semester of 2005. Much work has been done to ensure that all modules in Banner are activated, but several external items crucial to instruction and student services need to be integrated into Banner. These include DegreeWorks, Banner Enrollment Management, Banner Position Control, and Banner Finance.

DegreeWorks is an add-on system to the Banner Student module that provides a web-based user interface allowing student to conduct “what-if” scenarios for various majors, academic advisors to create automated Student Education Plans (SEP), and Admissions and Records evaluators to utilize automated instead of manual degree and certificate official, final evaluations. This software was purchased with money from the ACCESO Project in January 2008 but integration has not yet been completed.

Position control is part of the Banner ERP system purchased in 2004 but has not been configured and activated. It is a module that works closely with the Human Resources module to support the processing of employee job information, biographic/demographic information, student and student-employee enrollment verification information, salary planner, faculty load, 1099-R reports, 1042-S reports, W-2 reports, and the IPEDS reports.

Because the payroll system and the Position Control system have not been implemented in Banner, it is difficult to reconcile the information from those two modules (Finance and HR) and produce a contiguous, comprehensive, and accurate workload result for each individual faculty member. This EMS implementation will reduce the manual intensive work between Instruction, HR, and Business, and at the same time it will provide administrators a real-time readout of the “cost to do business.”

Training

IT must provide training for these items

Administrator in Charge of Implementation

Dean of Technology

Evaluated By

End users

Date of Evaluation

Program specific

Goal #3B: Complete the Installation of and Training for CurricuNet

Details

CurricUNET is state-recognized software that provides robust curriculum management, automating the process of curriculum development and approval. IVC purchased a license for CurricUNET in Spring 2008 and it is in the process of being installed and integrated to Banner.

The CurricUNET installation is estimated at 90% completed.

Once completed, widespread training in CurricUNET needs to take place for faculty, staff, and administrators who will utilize this very essential tool.

Training

Academic Services should lead the training for CurricUNET

Administrator in Charge of Implementation

Vice President of Instruction

Evaluated By

Division Chairs/Faculty

Date of Evaluation

June 2010

Goal #3C: Continue Training for Etudes course management system and Turnitin.com

Details

The Etudes course management system is the primary CMS used by IVC. It was initially used for online education, but more and more instructors are signing up to receive training and use for traditional classes. Through the ACCESO Project, IVC has trained faculty to use Etudes. As the ACCESO grant nears its end, the college must ensure that Etudes training and faculty support continues.

As well, ACCESO first purchased a site license for Turnitin.com, the online plagiarism tool, in 2005. Faculty and students from a variety of disciplines make use of this key tool. Training for this software is sporadic, however. More training will enable more faculty to use this service.

Training

ACCESO's Etudes training, both in regular workshops and through the annual summer Technology Camp, needs to continue once the ACCESO grant ends in Spring 2010. Likewise, turnitin.com training, which is now handled through ACCESO, needs to be integrated into the overall technology training offered on campus.

Administrator in Charge of Implementation

Vice President of Instruction

Evaluated By

Distance Education faculty through the Distance Education Committee

Date of Evaluation

Each semester

Goal #4: Support the Increasing Demand for a Secure Virtual Library

Details

IVC has not fully implemented a virtual library because student / faculty / staff authentication from off campus had not been available. It continues to be necessary for the Library to issue its own passwords and operate its own authentication, and this fractured service does not adequately reach those who need the virtual library.

Therefore, a single authentication system should be created to allow students, faculty, and staff access to secure sites including the virtual library (i.e., bibliographic databases). The new student portal could serve in this capacity, but it needs to be designed and tested to allow access to the virtual library.

Training

Training students, faculty, and staff to use the virtual library's resources is an ongoing job that will be made more pronounced once the virtual library is more easily accessed. Coordination between of IT and librarians is essential to ensure the most effective training.

Administrators in Charge of Implementation

Vice President of Instruction, the Dean of Learning Services, and the Dean of Technology

Evaluated By

The Learning Services Committee

Date of Evaluation

December 2009

Goal #5: Continue Planning and Implementation of Smart Classrooms

Details

Ideally, all classrooms should be identical insofar as they are equipped with technology resources and enhancements. This allows faculty to enter any classroom they might be assigned and lecture in their preferred style. However, certain classrooms need more than this. They need technologies that will allow videoconferencing, advanced video presentations, and video/audio recording.

The classrooms to be made into smart classrooms include 2131 and rooms in the 300 building, along with several classrooms in the under-construction 2700 building. Measure L funding will be utilized for these upgrades, as part of the campus-wide renovation.

Training

Once the classrooms are fully functional, training will need to take place for proper use of the equipment. IT (Larry Valenzuela) and Distance Education (Andres Martinez) should coordinate to ensure that this training happens on a regular basis.

Administrator in Charge of Implementation

Vice President of Instruction and Dean of Technology

Evaluated By

The Distance Education and Technology Planning Committees

Date of Evaluation

June 2010

Goal #6: Continue with Ongoing and Systematic Replacement of Outdated Hardware

Details

Objective 1D in the 2008 Technology Master Plan called for the establishment and implementation of an equipment replacement plan. This objective included the establishment of an inventory of old PCs to be replaced, which was initially completed in 2007. It also included a plan to update the PC replacement inventory each year. This was initially completed in 2008.

The current goal is to ensure that this equipment replacement plan is updated on a yearly basis by IT, in conjunction with division staff, instruction, student services, and learning services. Additionally, the inventory should take into account hardware used in classrooms like LCD projectors, DVD/VHS players, sound systems, and so on.

Training

Although the replacement of outdated hardware does not require training, the college should nevertheless plan for training employees in the use of this hardware once it is purchased. Lack of proper training in the latest version of Windows operating system, for example, can cost the college a significant amount of money in the form of work-hours. Further, if more faculty knew how to turn on and operate the LCD projectors in each classroom, there will be a reduction in the cost of repairs and an increase in the use, thus improving education overall for our students. IT can organize this training, and the Distance Education office can assist.

Administrator in Charge of Implementation

Vice President of Instruction and Dean of Technology

Evaluated By

The Technology Planning Committees

Date of Evaluation

June 2010

Goal #7: Provide guidance to division chairs as to specificity and rationale for technology requests prior to the annual program review process

Details

In the past, division chairs completed the Instructional Technology section of the Program Review with little input from IT. While Instruction must lead the focus, IT nevertheless needs to provide support and advice regarding logistics and costs connected to technical improvements.

In particular, IT should provide guidance on the following issues:

- Network needs such as wireless availability, security concerns, internet speed, network in classroom or offices, and so on
- Software/hardware needs/standards
- Equipment needs (including replacement plans and specifications for laptops, high resolution projection and high resolution monitors
- Web needs for student portal, faculty sites, and so on

Training

Basic training in technology management should be provided as part of this goal.

Administrator in Charge of Implementation

Vice President of Instruction and Dean of Technology

Evaluated By

Division Chairs

Date of Evaluation

This goal should be evaluated by June 2010 following the next program review cycle.

Goal #8: Develop Plan to Expand Computer Labs

Details

The Business and Science and Math Divisions requested space for expanded and/or dedicated computer labs (30 to 40 computers each) with secure storage for robotics/electronics and independent internet access. The Business Division requested space for a networking/computer repair lab for 30 students and are open to sharing the lab with the Computer Science Department. The IT Division needs additional secured/alarmed space for system configuration lab for servers and PCs.

Training

Program specific

Administrator in Charge of Implementation

Vice President of Instruction and Dean of Technology

Evaluated By

Program specific

Date of Evaluation

Upon project completion

Goal #9: Offer ongoing professional development specific to Etudes training and to Banner applications training

Details

Etudes is the course management system utilized by IVC. In the past, training was done both through the ACCESO Technology Camps each summer and through online training provided by the Etudes organization. Beginning in Fall 2009, IVC will offer face-to-face training for Etudes. This training is required for all instructors wishing to use Etudes for their classes (both online and face-to-face).

Banner is the ERP system that IVC has used since 2003. Over the years, the college has upgraded Banner on numerous occasions and has continued to add new features. However, training in Banner has not always been available each time a new element or a new upgrade has been implemented. The goal, therefore, should be to ensure that training in Banner be central across campus, both for existing features and for new features.

Training

Etudes training will be coordinated by Andres Martinez, the Instructional Media Designer, and will consist of three-week, intensive training sessions for faculty.

Banner training will be coordinated by IT, specifically Larry Valenzuela or designee. The nature of the training will vary, but it must be broad-based enough to meet the needs of faculty, staff, and administrators.

Administrator in Charge of Implementation

Vice President of Instruction and Dean of Technology

Evaluated By

Each session is evaluated by the end user.
The Distance Education Committee should evaluate Etudes training
The Banner User Group should evaluate the Banner applications training.

Date of Evaluation

Specific to training sessions

Goal #10: Develop a plan to use technology to support the college's "greening" efforts

Details

In the past, the college's efforts at "going green" have been few and far between. Recycling is still not prevalent across campus. There are many ways that the college can become more energy and resource efficient using technology, and a plan needs to be developed to support these efforts. Many committees, for example, are going paperless. This idea could be extended to all campus communications. Programs like ImageNow would allow the college to do the majority of all paperwork online. Web portals, Etudes, and server technology can also be used to distribute all classroom materials to students to cut down on the amount of paper used in classes. More energy efficient power strips and light bulbs could be added to classrooms to save energy, and our outdated technological equipment can be better recycled. These are just a few ideas that be added to a future greening plan. These ideas (and others) could save the college money, could save employees and students time and energy, and they could help to save the environment.

Training

IT and Distance Education can provide training for whatever programs that are used in these efforts.

Administrator in Charge of Implementation

Evaluated By

The Greening Committee will lead the evaluation of this effort.

Date of Evaluation

December 2010