

# Imperial Valley Community College District Technology Master Plan Midterm Report

February 2010

## I. Introduction

Imperial Valley College has taken great strides in the utilization of technology in the past few years. In addition, IVC has grown more purposeful in its planning and utilization of technology—sustaining established infrastructure while adding significant enhancements and new facilities. For at least two years now, IVC has been developing a completely new planning system. This system allows for an effective and comprehensive process that allows for all stakeholders on campus to present their needs and requirements for evaluation by newly created planning groups.

Extensive and ambitious, this focused planning effort amounts to a process that IVC has never enjoyed before, to this level of detail and comprehensiveness. New committees and new forms and new processes have been created to facilitate the important work of the college, to foster an atmosphere of accountability and to allow for the college budget to be driven by the needs of instruction.

The IVC Technology Master Plan 2006-2009 (TMP 2006-2009) was created on the cusp of the creation of the new planning structure. That 32-page TMP document was the first technology planning report IVC had ever developed that was so thorough, detailed, and forward-looking.

On the heels of that effort, IVC continued in earnest developing what has grown to be the current planning system. The TMP 2006-2009 was created and finalized prior to the extensive effort that resulted in the planning structure that exists at present. Therefore, another interim plan was created in 2009 in an effort to align and update the technology information presented in the earlier report.

Due to the size and scope of the new planning apparatus, the college—understandably—has been going through an adjustment period, as stakeholder groups grow accustomed to the new procedures, and as planning groups work with the new forms and reviews. Since the TMP 2006-2009 was produced ahead of this curve, it has been necessary to make adjustments in order to align the spirit and design of the original TMP 2006-2009 to fit the overall scheme of IVC's new planning structures.

Hence, this document serves as a bridge document. All the technology planning documents developed up to this point fall under the embrace of this IVC Technology Master Plan Midterm Report. This document provides the continuity necessary to guide technology efforts at IVC into the next step in the process, the development of Technology Master Plan 2010-2013.

Specifically, this midterm report document seeks to accomplish the following:

- Review the status of any unfinished technology objectives from TMP 2006-2009
- Reaffirm the connection to the Educational Master Plan
- Provide responses to Accreditation Team Recommendation #5
- Clarify the connection between technology planning and the college budget
- Clarify the connection between technology planning and facility planning
- Establish interim objectives that lead in to the Technology Master Plan 2010-2013.

Also, this midterm report describes in detail the process to assess, review, and modify all future technology plans.

In addition, since the new Science Building was completed and placed into operation at the beginning of the 2010 Winter Intersession, a new standard has been set for the “smart classroom” at IVC. (The completion of this building is yet another of the many developments that have impacted the development of technology planning—a further sign of the growth and accompanying changes that have characterized the recent climate here at IVC.) This “smart-classroom” standard needs to be illuminated for in this midterm report bridge document, as well.

## II. Technology Master Plan as part of the Educational Master Plan

One of the first documents written in response to the original requests of the Accreditation Team was the Technology Master Plan 2006-2009. This 32-page document presented six clear goals that were based on a prioritized three-fold vision about the role of technology at Imperial Valley College: to serve instruction; to support expansion; and, to maintain day-to-day campus operations.

This plan was well-received by the college. However, it was developed prior to the massive restructuring of the planning apparatus at IVC. Again, at the behest of the Accreditation Team, IVC began overhauling its planning process, developing new forms and reporting structures, culminating in the development of a new Educational Master Plan. A new Educational Master Plan Committee (EMPC) was created, as well.

Specifically, in "Recommendation 5," the Accreditation Team recommended that the "college develop a process to assess, review and modify the Technology Plan as the educational needs and program develop in order to support a college master plan. It is also recommended that the plan be aligned with college budgeting processes and staffing."

Accordingly, the EMPC—using comprehensive data acquired through the new IVC planning structures—presented a number of focused technology recommendations. Since the TMP 2006-2009 was developed before these EMPC recommendations, a slight realignment of procedures needed to be undertaken.

Now, the Technology Planning Committee updates the technology plan using input from the EMPC. This information is routed through the appropriate planning channels whereupon it passes through the Strategic Plan Committee on its way to the Board of Trustees approval. When the TMP 2006-2009 was created, this new planning process had yet to be implemented.

The EMPC's most recent recommendations were presented in the Educational Master Plan 2009-2010. What follows is a list of the EMPC's recommendations:

1. Incorporate recovery planning, redundancy, increased security, and maintenance of existing systems in the technology plan.
2. Provide resources to maintain compliance with regulatory standards to embrace current and emerging technology to educate the workforce of tomorrow.
3. Support the increasing demand for a secure virtual library management technology.
4. Continue planning and implementation of smart classrooms including multimedia lecterns, webcam capability, video-conferencing and digital video-taping capabilities, enhanced Internet access, digital voice recording, and Clicker technology.
5. Continue with ongoing and systematic replacement of outdated hardware.
6. Provide guidance to Division chairs as to the specificity and rationale for technology requests prior to the annual program review process.
7. Establish working relationships within Information Technology, Maintenance and Operations, and Academic Services for projects to modify or expand computer labs, secured storage for related robotics/electronics, and to modify alarmed space for system configuration labs.

8. Offer ongoing professional development specific to Etudes training and to Banner applications training.
9. Support the college's efforts to become more "green" and efficient in its meetings through "Board Docs" and other software.

At this stage, the newly developed planning structures were beginning to fall into place. The original TMP 2006-2009 served its purpose, to establish a clear and purposeful sense of direction for the IVC's continued development and utilization of technology. And then, with the new planning structures, forms, and procedures falling in line, the spirit of the TMP 2006-2009 could flow through the appropriate channels, for review and approval—ultimately to play an important role in driving the college budget.

A graphic depiction of this process can be found on page 10 of the Educational Master Plan 2009-2010 document. The Technology Plan feeds into the Educational Master Plan while also connecting to the Budget Plan.

As the college continued its efforts, building a revamped planning apparatus, technology planning continued, also. The main intention was to align the earlier efforts that resulted in the TMP 2006-2009 with the larger efforts that resulted in the creation of the EMP and related entities (to include the various planning committees that feed information to the EMP which then goes on to the College Council, the Academic Senate, the Strategic Planning Committee, the Superintendent/President, and ultimately the Board of Trustees).

In an effort to realign ongoing technology concerns within the context of the new planning structures, the EMPC appointed a subcommittee to review and evaluate the technology sections of the Program Reviews. The initial summation was submitted to the EMPC as "Technology Master Plan 2009-2011." This document presented "an evaluation of the goals set forward" in the previous TMP 2006-2009. This document also contained "technology goals that emerged from the Educational Master Plan."

Since this second report was created, and as the college continued to fine-tune its planning structures, the technology planning cycles were re-focused to coincide with the larger planning design. All technology planning documents created to date can be considered in their entirety as the TMP 2006-2009. The next three-year cycle will result in the TMP 2011-2013.

However the review and alignment of TMP 2006-2009 with the EMP, the Annual Budget and Fiscal Plan, and the 10-year Facility Master Plan was not complete and thorough in the second document. The document has been updated and renamed as the "Technology Master Plan Midterm Report." The updated document will provide findings, status, and alignment details, and included a significant amount of data gleaned from program-review information.

The inclusion of this information reflected the evolving nature of technology planning at IVC, as all stakeholder groups created and then utilized the new planning apparatus. As the planning process came into sharper focus, the TMP documentation grew to embrace pertinent data that flowed in from both the EMP and the new program-review reports. The vision of a unified and cohesive planning structure for the college that would realistically drive the budget was beginning to become a reality, and this evolving process is evident in the continual evaluation of technology goals and objectives.

The TMP received its "course correction," and key concerns and priorities were expressed, most notably with regard to:

- the balance between administrative and instructional needs;
- the deployment of a campus wireless network;
- the alignment of technology with the budgeting and staffing processes;
- the importance of technology and shared governance;
- the reaffirmation of technology committee structures and relationships.

The following describes the revised planning process infrastructure as part of the District response on Advancements since Fall 2009.

Currently, the technology planning process has been assimilated into the processes of the college and is fully implemented. High-lighting and driving the process is the use of data in planning and decision-making. The Institutional Research Office provides every department and division with standardized data (e.g., retention rates, success rates, and enrollment percentages), and the IT Department presents the enrollment data together with the cost information. These data drive the Program Review process. Coupled with the use of data is the integration of Student Learning Outcomes and Service Area Outcomes adopted by each department, division, and support area of the College.

In the revised Program Review process, the Program Lead identifies needs along with expected costs, a clear rationale, and specific justification. The Program Review process feeds information and specific data to the Educational Master Plan Committee to develop and update their plan—e.g., the Staffing Plan, Professional Development, the SLO Plan, the Facilities Plan, the Marketing Plan, and the Technology Plan. When the resource plans are completed, they are forwarded to the appropriate shared governance bodies for review and approval as recommendations, and then this material is forwarded to the Budget and Fiscal Planning Committee, the CEO, and ultimately the Board of Trustees. A five-year budget analysis was developed to aid in the review of the college's financial profile. In 2009, an ad hoc committee was formed by the Budget and Fiscal Planning Committee to evaluate the use of a resource allocation model for budget development.

Through the new Program Review and Educational Master Plan processes, important issues were identified that could be dealt with effectively utilizing the new planning apparatus developed by the college. For example, it was determined that the college should establish a wireless network across campus (Objective 5E in TMP 2006-2009). The installation was completed in Fall 2009, and an evaluation was set for 2010. The evaluation was handled by the DE Committee in conjunction with the IT Leads and the EMPC. The evaluation assessed the effectiveness of the network in enabling students and staff to access the Internet from any point on campus. This evaluative process, as a potential tool, will be evaluated for use as a model for other evaluative processes in the campus community (DE Committee minutes 2-17-2010). In addition, the development, completion, and evaluation of this wireless project was facilitated and focused by the newly created planning process.

The technology planning effort includes goals designed to better align technology with the college's budgeting processes and staffing. In addition, technology planners see the need for continued integration among Information Technology, Distance Education, Academic Services, and the shared governance structure on campus. These and other technology concerns can now be addressed efficiently and purposefully utilizing the new planning apparatus.

Key to the college's newly designed planning process is the need to align this process with the budget plan and with the facilities plan. In the ensuing section of this mid-term report,

details are provided that clearly reveal these links. Objectives are listed, and action items follow—all summed up with information in table form that highlights the connection among objectives, action items, budget, and facilities. From the beginning, as the college entered into the development of a completely overhauled planning process, it was central to this process that objectives connect in clear and significant ways to both the college budget and to the college's plans to expand, enhance, and maintain facilities. In the following section, these connections can be seen clearly—evidence of the initial success of the college's newly designed planning process.

### **III. Review of the Objectives in the 2006-09 Technology Master Plan**

The Technology Master Plan 2006-09 (TMP 2006-2009) contains 6 goals, 29 objectives, and 128 action items. As of February 2010, 98 action items have been completed, 15 action items are of continuous on-going type, and 15 action items will be completed in the coming months. In this section we will review the status of all the objectives and action items, identify their alignment with the Educational Master Plan, the Annual Budget and Fiscal Plan, and the 10-year Facility Master Plan.

#### **Objective 1A: Provide an updated computing environment for faculty and students and ensure proper support.**

This is an on-going objective and will be carried forward to the TMP 2010-2013. As stated in the TMP 2006-2009, Action Item #1, #2, and #3 have been completed.

#### ***Action Item #4: Replace outdated PCs for faculty and staff members.***

The IT Department has compiled a list of desktop PC and laptop inventory, and each computer has been designated a replacement date based on the 5-year replacement cycle. Together with the negotiated pricing with the computer vendor, a budget is generated each year for supporting the replacement.

In order to ensure the uniformity for support and cost saving, the Chief Finance Officer has requested the IT Department establish a centralized computer and printer purchasing process. An internal ordering website was established with the shopping cart feature; the standardized models of desktop PC, laptop, and printers are displayed with pricing information on the ordering web pages. Each department can order the needed equipment for their faculty and staff members to replace the outdated equipment. The shopping cart forwards the order to the IT Department to generate the purchase order. The equipment is shipped to the IT Department for initial configuration, and then delivered to the end user.

This online ordering process has helped to:

- a) simplify the equipment order process so purchase orders are issued only from the IT Department for easy tracking of expenses and warranty information;
- b) simply the process of updating the equipment replacement inventory list;
- c) provide advanced notice to the IT Department in terms of the timing and quantity of equipment that needs initial configuration.

This process helps scheduling the technicians' time, and the end user will get a faster delivery of the fully configured equipment.

#### ***Action Item #5: Replace outdated PC hardware in the student labs.***

The student computing labs are traditionally managed by the corresponding department. With the newly proposed 6-dean organization structure in the Instruction area (which was approved by Academic Senate on 2/17/2010), the support of the student labs will be consolidated into the Dean of Learning and Instruction Support. This should create synergy in the supporting area and achieve cost savings.

The PC equipment in the student labs follows the same 5-year replacement cycle.

**Action Item #6: Update instructional software on student computers.**

The instructional software is traditionally managed by each Division individually for the software purchase, upgrade, and installation, tailored to its special needs. With the newly proposed 6-dean organization structure in the Instruction area (which was approved by Academic Senate on 2/17/2010), the support of the instructional software used in the student labs will also be consolidated into the Dean of Learning and Instruction Support.

**Action Item #7: Evaluate the PC client management system and select the proper one for deployment.**

As the number of PC workstations grows, a centralized PC client management system is needed to simplify the setup, upgrade, trouble shooting, and software installation functions. The IT Department evaluated several vendor products and decided on selecting the KACE-KBox Client Management Tools system. The system was purchased in October 2008. Installation, training, and initial operation were all performed in January 2009.

This action item is completed.

***Alignment with the Educational Master Plan:***

Objective 1A is aligned with Technology Recommendation #5 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

Through the establishment of the equipment replacement inventory list and the internal ordering website, this objective is closely tied to the annual budget and fiscal plan.

The process for aligning with the Annual Budget and Fiscal Plan allows for the IT Department to present the needed funding based on the equipment replacement inventory list to the Budget and Planning Committee each year for inclusion.

***Alignment with the 10-year Facility Master Plan:***

In the current environment, some of the student labs, such as the Math Labs and the Reading/Writing Labs, are located in portable buildings.

In the 10-year Facility Master Plan the Technology/Library building will replace portable buildings 1600, 1700, 2600, along with other modular buildings. When all the student labs are located in a single place, further support synergy and cost savings can be achieved.

***Evidence:***

- The internal ordering website: <http://orders.imperial.edu/>
- PO #6021046 for KACE-KBox purchase
- "6 dean Structure detail 02-11-10.xlsx", 2/11/2010 4:37PM email attachment by Kathy Berry
- "10-yr Master Facility Plan.ppsx" by Jimmy Sanders, 2/6/2010 Board Retreat

presentation

**Objective 1B: Install audio/visual equipment in all classrooms.**

***Action Item #1: Install projection screen, video projector, VHS and DVD player, and audio speakers and amplifiers in each classroom.***

The audio/visual equipment deployed in the new 2700 building has set the standard for the smart classrooms in the college. As renovation applies to the older classrooms, the existing A/V system will be upgraded to meet the same standard as used in the 2700 building. Action Item #1 will be repeated as the old classrooms are renovated.

***Action Item #2: Maintain the Audio/Video equipment; ensure they all are in good working condition.***

As the audio/visual equipment in all classrooms is standardized, the maintenance work becomes easier. Action Item #2 is a continuous on-going item.

<p><b><i>Alignment with the Educational Master Plan:</i></b></p> <p>The Objective 1B is aligned with the Technology Recommendation #4 in the EMP.</p>
<p><b><i>Alignment with the Annual Budget and Fiscal Plan:</i></b></p> <p>The Library A/V Department will include the classroom audio/visual maintenance cost into the annual program review.</p>
<p><b><i>Alignment with the 10-year Facility Master Plan:</i></b></p> <p>As the old classrooms are renovated, the audio/visual equipment shall be brought up to the standard as used in the 2700 building.</p>
<p><b><i>Evidence:</i></b></p> <ul style="list-style-type: none"> <li>• 2700 building smart classroom equipment list</li> </ul>

**Objective 1C: Establish computer hardware standards for purchasing.**

***Action Item #1: Establish hardware standards for desktop and laptop computers based on input from Information Technology, and revise these standards on an annual basis.***

The Technology Planning Committee discussed and approved the standard models of PC desktops and laptops recommended by the IT Department. Action Item #1 is a continuous on-going item.

***Action Item #2: Implement the centralized computer hardware purchasing to ensure compliance.***

An internal ordering web site was established so that each department can order the needed equipment for their faculty and staff members. This ordering web site also supports the centralized computer equipment purchasing.

The Business Office is in the process of hiring the Director of Purchasing. With the position filled, the policy of centralized computer hardware purchasing can be further enforced. The Director of Purchasing will manage the centralized purchasing for the entire college and shall reject any computer hardware purchase order request that is not issued by the IT Department.

This action item is pending completion of the hiring of the Director of Purchasing.

***Alignment with the Educational Master Plan:***

Objective 1C is aligned with Technology Recommendation #5 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

Standardization allows the college to negotiate a volume discount with vendors. This in turn provides cost savings to the college.

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evidence:***

- The internal ordering website: <http://orders.imperial.edu/>

**Objective 1D: Establish and implement the equipment replacement plan.**

***Action Item #1: Establish an inventory of old PCs to be replaced.***

This action item is completed. The IT Department currently maintains a campus-wide PC inventory in the KBox client management tool.

***Action Item #2: Update the PC replacement inventory once a year.***

This is a continuous on-going item. The PC inventory will be maintained by the KBox client management tool. Each year a PC replacement list will be generated and the replacement cost will be forwarded to the Budget and Planning Committee to be included in the Annual Budget and Fiscal Plan.

***Alignment with the Educational Master Plan:***

The Objective 1D is aligned with the Technology Recommendation #5 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

Through the establishment of the equipment replacement inventory list and the internal ordering website, this objective is closely tied to the Annual Budget and Fiscal Plan.

The process for aligning with the Annual Budget and Fiscal Plan allows for the IT Department to present the needed funding based on the equipment replacement inventory list to the Budget and Planning Committee each year for inclusion.

***Alignment with the 10-year Facility Master Plan: N/A***

***Evidence:***

- Technology Planning Committee meeting minutes.

**Objective 1E: Apply virtual desktop (NComputing) technology in the Reading/Writing Labs.**

As stated in the TMP 2006-2009, Action Item #1 was completed.

***Action Item #2: Deploy 35 computer units in the Reading/Writing Labs.***

This Action Item was also completed in March 2009, a total of 45 units were installed.

This completed all the Action Items in Objective 1E. The NComputing technology proved to be cost-effective and energy efficient. As new student labs are constructed, this technology should continuously be applied. Therefore, an on-going action item of "Continue to apply the NComputing technology to new and expanded student labs" should be included in the TMP 2010-2013.

***Alignment with the Educational Master Plan:***

Objective 1E is aligned with the Technology Recommendation #5 in the EMP. As the older computers in the student labs need replacement, the NComputing technology should be considered as a priority.

***Alignment with the Annual Budget and Fiscal Plan:***

NComputing technology proves to be cost-effective. When deployed to new student labs or replacing outdated student lab computers, it should have a positive impact on the budget.

***Alignment with the 10-year Facility Master Plan: N/A***

***Evidence:***

- Student Lab 2610.

**Objective 1F: Implement VMWare technology**

Action Item #1 was completed as stated in the TMP 2006-2009.

***Action Item #2: Apply VMWare on the PCs used in the Technology Training Center.***

The VMware Workstation software was successfully installed in the Technology Training Center (Room 1704) in September 2009. By December 2009, the IT staff and computer lab techs were cross-trained to learn how to create virtual machines and tested software applications in a virtualization environment. This action item was completed.

***Action Item #3: Evaluate the VMWare application in the core sever room hardware environment.***

The evaluation for VMWare application in the core server room hardware environment was completed in July 2009. There are three VM servers running in the core server room supporting various functions. This action item was completed.

***Action Item #4: Determine selected applications to be put on the VMWare platform, and produce a budget estimate for the 09-10 fiscal year.***

The VMWare technology has been successfully applied to support an instruction class. The SME Division Computer Science Department utilized the VMware Workstation 7.0 virtualization technology in the spring 2010 semester CIS170 course, *Introduction to Unix/Linux*, in which the VMWare was installed on 30+ student lab computers in Room 1705 to support instructor Rick Castrapel in his teaching. The VMWare technology allows the same set of computers to support other classes that use Microsoft Windows, and therefore achieves a substantial savings in equipment cost.

This action item is a continuous on-going one, and needs to be included in the TMP 2010-2013.

***Alignment with the Educational Master Plan:***

The Objective 1F is aligned with the Technology Recommendation #7 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The use of VMWare technology allows the same set of computers to support both Windows as well as non-Windows (such as Linux) operating systems and applications, and therefore achieves a substantial savings in procuring two sets of equipment.

***Alignment with the 10-year Facility Master Plan:***

Since the same set of equipment can support different needs from different classes, particularly the computer labs, utilization and efficiency is greatly increased, and that results in a savings in the space requirement.

***Evidence:***

- Student computer lab 1705.

**Objective 1G: Make a concerted effort to bridge common technology interests between IVC and ICOE.**

**Action Item #1: Meeting with ICOE to determine feasible collaboration areas in technology.**

The Dean of Technology/CTO attends the monthly ICOE/IVTA Board meeting and is an official representative for the College. The ICOE/IVTA recently submitted a \$38M network infrastructure grant proposal to the Federal government BTOP program. If awarded, this grant will aid in the establishment of the Internet backbone for the entire Imperial Valley area. This will have a significant positive impact to the distance education program offered by the college. This Action Item is completed.

**Action Item #2: Join the Technical Advisory Committee of the Imperial Valley Telecommunications Authority (IVTA).**

The Dean of Technology/CTO has been elected the chair of the ICOE/IVTA Technology Advisory Committee for the 2009-2010 school year. Therefore, this action item is completed.

<p><b><i>Alignment with the Educational Master Plan:</i></b> Objective 1G is aligned with Technology Recommendation #1 in the EMP.</p>
<p><b><i>Alignment with the Annual Budget and Fiscal Plan:</i></b> N/A</p>
<p><b><i>Alignment with the 10-year Facility Master Plan:</i></b> N/A</p>
<p><b><i>Evidence:</i></b></p> <ul style="list-style-type: none"> <li>The meeting minutes of ICOE/IVTA Board.</li> </ul>

**Objective 2A: Build the CENIC fiber connection.**

Action Items #1 through #6 were completed as stated in the TMP 2006-2009.

**Action Item #7: Fiber link construction, testing, and turn on.**

The fiber construction was completed in November 2009. However the transmission testing results has not pass the CENIC standard yet. Testing work is still continuing. The project has been extended to June 2010.

<p><b><i>Alignment with the Educational Master Plan:</i></b> The Objective 2A is aligned with the Technology Recommendation #1 in the EMP.</p>
<p><b><i>Alignment with the Annual Budget and Fiscal Plan:</i></b> N/A</p>
<p><b><i>Alignment with the 10-year Facility Master Plan:</i></b> N/A</p>

**Evidence:**

- The meeting minutes of ICOE/IVTA Board.

**Objective 2B: Develop a contingency plan for the distance education course management system.**

***Action Item #1: Develop a contingency plan to consider utilization of an alternative online CMS in the possible event that the ETUDES might no longer be supported or available.***

This action item was scheduled to be completed in Fall 2009. However, no report has been shown yet. The responsible person for this action item needs to be changed to the Distance Education Committee.

***Alignment with the Educational Master Plan:***

Objective 2B is aligned with Technology Recommendation #1 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:*** N/A

***Alignment with the 10-year Facility Master Plan:*** N/A

**Evidence:**

**Objective 2C: Develop the transition plan for the ending of the ACCESO project Title V grant.**

***Action Item #1: Formalize ACCESO and our distance education advisory groups into a standing sub-committee under the Academic Senate.***

The Distance Education Committee was formed in February 2009 as a standing sub-committee of the Academic Senate. This action item was completed.

***Action Item #2: Determine support staff levels in order to ensure a quality distance education program.***

Given the sixth-year extension of the ACCESO program, the staffing plan for institutionalization now needs to be submitted to the Staffing Planning Committee of the Program Review.

***Action Item #3: Allocate funds to continue support in technologies and faculty training.***

The ACCESO program was approved for a one-year extension at no cost until October 2010. The cost for institutionalization will be included in the 2010-11 program review. The funding for supporting faculty training should be included in the Program Review as a recurring item in the Annual Budget and Fiscal Plan.

***Alignment with the Educational Master Plan:***

There is no specific recommendation in the current EMP to align with.

***Alignment with the Annual Budget and Fiscal Plan:***

The funding for supporting faculty training should be included in the Program Review as a recurring item in the Annual Budget and Fiscal Plan.

***Alignment with the 10-year Facility Master Plan: N/A***

***Evidence:***

- Program Review documents
- Annual Budget and Fiscal Plan documents

**Objective 3A: Maintain the Banner system.**

As stated in the TMP 2006-2009, Action Items #1 through #8 were completed.

***Action Item #9: Planning the Banner V8 upgrade.***

Sungard Higher Education has rolled out Banner version 8. The planning of the upgrade is well underway. However, since we are one of the California Banner Baseline (CAL-B) users, the CAL-B enhancements require us to upgrade to its latest version before applying the Banner 8 upgrade.

We are currently at CAL-B 7.4, and we need to upgrade to CAL-B 7.7 which is the latest version. The latest version has been installed on the TEST instance. It is waiting the testing from the A&R Department since there are several features that will impact the operation in the A&R Department. The target date for the CAL-B 7.7 upgrade in the production instance is set to 3/14/2010 provided that the A&R Department can accomplish all the needed testing and confirm the upgrade prior to the target date.

In addition to the CAL-B upgrade, the XtenderSolutions system will also need to be upgraded before applying the Banner 8 upgrade.

Banner 8 work will continue after the XtenderSolutions system upgrade is successfully completed.

***Alignment with the Educational Master Plan:***

Objective 3A is aligned with Technology Recommendation #1 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The Banner upgrade has always been a highly technical, complex, and tedious task. The IT Department takes the work in house with a minimum of support from a SungardHE remote DBA in order to save costs.

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evidence:***

- Banner User Group meeting minutes.

**Objective 3B: Implement the XtenderSolutions System.**

As stated in the TMP 2006-2009, Action Items #1 through #3 were completed.

***Action Item #4: Planning system upgrade to work with Banner version 8.***

This Action Item is tied to the Action Item #9 in Objective 3A. The system upgrade has been planned and will take place after the successful upgrade of CAL-B 7.7.

***Alignment with the Educational Master Plan:***

Objective 3B is aligned with Technology Recommendation #1 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:*** N/A

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evidence:***

- Banner User Group meeting minutes.

**Objective 3C: Implement the Fixed Asset System.**

As stated in the TMP 2006-2009, Action Items #1 through #3 were completed, and that marks the completion of this Objective.

***Alignment with the Educational Master Plan:***

Objective 3C is aligned with Technology Recommendation #1 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:*** N/A

**Alignment with the 10-year Facility Master Plan:** N/A

**Evidence:**

- Banner User Group meeting minutes.

**Objective 3D: Implement the Argos Report System.**

As stated in the TMP 2006-2009, Action Items #1 through #3 were completed.

***Action Item #4: Request to add a programmer in the IT group to handle the data report requests.***

An IT Department staffing plan has been submitted to the Staffing Planning Committee of Program Review. As budget conditions allow, a new programmer position should be created to support the data report requests.

**Alignment with the Educational Master Plan:**

The Objective 3D is aligned with the Technology Recommendation #1 in the EMP.

**Alignment with the Annual Budget and Fiscal Plan:** N/A

**Alignment with the 10-year Facility Master Plan:** N/A

**Evidence:**

- IT Department staffing plan.

**Objective 3E: Implement the Leave Balance System for Employee Self-Service (mock payroll).**

As stated in the TMP 2006-2009, Action Items #1 and #2 were completed.

***Action Item #3: Select trial organization to test the web time-entry and employee self-service.***

The organization was selected, but the web time entry testing was halted for the reason stated in Action Item #4 below.

***Action Item #4: General deployment of the web time entry and employee self service to all organizations on campus.***

The web time-entry is supposed to replace the current paper time sheet. However, the implementation team discovered that a part of the paper time-sheet process could not be implemented without making

a change in the current business process. Therefore, a business process analysis (BPA) was initiated. Due to the retiring of several key personnel in both the Human Resources and the Business Departments, the BPA was temporarily halted awaiting time when replacement personnel are in place. This Action Item will be carried forward to the TMP 2010-2013.

<p><b>Alignment with the Educational Master Plan:</b></p> <p>The Objective 3E is aligned with the Technology Recommendation #1 in the EMP.</p>
<p><b>Alignment with the Annual Budget and Fiscal Plan:</b></p> <p>By switching to the web time entry, the College can save printing and paper as well as simplify the time-sheet approval and recording process.</p>
<p><b>Alignment with the 10-year Facility Master Plan:</b> N/A</p>
<p><b>Evidence:</b></p> <ul style="list-style-type: none"> <li>• SungardHE consultant's trip report.</li> </ul>

**Objective 3F: Purchase the Oracle campus license**

As stated in the TMP 2006-2009, all action items in this objective were completed, and this marks the completion of this Objective.

<p><b>Alignment with the Educational Master Plan:</b></p> <p>Objective 3F is aligned with Technology Recommendation #1 in the EMP.</p>
<p><b>Alignment with the Annual Budget and Fiscal Plan:</b></p> <p>The purchase of the Oracle campus license allows Oracle to be installed and used for several different applications and thus achieves the cost savings of purchasing multiple copies of the Oracle license.</p>
<p><b>Alignment with the 10-year Facility Master Plan:</b> N/A</p>
<p><b>Evidence:</b></p> <ul style="list-style-type: none"> <li>• Purchase order P6016826.</li> </ul>

**Objective 3G: Implement the DegreeWorks System**

As stated in the TMP 2006-2009, Action Items #1 and #2 were completed.

**Action Item #3: Set up the DegreeWorks server and install the Oracle database.**

The server setup was completed and the Oracle database was installed in June 2009. This Action Item has been completed.

**Action Item #4: Catalog scribing.**

The catalog scribing was initially performed by a consultant from SungardHE. After the staff in A&R was trained, they took over the rest of the work to ensure cost-saving and better accuracy. The scribing work was completed in September 2009. This Action Item has been completed.

**Action Item #5: Integrate with a Banner cloned instance for the system test.**

The Action Item was handled by the IT department. The clone instance was set up in March 2009, to support the training and testing. This Action Item has been completed.

**Action Item #6: User training.**

The user training was completed in September 2009 with members of both the A&R department and the Counseling department.

**Action Item #7: Integrate with the Banner production instance.**

The integration with the Banner production instance was completed at end of October 2009. The system was in production mode since then. This Action Item has been completed.

This list indicates that all Action Items in this Objective have been completed and thus marks the completion of this Objective.

***Alignment with the Educational Master Plan:***

Objective 3G is aligned with Technology Recommendation #1 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The DegreeWorks system was purchased using a combination of District and ACCESO funds. The annual maintenance and licensing fee is added to the IT department software licensing budget. It is presented in the Program Review, and in the Annual Budget and Fiscal Plan.

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evidence:***

- SungardHE consultant's trip report for scribing work and user training.
- Banner User Group meeting minutes.

**Objective 3H: Implement the Position Control System.**

As stated in the TMP 2006-2009, Action Items #1 was completed.

***Action Item #2: Schedule on-site training and configuration review.***

A Banner Position Control consultant from SungardHE made multiple trips to conduct the training from December 2008 to May 2009. Attendees were members of the Human Resources department, the Financial Aid department, and the IT department.

During the training on the TEST instance, the team got to a point in which the project needed to stop and be re-analyzed. A mapping and business process analysis are needed. The 9/1/2009 trip report by the SungardHE consultant provides a detailed analysis of the situation.

This Action Item needs to be carried forward to TMP 2010-2013.

***Action Item #3: System test using the TEST instance.***

The TEST instance setup was completed in December 2008, to support the training. This Action Item has been completed.

***Action Item #4: System available for production use.***

Due to the problems encountered in Action Item #2, this Action Item could not be completed and will be carried forward to the TMP 2010-2013.

<p><b><i>Alignment with the Educational Master Plan:</i></b> Objective 3H is aligned with Technology Recommendation #1 in the EMP.</p>
<p><b><i>Alignment with the Annual Budget and Fiscal Plan:</i></b> The Position Control module works closely with the Human Resources module to support the processing of employee jobs and to provide data for salary planning.</p>
<p><b><i>Alignment with the 10-year Facility Master Plan:</i></b> N/A</p>
<p><b><i>Evidence:</i></b></p> <ul style="list-style-type: none"> <li>• SungardHE consultant's trip report for scribing work and user training.</li> <li>• Banner User Group meeting minutes.</li> </ul>

**Objective 3I: Implement the Payroll system.**

As stated in the TMP 2006-2009, Action Items #1 was completed.

The Banner Payroll module is very complex; therefore, it was scheduled as a three-year project. The first step is to implement the Position Control module. As stated in Objective 3H, the Position Control module implementation is currently being re-evaluated. Therefore, this Objective together with its action items will be carried forward to the TMP 2010-2013.

***Action Item #2: Schedule on-site training and configuration review.***

This Action Item will be carried forward to the TMP 2010-2013.

***Action Item #3: System test using the TEST instance.***

This Action Item will be carried forward to the TMP 2010-2013.

***Action Item #4: Reconcile with the payroll data from the county of Imperial to ensure data accuracy.***

This Action Item will be carried forward to the TMP 2010-2013.

***Action Item #5: System available for production use.***

This Action Item will be carried forward to the TMP 2010-2013.

***Alignment with the Educational Master Plan:***

Objective 3I is aligned with Technology Recommendation #1 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The Payroll module is an important link in the highly integrated Banner system. The payroll module plays an important role in providing data linkage between the Financial, Financial Aid, Student, and Human Resource modules. It is a key module to ensure data integrity in the Banner system.

Currently the college payroll is processed by the county of Imperial with manual data input from the IVC Business Office.

***Alignment with the 10-year Facility Master Plan: N/A***

***Evidence:***

- SungardHE consultant's trip report.
- Banner User Group meeting minutes.

**Objective 3J: Implement the Enrollment Management System**

***Action Item #1: Reconcile faculty load records, implement error-checking reports, and establish an accurate faculty load report.***

Both the faculty load report and the error-checking reports were completed. The results have been verified by the Instruction Office. This Action Item is completed.

***Action Item #2: Design and implement the user interface for data display.***

The initial user interface design for data display was completed in October 2008. Then there were several subsequent revisions to the design to accommodate added features. This Action Item is completed.

***Action Item #3: Research and determine the proper elements for fixed cost calculation at the college level.***

The fixed cost elements at the college level were discussed and determined with Business Office and a model was established in the EMS. This Action Item is completed.

***Action Item #4: Research and determine the proper elements for fixed cost calculation at the Division level.***

The fixed cost elements at the division level were determined and a model was established in the EMS. This Action Item is completed.

***Action Item #5: Implement the fixed cost calculation mechanism.***

With the models of fixed cost elements at the college level and the fixed cost elements at the division level successfully established in the EMS, the cost calculation can be performed. This Action Item is completed.

***Action Item #6: Deploy phase 1 of EMS.***

The phase 1 of EMS was deployed for Instruction Office and division chairs to use in March of 2009. The EMS is being used in the Program Review. This Action Item is completed.

***Action Item #7: Collect user feedback for the phase 1 implementation and plan for phase 2.***

The user feedback has been collected and the planning for phase 2 features and enhancement is underway. This Action Item will be carried forward to the TMP 2010-2013.

***Alignment with the Educational Master Plan:***

Objective 3J is aligned with Technology Recommendation #6 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The system allows academic areas to run projection scenarios and set enrollment targets based on the course schedules. This reporting tool supported the CIO and CBO during the 2008-2009 budgeting process. It has also proven to be accurate and has allowed for a better alignment between instructional

needs and budgetary accountability.

**Alignment with the 10-year Facility Master Plan:** N/A

**Evidence:**

- C&I Committee and Instruction Council meeting minutes.

**Objective 4A: Provide an updated computing environment for faculty and students, and ensure proper support.**

***Action Item #1: Periodically update technology training contents for new faculty.***

***Action Item #2: Perform faculty and staff surveys on a regular basis and use the feedback to prioritize the training course offerings.***

***Action Item #3: Develop an online tutorial of using Banner for new users.***

As IVC continues to move forward, the need to provide relevant and continuous training exists. As faster and more powerful computers find their way into classrooms and offices, faculty and staff will need to have support to technological advances being made on campus. All three Action Items in this Objective are supported by the Technology Training Center which has been moved from IT Department to the Human Resources Department.

This Objective as well as all the Action Items are continuous on-going and will be carried forward to the TMP 2010-2013.

**Alignment with the Educational Master Plan:**

Objective 4A is aligned with Technology Recommendation #8 in the EMP.

**Alignment with the Annual Budget and Fiscal Plan:**

The budget for the Technology Training Center is submitted and reviewed in the annual Program Review process.

**Alignment with the 10-year Facility Master Plan:** N/A

**Evidence:**

- Technology Training Center training calendars and attendee lists.

**Objective 4B: Update student computing labs with current hardware and software.**

**Action Item #1: Replace outdated PC hardware in the student labs.**

**Action Item #2: Update instructional software on student computers.**

The student computing labs are traditionally managed by the corresponding department. With the newly proposed 6-dean organization structure in the Instruction area (which was approved by Academic Senate on 2/17/2010), the support of the student labs will be consolidated into the Dean of Learning and Instruction Support. This should create synergy in the supporting area and achieve cost savings. The PC equipment in the student labs follows the same 5-year replacement cycle.

This Objective as well as all the Action Items are continuous on-going and will be carried forward to the TMP 2010-2013.

***Alignment with the Educational Master Plan:***

Objective 4B is aligned with Technology Recommendation #5 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The DegreeWorks system was purchased using a combination of District and ACCESO funds. The annual maintenance and licensing fee is added to the IT department software licensing budget. It is presented in the Program Review, and in the Annual Budget and Fiscal Plan.

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evidence:***

- Student computer labs at various locations.

**Objective 5A: Rebuild the College's main web site.**

As stated in the TMP 2006-2009, Action Items #1 – #8 were completed.

**Action Item #9: Implement open-source based CMS alternative to replace the current CMS.**

The Webmaster is currently searching for a suitable open-source based CMS platform. The platform by CampusEAI Consortium looks very promising. A testing is underway to verify the feature sets as well as migration options. This Action Item will be carried forward to the TMP 2010-2013.

***Alignment with the Educational Master Plan:***

Objective 5A is aligned with Technology Recommendation #1 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The platform offered by the CampusEAI Consortium has an option for hosting the site in their data center and a 24x7 service desk is available. This will reduce the cost of

maintaining a server on campus. The hosting service also provides better redundancy and maintenance.

**Alignment with the 10-year Facility Master Plan:** N/A

**Evidence:**

- <http://www.imperial.edu> .

**Objective 5B: Upgrade campus intranet wiring.**

As stated in the TMP 2006-2009, Action Items #1 – #8 were completed.

**Action Item #9: Building 700 wiring upgrade.**

This Action Item was completed in March 2009.

**Action Item #10: Extend the intranet to the new science building.**

This Action Item was completed in December 2009.

All Action Items in this Objective have been completed and this marks the completion of the Objective.

**Alignment with the Educational Master Plan:**

The Objective 5B is aligned with the Technology Recommendation #1 in the EMP.

**Alignment with the Annual Budget and Fiscal Plan:** N/A

**Alignment with the 10-year Facility Master Plan:** N/A

**Evidence:**

- Network wiring in each building on campus.

**Objective 5C: Renew campus intranet network equipment.**

As stated in the TMP 2006-2009, Action Items #1 – #5 were completed.

**Action Item #6: Implement additional security measures.**

Additional security measures involve the purchase and installation of the network access controller (NAC). The cost of the equipment will be included in the hardware budget proposal to the Program Review.

This Action item will be carried forward to the TMP 2010-2013.

**Action Item #7: Extend new intranet to the new 2700 building.**

This Action Item was completed in December 2009.

<b><i>Alignment with the Educational Master Plan:</i></b> Objective 5C is aligned with Technology Recommendation #1 in the EMP.
<b><i>Alignment with the Annual Budget and Fiscal Plan:</i></b> The cost of the network access controller equipment will be included in the hardware budget proposal to the Program Review.
<b><i>Alignment with the 10-year Facility Master Plan:</i></b> N/A
<b><i>Evidence:</i></b> <ul style="list-style-type: none"><li>• BDF/IDF closets for network wiring in each building on campus.</li></ul>

**Objective 5D: Renew campus telecommunication equipment.**

As stated in the TMP 2006-2009, Action Items #1 – #5 were completed.

**Action Item #6: Deploy and cut over to the new IP phone system.**

This Action Item was completed in March 2009.

**Action Item #7: Conduct user training for the new IP phone system.**

Both the user training and the training for IT personnel were completed in January 2009. This Action Item is completed.

All Action Items in this Objective have been completed and this marks the completion of the Objective.

<b><i>Alignment with the Educational Master Plan:</i></b> Objective 5D is aligned with Technology Recommendation #1 in the EMP.
<b><i>Alignment with the Annual Budget and Fiscal Plan:</i></b> N/A
<b><i>Alignment with the 10-year Facility Master Plan:</i></b> N/A
<b><i>Evidence:</i></b> <ul style="list-style-type: none"><li>• ShoreTel VoIP phones used on campus.</li></ul>

**Objective 5E: Deploy a campus-wide wireless data network.**

***Action Item #1: Invite wireless network infrastructure vendors to present their products.***

This Action Item was completed in February 2009.

***Action Item #2: Conduct site survey, determine placement locations of radio units, compile equipment list, and determine the estimated costs.***

The site survey was completed in May 2009.

***Action Item #3: Assemble a complete end-to-end working model and test the authentication and network access control functionality.***

The testing was completed in September 2009. Two wireless SSID were assigned. The "IVC Intranet" SSID is for laptops that are in the Windows domain, and the "IVC Wireless" SSID is for all other laptops. A captive portal was setup to use the G#/PIN authentication. This Action Item is completed.

***Action Item #4: Schedule the installation of the radio units and the wireless network switches.***

The wiring vendor Teldata Enterprise Networks completed the installation of the wireless network switches and the radio units in September 2009.

***Action Item #5: Test and adjust radio units for optimum performance.***

This Action Item was completed in December 2009.

All Action Items in this Objective have been completed and this marks the completion of the Objective.

***Alignment with the Educational Master Plan:***

Objective 5E is aligned with Technology Recommendation #1 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:*** N/A

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evidence:***

- Wireless network on campus.

**Objective 5F: Update software and hardware on the infrastructure computing systems.**

***Action Item #1: Implement a pilot network storage file server for faculty and students to study and collect information about the file access, sharing, security, authentication method, and applications.***

The feasibility study was completed in February 2009. This Action Item is completed.

***Action Item #2: Based on the pilot study result, determine the best way to implement a full scale network storage file server for the entire campus to use.***

Based on the feasibility study, the conclusion was to implement a centralized network file server on campus to be shared by all users. This Action Item is completed.

***Action Item #3: Implement the production network storage file server.***

The network file server installation and deployment was completed in March 2009. This Action Item is completed.

All Action Items in this Objective have been completed and this marks the completion of the Objective.

***Alignment with the Educational Master Plan:***

Objective 5F is aligned with Technology Recommendation #1 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The budget for the maintenance of the network file server is included in the annual Program Review submission from the IT Department.

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evidence:***

- Technology Planning Committee meeting minutes.
- File server installed in the core server room.

**Objective 6A: Establish the Computer and Network Use Policy**

***Action Item #1: Current draft of the IVC Computer and Network Use Policy forwarded to Technology Council for review and approval.***

The Technology Planning Committee completed the review of the IVC Computer and Network Use Policy, and at their 2/19/2009 meeting the TPC approved forwarding the policy to the College Council. The College Council approved the AP3720 Computer and Network Use Policy at their 5/11/2009 meeting. The policy was approved at the 6/17/2009 Board Meeting (Resolution 14380, BP3720).

This Action Item is completed and so is the Objective.

***Alignment with the Educational Master Plan:***

Objective 6A is aligned with Technology Recommendation #1 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:*** N/A

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evidence:***

- IVC Computer and Network Use Policy draft.
- Technology Planning Committee meeting minutes 2/19/2009.
- College Council meeting minutes 5/11/2009.
- Board meeting minutes 6/17/2009.

## IV. Going Forward – Revision of Goals and Objectives

### Introduction

In the 2009-2010 Program Review, Section F, “New Technology Needs,” was added as a means of communicating technological needs to the Technology Planning Committee. Based on the data collected, the following objectives were established:

- PR09-10 Obj-1. Complete campus-wide wireless network.
- PR09-10 Obj-2. Establish clear guidelines for recovery planning, redundancy, increased security, and maintenance of existing systems.
- PR09-10 Obj-3. Complete the installation of and training for DegreeWorks and for the Position Control for Banner Integration.
- PR09-10 Obj-4. Complete the installation and training of CurriUNET.
- PR09-10 Obj-5. Continue training for the ETUDES course management system and Turnitin.com.
- PR09-10 Obj-6. Support the increasing demand for a secure virtual library.
- PR09-10 Obj-7. Continue planning and implementation of smart classrooms.
- PR09-10 Obj-8. Continue with ongoing and systematic replacement of outdated hardware.
- PR09-10 Obj-9. Provide guidance to division chairs as to specificity and rationale for technology requests prior to the annual program review process.
- PR09-10 Obj-10. Develop plan to expand computer labs to meet student demands.
- PR09-10 Obj-11. Offer ongoing professional development specific to ETUDES training and to Banner applications training.
- PR09-10 Obj-12. Develop a plan to use technology to support the college’s “greening” efforts.

These objectives represent the immediate need during the academic year 2009-2010.

### **PR09-10 Obj-1: Complete campus-wide wireless network**

This Objective is essentially Objective 5E in the TMP 2006-2009, which belongs to Goal #5, “Implementing the campus technology modernization plan,” in the TMP 2006-2009.

The review in section 2 of this document indicates that this Objective has been completed. However, due to the limit of the COP fund which supported the Objective 5E, the south-east side of the campus is lacking adequate wireless signals. The remedy plan is to incorporate the wireless switch and access points installation as part of the building renovation scope. When old buildings are renovated, the wireless infrastructure will be installed.

<b><i>Alignment with the Educational Master Plan:</i></b>
PRO09-10 Obj-1 is aligned with Technology Recommendation #1 in the EMP.
<b><i>Alignment with the Annual Budget and Fiscal Plan:</i></b> N/A

**Alignment with the 10-year Facility Master Plan:** N/A

**Evaluation:**

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

**PR09-10 Obj-2: Establish clear guidelines for recovery planning, redundancy, increased security, and maintenance of existing systems.**

This is a new objective (Objective 1H) that connects to Goal #1 in the TMP 2006-2009, "Providing the best possible computing environment and classroom technology solutions to all faculty members, staff, and students." This new objective needs to be carried forward in the TMP 2010-2013.

The college's email server experienced a virus attack in spring of 2009, and the campus email service was interrupted for four days. As this incident suggests, the college's security, backup, and recovery plans are currently not optimal.

Therefore, a written backup/recovery plan is needed to ensure that incidents like this never again interrupt the college's services. 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. In addition, this plan 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, the plan should contain alternative means of accessing email and other core online services should the campus's network go down in the future. An Uninterrupted Power Supply (UPS) should be used to help sustain the system during an unscheduled power outage.

**Alignment with the Educational Master Plan:**

PR09-10 Obj-1 is aligned with Technology Recommendation #1 in the EMP.

**Alignment with the Annual Budget and Fiscal Plan:**

Financial impact will be included in the plan.

**Alignment with the 10-year Facility Master Plan:** N/A

**Evaluation:**

This objective will be evaluated by the Technology Planning Committee.

**PR09-10 Obj-3: Complete the installation of and training for DegreeWorks and for the Position Control for Banner Integration.**

This objective is the combination of Objective 3G and Objective 3H in the TMP 2006-2009. As stated in section 3 above, Objective 3G has been completed. Objective 3H will be carried forward to the TMP 2010-2013.

***Alignment with the Educational Master Plan:***

PRO09-10 Obj-3 is aligned with Technology Recommendation #2 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The annual license and maintenance fee of DegreeWorks is included in the Program Review of the IT Department and the Annual Budget and Fiscal plan.

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evaluation:***

This objective will be evaluated by the Banner User Group.

**PR09-10 Obj-4: Complete the installation and training of CurricUNET**

This objective is reflected in Goal #1 and in Goal #4 of the TMP 2006-2009. More specifically, it represents a response to the realities of a growing community college and to the expectations expressed in accreditation responses. This objective also presents a challenge to technology planners who need to create plans that allow for responses to the exigencies of the moment while still maintaining the overall planning structures that are designed to move the college forward.

CurricUNET is state-recognized software program that provides robust curriculum management, automating the process of curriculum development and approval. IVC purchased a license for CurricUNET in Spring 2008, based on the recommendation from the Curriculum and Instruction Committee in November 2007. The purpose is to streamline the writing and evaluating of curriculum while also tracking SLOs.

The CurricUNET project is currently in its go-live phase and is anticipated to improve the accuracy and efficiency in the maintenance of course outlines and SLO data. It represents a dramatic leap forward for IVC, in terms of new course development and in the maintenance of Course Outlines of Record. This program will also provide a direct connection to the California Community College Chancellor's Office.

The CurricUNET system is based on the ASP model which provides for the software to be hosted by the vendor Governet.

***Alignment with the Educational Master Plan:***

PRO09-10 Obj-4 is aligned with Technology Recommendation #2 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The annual license and maintenance fee of DegreeWorks is included in the Program Review of the IT Department and the Annual Budget and Fiscal plan.

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evaluation:***

This objective will be evaluated by the C&I Committee.

**PR09-10 Obj-5: Continue training for the ETUDES course management system and Turnitin.com.**

This objective is added as a new objective in Goal #4, "Ensuring comprehensive faculty and staff training" in TMP 2006-2009. It is continuous and on-going training, and it will be carried forward into the TMP 2010-2013.

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—to create web-enhanced experiences for students. 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.

Additionally, 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 powerful and important service. Training for this software is sporadic, however. More training will enable more faculty members to use this service.

***Alignment with the Educational Master Plan:***

PRO09-10 Obj-7 is aligned with Technology Recommendation #2 and #8 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The budget for the training is submitted and reviewed in the annual Program Review process.

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evaluation:***

This objective will be evaluated by the Distance Education Committee.

**PR09-10 Obj-6: Support the increasing demand for a secure virtual library.**

This objective is related to Goal #1 in the TMP 2006-2009, as well as Goal #4. Gaining more specificity as technology planning became more focused and extensive in 2009, this objective seeks to address yet another technological reality in the rapidly developing Digital Age.

IVC has not fully implemented a virtual library because user authentication (faculty, staff, registered student) 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 to access secure sites including the virtual library (i.e., bibliographic databases). The new

student portal could serve in this capacity, but the portal needs to be designed and tested to allow access to the virtual library.

In addition, 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 IT and librarians is essential to ensure the most effective training.

***Alignment with the Educational Master Plan:***

PRO09-10 Obj-6 is aligned with Technology Recommendation #3 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The cost of implementation will be included in the Program Review and the Annual Budget and Fiscal plan.

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evaluation:***

This objective will be evaluated by the Learning Services Committee.

**PR09-10 Obj-7: Continue planning and implementation of smart classrooms.**

This objective is an extension of Objective 1B in TMP 2006-2009. Since the new Science Building was completed and placed into operation at the beginning of the 2010 Winter Intersession, a new standard has been set for the "smart classroom" at IVC.

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—using a standard set of technology tools. However, certain classrooms need more than a prescribed universal standard. They need more specific or discipline-specific 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 2700 building. Measure L funding will be utilized for these upgrades, as part of the campus-wide renovation.

***Alignment with the Educational Master Plan:***

PR09-10 Obj-7 is aligned with Technology Recommendation #4 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The Library A/V Department will include the classroom audio/visual maintenance cost into the annual program review.

***Alignment with the 10-year Facility Master Plan:***

As the old classrooms are renovated, the audio/visual equipment shall be brought up to the standards as reflected in the 2700 building.

***Evaluation:***

This objective will be evaluated by the Learning Services Committee and the Technology Planning Committee.

**PR09-10 Obj-8: Continue with ongoing and systematic replacement of outdated hardware.**

This objective is the same as Objective 1A, Action Item #4 and Action Item #5, in the TMP 2006-2009. As stated in the section 3 above, both action items are continuing and ongoing, and this effort will be carried forward to the TMP 2010-2013.

This objective is also connected to Objective 1D in TMP 2006-2009, in the sense that the equipment replacement plan should be expanded to cover classroom A/V equipment.

In addition, the training of how to use the new equipment (e.g., classroom A/V), as well as the latest versions of Windows and MS Office applications, should also be taken into consideration, so that the users can effectively make use of the new equipment and software programs.

***Alignment with the Educational Master Plan:***

PR09-10 Obj-8 is aligned with Technology Recommendation #5 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

Through the establishment of the equipment replacement inventory list and the internal ordering website, this objective is closely tied to the annual budget and fiscal plan.

The process for aligning with the Annual Budget and Fiscal Plan allows for the IT Department to present the needed funding, based on the equipment replacement inventory list, to the Budget and Planning Committee each year for inclusion.

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evaluation:***

This objective will be evaluated by the corresponding Divisions.

**PR09-10 Obj-9: Provide guidance to division chairs as to the specificity and rationale for technology requests prior to the annual program review process.**

This objective is related to Goal #1 and Goal #4 in the TMP 2006-2009. It reflects a continuing reality at IVC—the increased development of technology for education, and the

need for effective communication and direction for the planning, purchase, and implementation of this new technology for instruction.

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

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

- Network needs such as wireless availability, security concerns, Internet speed, network in classroom or offices, and related concerns;
- Software/hardware needs/standards;
- Equipment needs including replacement plans and specifications for laptops, high resolution projection and high resolution monitors;
- Web needs for the student portal, faculty web sites, and similar concerns.

***Alignment with the Educational Master Plan:***

PRO09-10 Obj-9 is aligned with Technology Recommendation #6 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:*** N/A

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evaluation:***

This objective will be evaluated by the Instruction Council.

**PR09-10 Obj-10: Develop plan to expand computer labs to meet student demands**

This objective is a new Action Item for Objective 4B in the TMP 2006-2009, and this Objective is the continuous and on-going type. Therefore, it should be included in the TMP 2010-2013.

The Business and SME 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 the Business Division is open to sharing this proposed lab with the Computer Science Department.

The IT Department needs additional secured/alarmed space for system configuration lab to perform PC repair work.

***Alignment with the Educational Master Plan:***

PR09-10 Obj-10 is aligned with Technology Recommendation #7 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The cost of purchasing additional computers for the student labs will be included in the Program Review and the Annual Budget and Fiscal Plan.

***Alignment with the 10-year Facility Master Plan:***

The space, furniture, and data wiring requirements for the expanded student labs need to be included in the 10-Year Facility Master Plan.

***Evaluation:***

This objective will be evaluated by the corresponding Divisions.

**PR09-10 Obj-11: Offer ongoing professional development specific to ETUDES training and to Banner applications training.**

This objective is the same as Objective 4A, Action Item #2 and #3, in the TMP 2006-2009. Both Action Items are continuous and on-going, and they will be carried forward into TMP 2010-2013.

ETUDES is the course management system utilized by IVC. In the past, training was provided 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.

***Alignment with the Educational Master Plan:***

PR09-10 Obj-11 is aligned with Technology Recommendation #8 in the EMP.

***Alignment with the Annual Budget and Fiscal Plan:***

The budget for training is to be included in the Program Review and the Annual Budget and Fiscal Plan.

***Alignment with the 10-year Facility Master Plan:*** N/A

***Evaluation:***

This objective will be evaluated by the Distance Education Committee and Banner User Group on the corresponding items.

**PR09-10 Obj-12: Develop a plan to use technology to support the college's "greening" efforts**

This objective is again reflects the effort of technology planners to stay current and align the college with the vicissitudes of contemporary trends and demands. In Fall 2009, three former standing committees have been consolidated into the Facilities & Environmental Improvements Committee, in response to the college's growing concern to become more "green." When the TMP 2006-2009 was originally drafted, these "greening" efforts were not so pronounced at IVC.

Now, the picture is a bit different, and "green" has become a clear priority campus-wide. This objective most closely aligns with Goal #5 and Goal #6 in the TMP 2006-2009. Having become a priority toward the end of the 2006-2009 planning cycle, this critical objective will be carried over to the TMP 2010-2013.

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 can 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 can help protect the environment.

<b><i>Alignment with the Educational Master Plan:</i></b> PRO09-10 Obj-12 is aligned with Technology Recommendation #9 in the EMP.
<b><i>Alignment with the Annual Budget and Fiscal Plan:</i></b> N/A
<b><i>Alignment with the 10-year Facility Master Plan:</i></b> N/A
<b><i>Evaluation:</i></b> This objective will be evaluated by the Greening Committee.

## **Conclusion**

Technology planners sat down to produce the most comprehensive and focused technology plan the college has yet seen, which resulted in the Technology Master Plan 2006-2009. Since this more recent technology planning process began in earnest, Imperial Valley College technology planners have analyzed the needs of the campus and have made a concerted effort to respond to those needs. Technology planners moved ahead of the majority of the IVC stakeholder groups, initially. Then, they redoubled their efforts and added more specific goals and objectives, reflecting the overall college effort to consolidate planning across campus. This initial three-year process was complemented by an updated effort, all reflected in Section IV of this mid-term document, "Going Forward."

Since this process began, the remainder of the college has also been intensely involved in developing an entirely new planning apparatus. Technology planners worked diligently to realign their original efforts (i.e., the TMP 2006-2009) with the new planning structures, and in this effort they have been successful.

This bridge report seeks to document those efforts while revealing that the planning process has become more unified and cohesive among all stakeholder groups at IVC. Already, the college is experiencing clear benefits from this cohesiveness; and, it is clear that the college will continue to benefit from this renewed planning process in the years to follow.