Community College of Philadelphia
Information Technology Strategic Plan
Time Span: July 1, 2000 – June 30, 2003

Major Planning Initiatives Annotations **DRAFT for TCC Review**

This *draft* document contains only the Major Planning Initiatives as identified by the Technology Plan, last updated May 2001. These initiatives refer to "Institutional Strategies" (IS), "User Requirements" (UR), and "Infrastructure Needs" (IN) which are listed at the end of this draft as referenced from the original planning document.

Initiative #1

Develop a specific number of new distance-education courses.
Supports: IS#2, IS#7, IS#8, IS#9

Discussion

Distance education encompasses a wide variety of formats and methodologies, including telecourses, videotape, teleconferencing, CD-ROM, and Internet/Web. The College has already offered some distance education courses, but sees the next three years as an opportunity to make distance education available to a larger group of students.

Related issues include support services for students taking distance education courses, including access to library materials; support and training for faculty; and course ownership.

Year 1

1-1. Planning: The Technology Coordinating Committee, working closely with an ad hoc Distance Education Committee, will produce a report that will accomplish the following:

1. Define the target audience for distance education courses. Determine the make-up of the potential student body, their locations, how many of them are there, how many of them are current students, etc.
2. Create a master list of courses/programs/departments that we offer now that have been identified by the divisions as good candidates for distance education.
3. Suggest courses that are new for us that would be appropriate for a distance education model.
4. Identify the support services that faculty need in order to participate in designing distance education courses. Identify the support services that faculty need in order to teach distance education courses.
5. Determine how to provide the infrastructure and support resources that are needed to appropriately conduct these distance learning courses, including computing and networking facilities, technical support, user support, library support, academic advising, marketing, administrative processes such as registration, drop and add, and billing. Identify the services that students need in order to become successful distance-education learners.
6. Identify evaluation methodologies for distance education courses.

1-2. Develop and offer at least five new Web-based courses. The new courses will be considered pilot projects and a report will be distributed to all faculty and interested others about what was learned from these experiences. As pilot projects, each of these courses will be designed to test the feasibility of one of the different models of Web-based instruction (no attendance on campus, some attendance on campus, etc.) Each of these courses will use the Internet as its main delivery vehicle, although some courses may include a few face-to-face activities on campus. At least one of the new pilot courses will be totally Internet-based and will fully explore the delivery of education to the student who is not expected to come to campus. One of the goals of the College's distance education initiatives is to reach students in underserved areas far from the College's campuses and regional centers. At the same time, we also see significant development in the areas of teleconferencing, telecourses, etc. as tools for delivering distance education.

1-3. The Technology Coordinating Committee, working closely with an ad hoc Distance Education Committee and other appropriate bodies, will establish necessary policies to govern the introduction of new technologies into the curriculum. These policies will include new courses as well as existing courses that are being adapted for this purpose.

1-4. The College will partner with others to help it reach its goals in distance education. For instance, the College will participate in the Pennsylvania Virtual Community College Consortium.

11/29/00 Update
The issues associated with posting of faculty web pages have been explored. A modification to the College's Acceptable Use Policy for Interactive Systems has been identified and is being passed through the College approval processes. A two-level arrangement for secured and unsecured web pages will be established with links from a College Faculty by Department Directory. Information for registered students will be accessible from the secured area that will require an account and password for access. Information that is for public access will be in an unsecured area and faculty compliance with the Acceptable Use Policy for Interactive Systems will govern the content. Links to the secured pages will appear on the unsecured pages that will be the initial access paths.

The College has appointed Mark Saks as Acting Director of Distance Education with the responsibility of providing assistance to faculty, developing a web site and providing guidance for establishing standards and practices.

Academic Computing has added the position of Instructional Technology Design Specialist to assist departments, programs, disciplines, and individual faculty in the development of web pages to support existing and distance learning courses.

An ad hoc Distance Education Committee has been established. Membership consists of Mark Saks, Arnold DiBlasi, Mary Ann Yannuzzi, Jody Bauer, Kerri Armstrong, Carolyn Birden and Kathy Smith.

Distance Courses are currently classified under four types. Different disciplines may require more or less personal contact. Here are the classifications:
Telecourse (T): The course is delivered primarily by broadcast video. There are usually a small number of scheduled on-campus meetings (typically about 5).
Tele-web (TW): The course is delivered primarily by broadcast video. However, contact with the instructor and assignments are managed through the Internet. Internet access is required. There are usually a small number of scheduled on-campus meetings (typically about 5).
Online (O): These courses are delivered primarily online. The course material is frequently a textbook, supplemented by materials delivered via the Internet. There may be a small number of on-campus meetings.
Campus-web (CW): These courses are classroom intensive, meeting as often as once per week in some intensive cases. There may be field trips required as well. Assignments and supplemental materials are delivered via the Internet.

Initial College entries into the Distance Education arena will use the Web Study software provided by the WHYY consortium. An Anthropology course is expected to be available for the Spring 2001 term. Courses in Biology, Justice, Health Information Technology, English (Creative Writing), Paralegal Studies, Architecture, Behavioral Health/Human Service, and Computer Aided Design will be available starting in Summer 2001. A distance education web site has been developed.

The College is an active participant in the Pennsylvania Virtual Community College and has listed all currently offered TV and internet-based courses on the Pa Virtual Community College web page. http://www.pavcc.org/

The WHYY consortium continues to advertise and broadcast the College's TV and Internet-based courses. The Acting Director of Distance Education in order to remain current with new developments attends the regular monthly consortium meetings. http://www.whyy.org/homecollege/html/on-line.html

April 2001 Update

The Acting Director of Distance Education, Mark Saks, in conjunction with the ad hoc Distance Education Committee, have developed a "Proposal for Standards for Distance Education Courses". The proposal details suggested standards for online courses, as well as tele-web and campus-web courses. These standards

include the posting of a public syllabus on the College's web server; regular defined interaction between instructor and student; the existence of actual course content accessible via the Internet; development of online tests and/or practice quizzes where appropriate; development of a course manual.

The ad hoc committee addressed the need for technical support of online courses with the following issue statements:

- ***The need for technical support via phone or email, online help where possible***
- ***Availability of the Testing Center facility to students who may require face-to-face interaction***
- ***A printed and/or online manual of operation for the course platform***

Specific needs/expectations of the course instructor are stated as

- ***Provided with adequate technology to manage courses while in their on-campus office***
- ***Provided with software directly related to their course instructor for home use***
- ***Provided with training and technical support***
- ***Assigned to teach distance courses on an ad hoc basic***
- ***Instructors shall check their online communications at least twice daily or on a regular schedule made known to their students.***

Expectations of the students are stated as

- ***Each student shall be required to participate in a first course meeting***
- ***Each student should meet all course technical pre-requisites***
- ***Each student should take the online course assessment prior to taking their first online course***
- ***Each student should be in contact with their instructor before the end of the first week of the course***
- ***Each student should participate online on a regular basis***

Information Systems will work with through the TCC to develop appropriate support mechanisms and procedures for both instructors and students participating in online courses.

To meet the year 2 requirement of this initiative, the ad hoc committee is also in the process of reviewing distance learning delivery platforms, i.e., Blackboard and WebCT. Recommendation to the TCC will follow their review. The office of Distance Education continues to support the WHYY WebStudy platform.

The committee is currently working to develop the process for faculty application to develop and teach a distance-learning course.

Year 2

1-5. Select one or more software packages or services for providing distance education. Do a need analysis for a distance education environment and use that as the basis of a Request for Proposal to be sent to distance learning vendors. Involve faculty in the decision process. Choose a new system based on responses to the RFP, campus software demos, site visits, client references, and other information gathering.

1-6. Continue the activities of Year 1, with specifics to be determined by the planning process.

April 2002 Update

The Distance Education Standards document has been approved. The process of implementing its conditions has begun with a review of all existing faculty websites and will be continued over the Summer 2002. An ad hoc goal of bringing all faculty who teach distance courses into conformity with the Standards document or have them begin doing so by the end of the Summer is a top priority. A checklist form to aid in reviewing the standards that parallels the standards document has been developed to aid in the process. Mark Saks will carry out the reviews.

We have added several new online courses. The current list of online courses using the WebStudy platform is list ed below. Additionally, some instructors are exploring enhancing existing telecourses with internet facilities. Those with an asterisk are scheduled to be offered for the first time either this Summer or this Fall.

ANTH 101	***BIOL 106***	***CHEM 110***	***CIS 103***
CIS 130*	***DIET 111***	***ENGL 101***	***ENGL 102***
ENGL 205	***ENGL 222****	***HIST 101***	***HIT 105***
JUS 281	***MA 112****	***MATH 118***	***OA 110***
PLS 101	***PSYC 101***	***PSYC 215***	

Additionally, two courses MNGT 121 and 141 that were listed as online need to be updated to the common platform. There are several faculty members who are involved in adapting additional courses. Whether or not they will be realized and when is always unpredictable.

Summer training and development workshops are planned to help faculty adapt courses to an online format and improve existing courses. A small faculty mentoring project will be integrated with that effort wherein faculty who have previously adapted courses will be a resource for new faculty adapting courses. At this point, a number of faculty from diverse disciplines have expressed interest in the summer activities. Some will adapt courses and some will be converting existing telecourses to an online version either totally or enhancing the course.

We are continuing to use the WebStudy platform. The WebStudy platform has been released in version 5, which has many improvements and enhancements to facilitate course delivery. Re-training of faculty in using the new features continues on an as-needed basis.

Effective Spring 2002, Distance Education, Division of Educational Support Services, assumed responsibility for scheduling orientation meetings and coordinating course offerings. Community Services previously did these tasks. Streamlining of procedures has been proceeding in an effort to make the College's process for students similar to that found at other consortium member institutions. This effort will make it easier to take in students referred by other schools. For online courses, the effort to make as many courses "campus free" as possible fits with the PAVCC model so that we can provide a service to students statewide as our program grows.

There has been a substantial increase in enrollments for the Spring 2002 semester. Part of this may be due to an increased number of course offerings, but enrollments in existing courses are up as well. Interest by faculty in developing courses is increasing which seems to point to good future growth in the program. Certain challenges remain, such as testing/proctoring for missed exams or conflicts.

A retention and student success profile is being undertaken with Institutional Research. The goal is to try to characterize what student attributes may be associated with completing and passing a distance education course. Results may influence future decisions and policies regarding enrollment, advising, and marketing efforts.

<u>Year 3</u>
1-7. Continue the activities of Year 1 and 2, with specifics to be determined by the planning process.

Initiative # 1 2003 Update

The use of Distance Education continues to grow at the College. The WebStudy platform remains the College standard for delivery of online distance courses. Community College of Philadelphia is supplementing its course offerings with "distance education" courses. These courses may take several forms. One is the telecourse where a student views supplemental videos while studying the material in an accompanying text, typically meeting four times for reviews and exams. Some of these telecourses are internet-based, which means that the instructor wishes to manage the course by using the internet. An internet connection with a current browser and e-mail are typical basic requirements

PA Virtual Community College is a consortium of Pennsylvania's fourteen community colleges that enables students to take distance learning courses outside of the classroom. The College PVCCC offering include:

English 101 (Writing and Enghlish Compistion), English 102 (English Composition), Biology 106 (General Biology), Math 118 (Intermediate Algebra), Psychology 101 (Introduction to Psychology), Health Information Technology 101 (Medical Terminology), Computer Information Systems 103(PC Applications), OA 110 (Keyboarding)

Initiative #2
Talk to SCT about migration possibilities
Supports: IN#3

Acquire a new Administrative/Student Information System
Supports: IS#1, IS#3, IS#4, IS#6, IS#7, IS#9, IS#11, UR#4, UR#5, UR#6, IN#2, IN#11

Create an administrative computing project designed to reduce paper. Possible candidates: online requisitioning/purchase orders; transcript requests; registration
Supports: IS#6, UR#5, UR#6, IN#10, IN#11, IN#14

Acquire a tool for end-user report writing
Supports: UR#5

Discussion
The suite of administrative systems currently running at the College is not of the latest generation of software and functionality. The finance and human resources systems,

both from SCT and both the latest in their product lines (IA Plus), are being considered by SCT for migration to a new set of systems called Relationship Leveraging Systems (RLS). RLS will represent not just new underlying technology and architecture (faster, less labor-intensive, less expensive to maintain, less risk of obsolescence), but also greater functionality for end-users. The RLS systems are being designed to be the primary tool for colleges and universities to manage their relationships with all constituencies, especially their students. The College will ask SCT for a confidential briefing on the future of their products, based on signing a non-disclosure agreement.

The student system was developed at the College, and of all of the current systems, represents the greatest opportunity to move to an environment in which the system is a critical resource in treating each student in an individual way, but also in a way that is fast and efficient. Modern student systems are designed to be controlled by end users to a very great extent and to accommodate a wide array of differences in students, programs, costs, schedules, and approaches.

Integration between the student system and the finance and human resources systems is important as well. Acquiring all of the products from a single vendor in an integrated suite is the best approach. In addition, there are issues of training, reengineering, and hardware readiness to consider.

Year 1

2-1. Meet with SCT to find out more about the migration to RLS and consider whether this will be a viable option for the College for the finance and human resource systems. If it is, the timing would most likely make it beyond the scope of this plan. (This step does not indicate a preference for staying with SCT, but is a prudent step for the College to take in evaluating its current situation and future options.)

10/01/00 – Met with SCT to determine the viability of the RLS System. At this point SCT has revised its implementation schedule and has removed projected release dates from the RLS System. They have made a commitment to continue the Banner System into the future with the expectation that the Plus Systems Users would migrate to Banner or wait for the release of RLS.

- ***Spring 2001***

Information Systems, after further discussions with SCT, have been informed that the RLS System will not be available for two years and will not be an upgrade product. This change in strategy by SCT will cause a "double-conversion" effort to move from RLS to Banner. The possible move to RLS is now on hold pending future changes in SCT's strategy with this Plus System.

2-2. Do a needs analysis for a new information system, concentrating on the student area, and use that as the basis of a Request For Proposal to be sent to administrative

system software vendors. Choose a new system based on responses to the RFP, campus software demos, site visits, client references, and other information gathering. Take into account SCT's migration path in determining the best fit for the College. Criteria for the final selection will be:

- Functionality
- End-user tools for reporting, querying, and self-service; Web access
- Workflow and integration
- Support and training
- Underlying technology
- Cost
- Financial viability and stability of the vendor
- Cultural fit with the College

12/08/00 – Information sessions have taken place for DATATEL (October 24, 2000), SCT's Banner System (October 31, 2000), and PeopleSoft (December 5, 2000). Oracle is scheduled for December 19, 2000. In all cases a preliminary session was held with Information Systems staff to update the vendors on the College's current systems and the expected outcomes of the information sessions. Follow-up budgeting sessions have been scheduled with IS and Budgeting staff to get information on implementation costs and possible timetables. The DATATEL session took place November 17, 2000; SCT is took place November 30, 2000. Peoplesoft is scheduled for December 20, 2000. Oracle will be scheduled after the information sessions.

- ***Spring 2001***

Follow-up vendor presentation visits are scheduled for the following dates:
SCT – April 18 & 19
Peoplesoft – Aril 26 & 27
Datatel – May 14 & 15
Oracle May 21 & 22

- ***4/13/01***

Dr. Curtis arranged for a consultant to facilitate a session on enhancing our vendor presentations. This session included a detailed review of our "Vendor Administrative Information System Presentation script. Interested parties from Student Affairs, Information Systems and the Office of Communications attended the session. The consensus of the group was to develop a more detailed "script" focusing on the actual needs of the user community, a needs analysis, and to inclusion of the Academic Affairs group to ensure that the all areas of the College community are represented.

All vendors have been provided with a 16-page script". This script contains specific questions the College wishes each vendor to address in the following areas:

- ***General System Overview***
- ***General Reporting Capabilities***
- ***Vendor Support***
- ***Student Recruiting/Admissions***
- ***Assessment/Placement***
- ***Demographic Information about Students***
- ***Student Registration/Scheduling (catalog, schedule of classes, enrollment, holds)***
- ***Transfer Credit Evaluation***
- ***Student Grades/Transcripts***
- ***Graduation Evaluation***
- ***Financial Aid***
- ***Academic Advising and Counseling***
- ***Community Services (Credit and non-credit programs)***
- ***Accounts Receivable/Cashier***
- ***Finance – Chart of Accounts and Account Number Structure***
- ***Journal Entry Processing***
- ***Transaction Detail Overview***
- ***Financial Closing***
- ***Budget Preparation***
- ***Budget Administration and Adjustment Processing***
- ***Procurement (Purchasing, Receiving, Accounts Payable)***
- ***Human Resources***
- ***Payroll***
- ***Institutional Research***

- ***04/17/01***

Brenda Wright, Vice President of Information systems and Telecommunications, and her staff will begin the process of developing the Technical Specification document necessary for all future vendor information sessions. IS will also begin the process of user needs analysis with an emphasis on the evaluation of business processes at the user level. Meetings with the user committee will be scheduled to begin this process.

2-3. Develop a full implementation plan for the new student system that includes user education and training as well as opportunities for reengineering certain student-related processes.

- ***Spring 2001***

The implementation plan has yet to be developed. A Project Manager position is being discussed at the cabinet level and a job search will begin soon. This position will take the lead in the development of the plan and guide the user analysis process.

2-4. Acquire a reporting tool for end users to use on current data that can be migrated to the new systems.

11/29/00 – A number of projects aimed at paper work reduction have been initiated. The monthly financial reports are now available via the intranet with full security provided through a mainframe web server. The 2001-2002 capital and operating budget processes have been redesigned to utilize the web with interaction to an access database using Tango. Purchasing of supplies through Alpha Office Supplies is being moved a web-based ordering format.

April 2002
Shari Prussin, Project Manager, has developed the following timeline for the RFP associated with the Administrative/Student System Implementation.

- *April 12, 2002 RFP Committee finalizes draft*
- *April 15, 2002 RFP to President's Cabinet*
- *April 22, 2002 RFP sent to Purchasing*
- *May 16, 2002 RFP sent out from Purchasing*
- *June 6 Responses due from Vendors*
- *Presentation June 10, 2002 through June 27, 2002 (allowing 3 days per vendor)*
- *June 27, 2002 through July 15, 2002 Review of responses by RFP Committee and President's Cabinet*
- *Award July 15, 2002*
- *Start Date for the financial module implementation is planned for Fall, 2002.*

Many issues intersect with this Initiative. Listed below are projects which fall into this category.
Automated Projects to Offer Enhanced Services to Students and Faculty
Update 1: PowerFAIDS implementation for Financial Aid – PowerFAIDS, a College Board product, is a powerful software system that combines a broad range of data processing services into a single manageable solution. This software manages federal aid requirements, institutional aid programs and allows staff to provide faster service to students. It manages student eligibility, verification, PELL Grant management, award

packaging, loan origination, reporting and research. The latest federal rules are programmed into the software so that the College will always be compliant with federal regulations. Other desired features of the software include:

- Streamlines time-consuming functions such as cost of attendance and document tracking
- Provides automatic aid packaging and disbursement
- Provides the ability to e-mail students directly and provides financial aid information to other College offices more efficiently through the web module
- Allows corrections to students' applications using just PowerFAIDS as opposed to the current necessity of using two systems

Update 2: AMS/PPM Cashiers Office – A change from the outsourced AMS tuition deferral service to an in-house database product, PPM. Improvement of customer service issues to students in tuition deferral.

Update 3: Right-On-Queue Implementation – This software/hardware solution from Avotus (formerly SwitchView) has been implemented at the request of Student Affairs for the Information Center. The Avotus Call Center helps managers and supervisors take control of their Nortel Networks Meridian 1 call center. This solution improves customer service, reduces the number of abandoned calls, and optimizes staffing levels.

Avotus Delivers:

- Immediate visibility through real-time queue and agent monitoring, empowering managers to take action before callers hang up
- Historical reports with information required to objectively assess agent productivity and plan for call center growth
- Agent desktop software which facilitates superior customer service

Update 4: SEVIS – Review of this new government reporting mandate on the immigration status of students is ongoing. New software and procedures will need to be developed to handle the new student and exchange visitor information system. SEVIS will allow colleges to transmit electronic information and event notification to INS.

Update 5: OpScan –

New Procedures for Scoring Student Tests

The current procedure for processing student test scores is being modified to include an automated "self service" option for faculty. A personal computer with a link to the mainframe via a script, an Opscan machine and a printer has been setup in B2 –2A. along with detailed instructions for scoring tests. Faculty with a rest room key can use this setup to score their test at their convenience. This

procedure will be available to all faculty April 29, 2002. Faculty can still leave their tests in the Computer Center to be scored during work hours. A lock-box has been located outside of B2-38 for Faculty who wish to leave their tests to be processed after hours.

Community Service Student Evaluations

To assist the College in maintaining the quality of the programs offered in the non-credit area, two opscan forms are being created that will be completed by students for each class. One will be the Instructor Course Evaluation Questionnaire. This will ask about course objectives, understanding about the course, and the physical surroundings of the class. The second will be the Student Course Evaluation, which will address the registration process, course content, and whether the course met the student's expectations. It will also ask several other questions about the instructor.

Update 6: Peregrine –
Information Services is reviewing this product which is intended to replace outdated manual systems with workflow automation that speeds the handling of unique processes and optimizes user productivity. The results are higher employee effectiveness, lower costs, and improved management visibility. Peregrine also contains Asset Management and College Calendar capabilities. The first workflow will be the HR Termination Process, May 1 ,2002.

Update 7: Aviva evaluation – This product allows secure, internet-based remote access to the CCP mainframe. Evaluation is ongoing.

Update 8: ID System improvements – Overall faster access at all sites to the ID system as well as improvement in the stability of the system.

Initiative #2 ***2003 Update***

The OASIS Project is underway. The College selected SCT Banner as the integrated software system to support both student and administrative services. Collegis, as the College implementation partner is performing business process analysis to redesign current service operations. The College's new Project Manager, Sherri-Kae Calkins, is providing the College with coordination of all aspects of this enterprise resource planning effort.

- ***Finance Go Live – July 2003***
- ***Human Resources/ Payroll – January 2004***
- ***Financial Aid – in the Spring of 2004 for Fall 2004 class***
- ***Student – in the Spring of 2004 for Fall 2004 class***

OASIS Project Mission
The OASIS Project Teams will implement a fully integrated system that supports efficient student-centered administrative and academic processes for the community benefiting from College services.

Scope of the OASIS Project will encompass the implementation of an integrated software solution to include the following pieces:

- ***Banner Finance***
- ***Banner Human Resources & Payroll***
- ***Banner Student (including Academic Affairs)***
- ***Banner Financial Aid***
- ***Campus Pipeline***

Project Guidelines

- ***Banner is a User System (providing End Users access to data for reporting)***
- ***Vanilla Banner will be implemented***
- ***Best Practices using Banner for the Community College of Philadelphia***
- ***Constant Project communication***

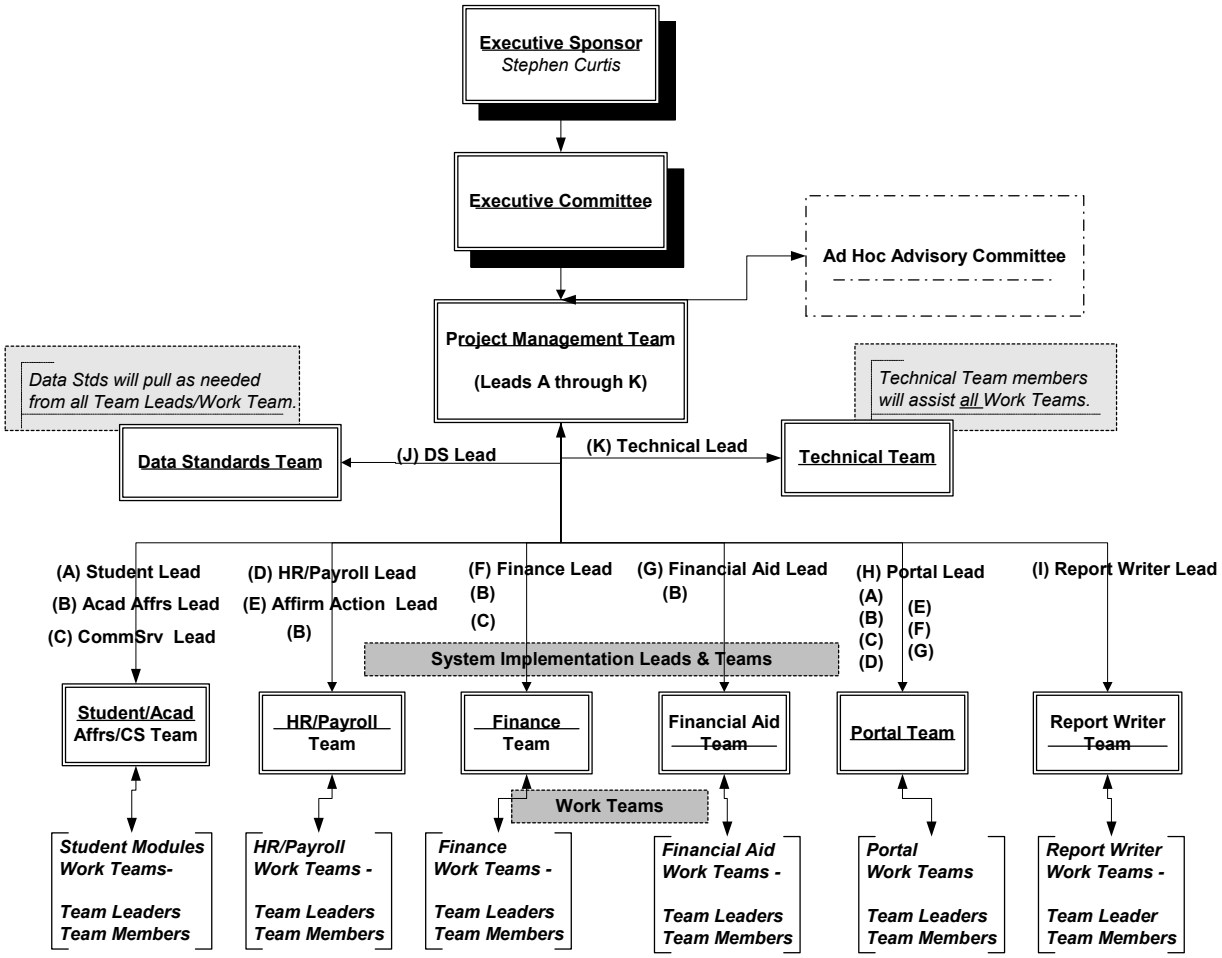
Implementation Approach

- ***Project Planning***
- ***On Going Communication to assist with Change Management***
- ***Business Process Analysis (identifying gaps)***
- ***SCT Training***
- ***On Going Data Standards Development & Control***
- ***Banner System Build***
- ***Data Conversion***
- ***System Testing***
- ***Process Documentation***

OASIS Project Goals

- ***To accommodate a changing student body***
- ***To increase administrative efficiency***
- ***To partner with schools***
- ***To create an image that has the public associate the College with technology; to be thought of as a technologically forward-thinking institution***
- ***To create an environment in which all faculty are in a position of making a well informed choice about using technology in their teaching, with barriers removed***
- ***To become more data driven***
- ***To increase retention***
- ***To focus on life-long learning***

Project Governance Structure



Executive Sponsor – President Curtis

- ***Provides clarification of College's priorities as they impact process***
- ***Champions the reengineering process***
- ***Provides change management leadership***
- ***Helps address roadblocks, remove obstacles or other constraints***

Executive Committee

- ***Communicate commitment to the project's success to the organization***
- ***Provide input and support the College's long term goals and vision***
- ***Commit the required resources to the project***
- ***Review project progress through key milestones***
- ***Quickly resolve College policy issues referred by the Project Management Team***
- ***Promote best practices***
- ***Ultimately responsibility for the success of the project***

Ad Hoc Committee

- ***Recommending body to the Executive Committee***
- ***Assess standards by which project success will be measured***
- ***Review project progress through key milestones***
- ***Meet as needed to advise the Project Management Team in risk assessment***
- ***Review policy changes resulting from the Data Standards Team***

Chairs: SK Calkins & Patty Forster

- ***Meet electronically through Groupwise & In person as needed***

Project Management Team

- ***Refer issues to the Ad Hoc Advisory Committee for Executive Committee for approval***
- ***Make timely decisions to resolve escalated issues***
- ***Review and approve project work team progress***
- ***Take initiative to proactively identify and mitigate project risks***
- ***Provide feedback to the Executive Committee on project status and risk assessment***
- ***Members will be responsible for becoming an OASIS functional expert in their area***

System Implementation Leads

- ***Ensure that the business goals and objectives are met by the implementation***
- ***Responsible for cross-functional integration***
- ***Alert Project Manger(s) on project risks***
- ***Identify & document project issues***
- ***Mentor/guide/advise project work teams***
- ***Communicate project updates to management and work teams***

Collegis Implementation Tasks

- ***Analyze & Define user requirements***
- ***Define system gaps***
- ***Provide expertise to users on the SCT Banner System on a day to day basis***
- ***Facilitate the creation of test scripts & a testing methodology***
- ***Provide technical support for the implementation***
- ***Assist College in developing a reporting methodology***

Data Standards Team

- ***Addresses College Data guidelines, integrated system issues, and other overlapping aspects to the implementation***
- ***Establish data security measures***
- ***Guide decisions that would have been purely departmental before integration but affect the whole College under Banner***

Work Teams

- ***Foster the partnership & collaboration within the college***
- ***Validate data in their own area***
- ***Execute testing plan***

Project Communications
The Project will ensure easy access to information by implementing:

- ***Weekly Updates via E-mail***
- ***Monthly Oasis Newsletter***
- ***Updates in College Communication vehicles***
- ***Web Site with Project Updates***
- ***GroupWise document archive & project schedule***

Project Tracking Log:

- ***Risks***
- ***Issues***
- ***Changes***

Updated & monitored by Project Managers

Status Reporting:

- ***Work Teams report to System Leads Weekly***
- ***System Leads send status reports to College Project Manager and report weekly to Project Management Committee***
- ***Project Managers report weekly to Executive Committee Chair and Project Management Committee***

Training

- ***The College Training Coordinator will provide scheduling assist to SCT and Collegis as well as coordinate the basic skills training for College staff.***
- ***Collegis will support the project teams in module previews & system navigation training***
- ***SCT will deliver system training to the System Implementation Teams***
- ***End users will have "Just in Time" training in their areas***

Technical Update for OASIS as of February 2003

- ***Financial Interfaces & Conversions under way (goal mid-April completion for testing)***
- ***General Technical Training by SCT 2/4 - 2/6***
- ***Finance Technical Training by SCT 2/25 – 2/27***
- ***Fixed Assets Meeting uncovered an unmet functionality in Banner to track Technical machine maintenance (ITS needs to explore alternative solution to interface)***

Report Writer Selection Team

- ***Working with College constituents to review Banner approved report write products; Sahara, Crystal Reports, Brio***
- ***Selection recommendation to the Executive Committee by the end of February 2003.***

Initiative #3

Make sure that students have appropriate access to computing facilities regardless of whether they are on the Main Campus or at the Regional Centers.

Supports: IS#5, IS#9, IN#12

Discussion

Our overall goal is to have all of the facilities on the Main Campus and at the Regional Centers be what they need to be to support the educational programs that are offered at each location. However, we also recognize that computing hardware and software is a fundamental necessity, and we want to maintain the same standards and achieve an appropriate ratio at each location.

Our College-wide ratio of students to public computers is approximately 12:1, which is consistent with, and a bit ahead of, other community colleges. In addition, the ratio at each location, including the Main Campus as well as all of the Regional Centers, is at least 13:1. Our goal is to continue to emphasize providing access for students to modern, capable equipment and to maintain a ratio at each location that is at least consistent with other community colleges. In addition, we will strive to increase accessibility to students by opening up existing facilities that are dedicated to certain purposes and locked at other times.

Year 1

3-1. No action needed.

11/29/00 – We constantly monitor the computer access for students. The Student Academic Computer Center (SACC) monitors use of the open lab and the Internet access on the main campus and regional centers. Expansion of the SACC requires a major commitment of space that is in short supply at the main campus. The facility planning process to relocate the Workforce Development Center when the lease expires in 2002 will incorporate space for expansion of SACC and added computer classrooms to serve the main campus population.

- ***Spring 2001***

During the Fall 2000 semester, an Enrollment Management Listserv procedure was created to assist in disseminating information to individuals in direct contact with students. Interested parties within the College community may send, via email, information on student intake, communications, advertising, mailing brochures, changes in courses and programs, changes in prerequisites, calendar events pertains to due dates and deadlines for financial aid. These information announcements are also placed in a web-based database that is intended to be a searchable information archive. This archive allows those individuals directly involved with student enrollment to recall messages that pertain to a current situation. The Enrollment Management web site is located at ?.

Year 2

3-2. Enrollments at each location will be monitored, as well as the needs of specific academic programs. Hardware and software available to students will be increased or replaced as necessary.

- ***April 2001***

To further address this initiative by ensuring that students have access to the latest technology, Information Systems, in conjunction with Academic Computing and the Purchasing office, developed RFP9066 "A Computer Hardware Acquisition Program". The stated objectives of this program is to:

- ***procure a minimum of 1600 personal computer workstations, installed for general academic purpose, over a 3 year period;***
- ***select current, standard microcomputer, notebook and network file server configurations;***
- ***select a preferred vendor that will serve as the IST recommendation for new system purchase/leases by non-academic areas;***
- ***the College also anticipates replacing 600-800 non-academic computer workstations in the next three years.***

The schedule of events for this RFP process is:

April 16 – RFP distributed to vendors
April 23 – Last opportunity for questions and clarifications
April 30 – College addenda response to vendor questions

May 7 – RFP response due (3:00 PM)
May 7 – June 21 – Committee Review Process
Process may include Hands on Evaluation of systems and scheduled site visits.

- ***Spring 2001***

A new facility to be located at the corner of 18th and Callowhill Streets will provide new administrative and instructional space for the Business and Industry Center as well as several academic classrooms. The total space is estimated at 95,000 square feet and will have several classrooms dedicated to academic instruction utilizing high-end technology. Completion of the project is anticipated to be January of 2003.

Year 3
3-3. Enrollments at each location will be monitored, as well as the needs of specific academic programs. Hardware and software available to students will be increased or replaced as necessary.

Initiative #3 2003 *Update*

The Center for Business and Industry opened on schedule for the Spring 2003 semester. This high-tech facility brings wireless capability to the College. Student access has increased by 503 workstations.

1st Floor	ACT Center	10 desktop systems
	Career Services Center	20 desktop systems
2nd Floor	First Step	30 wireless laptops with mobile cart
	Workforce Development Computer Labs	99 desktop systems
	Physics Computer Support Lab	30 wireless laptops with cart (HP)
3rd Floor	Computer Classrooms	245 desktop systems
	Student Academic Computer Center	75 desktop systems
	Cyber Café	5 Internet Access stations

The lease replacement plan for computer classrooms is nearing the end of the first lease cycle (August 2003). Each semester, ITS and Academic Computing coordinate to replace 250-300 workstations. All pre-defined "high-end" labs are placed on a two year replacement cycle, while all other computer labs are on a three year cycle.

Initiative #4

Hire/acquire trainers and create a College-wide training program for faculty and staff.
Supports: IS#7, IS#10, UR#1, UR#5, IN#5, IN#9

Discussion

We will set up a comprehensive, College-wide technology training program for faculty and staff that is user-oriented, responsive to specific needs, tailored to teaching and office schedules, and done by people who are skilled in instructional techniques. We also recognize that training is sometimes difficult to fit into one's schedule and that other activities may often take precedence over attending training sessions. Therefore, we are making attendance at two half-day workshops during a one-year period a strong recommendation and we are pursuing other channels to see about making it a requirement. Staff in administrative offices will be given release time to attend the workshops. (At the option of the instructor, an individual may be released from the requirement after demonstrating competency in the topics to be covered.)

Year 1

4-1. The half-day workshops will be held many times over the course of the year so that everyone's schedule can be accommodated. A sample program might be:

Workshop 1 (half-day):
- General computer concepts
- Electronic mail
- Calendaring

Workshop 2 (half-day):
- Word processing
- Internet access

4-2. Academic departments are in the process of developing technology plans in conduction with the Academic Computing Coordinator. Each of these plans includes a training component. For this as well as other needs of the academic community, an additional full-time faculty member is being hired in the Academic Computing department.

4-3. The staff in the Information Systems department require a specialized training plan, tailored both to the specific requirements of each of their positions and to their backgrounds and experience levels. It will be up to the Vice President of IS to design these individualized plans.

12/07/00 – While a College-wide training program has yet to be instituted, there have been on-going training events addressed to increasing the technical competence of the Information Systems staff and the faculty and staff College-wide. They are:

Information Systems Staff Training:

Help Desk Staff - Exceptional Customer Service Skills
Academic Technical Staff – Microsoft Windows 2000 and Office 2000 training

Institutional Advancement:

OneOnOne Computer Training – available in MG-23 for individualized training in Microsoft Windows, Word and Powerpoint

Microsoft Word – Counseling Department
Microsoft Excel – Division of Liberal Studies
Ask the Help Desk – November 3 and December 1
Professional Development Week, August 2000
– Information Systems conducted two sessions on accessing the Internet and using the mainframe
Professional Development Week, January 2001 –
- Academic Computing is conducting a technology symposium
- Information Systems is repeating the sessions on accessing the Internet and using the mainframe.
Professional Development Day, February 19, 2001

- ***The theme for the day's program is technology***

- ***Spring 2001***

The Information Systems staff training Spring 2001:
-Helpdesk Staff – Customer Service Training
-Network Support Group – Novell ATT Zenworks for Desktops 3 Master series
-Network Support – TCP/IP training
-Technical Support Group – PANUG Zenworks for Desktops 3 (3 hour presentation hosted by CCP)
Training initiatives pending for 2001:
-Technical Support Group and Helpdesk staff – Zenworks for Desktop 3 overview from the perspective of user support (in-house training)
-Microsoft Office 2000 training – This training will be offered to groups of fifteen. The cost for each session will be $1800. The user community will be asked for potential attendees and scheduling will be developed.

Information systems managers are developing individual training needs assessment for all staff to enhance support of current and future IS systems. The above listing reflects this effort.

- ***Spring 2001***

To better prepare for the Year 2 tasks of this initiative, the Office of Institutional Advancement formed a committee to review the resources necessary to provide the training needs detailed by each College department.

The committee members are:

Phil Ringle – chair
Carolyn Birden
Brian Custer
Arnold DiBlasi
Jean Kemper
Victoria King-Garwood
Peter Piotrowicz

This committee is charged with identifying the current training available to faculty and staff, the creation of goals for training and minimum competencies needed for each departmental area of the College, and the best training approach for each area or defined group of the prospective audience. The committee anticipates forwarding a recommendation document to the President's Cabinet soon.

Year 2

4-4. In addition to continuing the half-day workshops, each academic department and administrative office may request one full day (or a number of sessions adding up to one full day) every six months for area-specific training. This will be done by a combination of a professional outside instructor and a user services staff member from the IS department and will be arranged in advance by appointment.

For more specific training, such as for certain software packages including spreadsheets, database management systems, and presentation software, a combination of computer-based and videotape-based training will be available for individual access from the IS department.

4-5. Training in the new administrative system will be part of the project implementation of the new system, and will include all users of the system.

Year 3

4-6. Continue workshops and training in new administrative system.

Initiative #4 ***2003 Update***

With the start of the OASIS Project, the College developed a Training Coordinator position. This position, reporting to the Acting CIO, will oversee all SCT Banner training as well as the supplemental Collegis training and the Basic Skills training. As of February 2003, forty Finance staff has received training in SCT Banner and 90% of the Information Technology Services staff has received technical training. Basic Skills training in Windows, Word, Excel, and GroupWise will begin in late February for those immediately affected by the Banner implementation. All staff in the Finance division have received or will receive before March 1, 2003, leased workstations with updated software.

Initiative #5

Create a 1:1 ratio of people to computers for faculty and staff.
Supports: IS#9, IS#10, UR#3, UR#6, IN#4, IN#13

Discussion

A necessary condition of genuine competency with information technology is convenient access. For the past few years the College has funded access to computing power for those who could demonstrate that they were most in need of it. This program has helped computers to proliferate, but at the same time, the institution's expectations for the members of its community have changed (for example, everyone is now expected to use e-mail). A lack of personal computers, especially among the faculty, still inhibits access to both tools and information such as e-mail, communication with students and with colleagues, access to administrative data, special interest bulletin boards, specialized databases, and curriculum-based software. Institutional funding for personal computers for all members of the community is the best way to empower each individual to be as productive as possible. This initiative will also create an environment in which it is clear that information access and technology tools are valued and expected to be used, regardless of one's job, field of interest, or endeavor.

Deployment of computers to faculty and staff will follow the guidelines in Appendix A, "User Levels and Hardware/Software Minimum Levels."

We recognize that because of Community College of Philadelphia's physical facilities, mission, and history, we have evolved into a campus full of mobile people. The campus is more nomadic than residential, even for the faculty who teach their full time. Fixed,

private space is at a premium, with several faculty often shared an overflowing office. This has technological implications. It will not be easy to find room in offices for a computer for each faculty member. More equipment will strain the electric power wiring and put more demand on the environmental systems. The College will have to use creativity to overcome these difficulties. Providing the option of using notebook computers is one way to address this reality. It also addresses the growing desire for computing that is available any time, anywhere. We must also address the fact that much faculty work is done at home. By providing better network connections for faculty and students when they are off-campus, we can tie the home workspace more seamlessly with life on campus.

Year 1
5-1. Deploy desktop and notebook computers to full-time faculty to reach a 1:1 ratio (possibly leased).

11/29/00 – The College has chosen to address this in steps. The first step is to provide a computer for each faculty office. We are using the deployment of computers pulled from classrooms in a Thin Client mode or under Windows 95 to accomplish this. Of the 356 faculty offices located on the Spring Garden Street site 179 have had computers deployed. Another 50 will be deployed by the end of January 2001. We expect to have all faculty offices covered by the end of June 2001. We are addressing the network infrastructure to facilitate individual logons from these or any computer stations giving the faculty the effect of personalized computers. The College's computer loan benefit and the dial-in access will continue to encourage home access.

A recent survey of computers in administrator and support staff offices confirmed that those requiring computers for the most part had them. Any upgrades or expansion will be handled through the College's normal capital budget process. Information systems will provide the guidance as to which systems and software will need to be upgraded. These will also tie-in to the scheduled replacement of mainframe terminals to provide access to any new administrative information systems.

- ***April 2001***

RFP 9066 the "Computer Hardware Acquisition Program" is planned as the reallocation mechanism which will allow the College to complete the deployment of computer systems into faculty offices with during the Fall 2001 semester. The RFP approval process caused a delay in this initiative but wiring of faculty offices and classrooms continues in preparation for deployment. The current expectation is to supply a single system to each faculty office and provide a secure and "personal desktop" to each officemate.

The table below reflects the replacement schedule of current classroom computer systems into faculty and staff offices via this RFP over the next three years. The replacement dates noted reference semester time frames to accommodate academic sequences. The breakdown of processor speed is shown to reflect the deployments possible from each replacement phase. This re-purposing will drive the hardware deployments as dictated in the next 2 years of this initiative.

Replacement Date	*Total Targeted for Replacement*	*Systems that are P233 or better*	*Systems that are less than P233*
August 2001	***483***	***94***	***389***
December 2001	***150***	***92***	***58***
May 2002	***201***	***99***	***102***
August 2002	***198***	***198***	***0***
December 2002	***151***	***146***	***4***
May 2003	***203***	***203***	***0***
August 2003	***290***	***290***	***0***
December 2003	***168***	***168***	***0***

Year 2
5-2. Deploy desktop and notebook computers to staff to reach a 1:1 ratio as appropriate (possibly leased).

5-3. Plan how to provide appropriate computing to part-time faculty, setting reasonable expectations.

Year 3
5-4. Deploy desktop and notebook computers to part-time faculty to reach a 1:1 ratio of computers to full-time positions. (possibly leased).

April 2002
Faculty deployments are continuing and will be completed by the end of the Spring 2002 semester. The delay is caused by a lack of communication to and from faculty. We are currently 40 rooms away from the complete and have systems to place.

The committee charged with reviewing the leasing of non-classroom computers has meet several times. The last meeting, April 2002, resulted in the determination that assistance from the individual divisions was required to make sure the computer inventory was up-to-date. Reports will be generated and distributed for this purpose. From this data, a plan will be developed for

"departmental" or "related area" rollout of new computer systems to replace those unable to support the new admin/student system.

Initiative #5 ***2003 Update***

Faculty offices are now all equipped with computer workstations connected to the College network. The process to upgrade these workstations continues as the lease replacement cycle in the classrooms continues. During the Fiscal Year 2003-2004 the College will lease workstations to provide faculty with the hardware and software necessary to utilize Banner. Faculty in the new Center for Business and Industry were issued laptops to enhance the wireless connectivity of the building.

The effort to upgrade all workstations will continue into future technology plans.

Initiative #6
Add additional user support staff
Supports: UR#2, IN#1

Discussion
It has become apparent throughout all industries, including higher education, that supporting the use of technology is as important as providing the technology itself. A Help Desk staffed with knowledgeable and friendly staff is a requirement in order for the College to be able to move forward in a reasonable way. Appropriate salaries must be offered to attract and retain staff with the required qualifications. Since hiring new staff at attractive salaries may cause an imbalance with existing staff, this may be an opportune time to review the salary structure in the entire Information Systems department. A revised salary scale might also take into account technical certifications such as MCP, A+, or CNE.

The goal is to have 60% of all calls to the Help Desk answered during the first pass, 30% answered within 24 hours, and 10% answered within 72 hours.

Year 1
6-1. Hire two additional Help Desk staff in IS.

6-2. Conduct a salary review of all staff in IS with a possibility of reformulating the salary structure.

11/29/00 – IS has recast the Manager of Customer Support position into a Manager of Technical Support to oversee the technicians who install and maintain computer equipment and software. The extended warranties on desktop equipment and the reduction of mainframe communications equipment has allowed IS to bring the previously outsourced maintenance contract in-house under a time and materials basis. The savings were diverted to hiring two additional technicians, one (started November 1, 2000) to expand the equipment and software installation and maintenance staff, and another (currently advertised) to assist the Webmaster with the technical functions of maintaining a web site.

- ***April 2001 –***

Helpdesk Calls – To-date analysis of the Helpdesk calls reveals 60% are handled by first-level support on the first call to the Helpdesk. The remaining 40% of calls are forwarded to second or third level support for resolution. Approximately 17% of forwarded calls are resolved within the first 24 hours, with the remaining 23% resolved after 24 hours. The percentages for 24-hour resolution may be skewed due to late reports by second level technicians.

Staff issues are currently under review by the new Vice President for Information Systems and Telecommunications. It is recommended that support staff with experience in the package selected for the new Administrative/Student System be included.

Academic Technical Support
To enhance the support of Academic Affairs, the Information Systems department will be developing and implementing initiatives to improve support to all academic areas with special emphasis on the needs of the "high-end" computer labs. These high-end labs include the Photographic Imaging lab, the Design Technology labs, and the CIS labs. These dedicated labs require specialized support for both hardware and software. Academic Technical Support will be working with Academic Computing and the respective department heads in these areas to develop improved technical support objectives for these areas as well as all of Academic Affairs. These objectives will include but not be limited to the following.

- ***Initiate a systematic effort to improve documentation on all IS Academic Support services, systems and supported products, with specifics in publicized documentation of installation and maintenance procedures for classroom software.***
- ***Begin the process of working with the College administration to fully capitalize the equipment and software required for instructional purposes in the classroom labs, so that all equipment and software can be regularly upgraded to meet the needs of the academic program.***

- ***Give more attention to effective communication with faculty as to the level of support that can be provided by IS to students using class related software in the public computer labs.***
- ***Assist in the establishing the Help Desk as a key element in IS consulting support:***
- ***Create a single point of contact for problem reporting problem solution tracking and closure***
- ***Increased the number of technical support personnel dedicated to serving the needs of Academic Affairs.***
- ***Investigate, develop and implement new methods of supporting the computer lab environments with particular interest in the support of "high-end" specialized labs.***
- ***Support all associated initiatives detailed in the Technology and Strategic Plans.***
- ***Develop and implement improved communication between Academic Affairs and Information Systems.***

April 2002
In answer to the April 2001 recommendation that "recommend that support staff with experience in the package selected for the new Administrative/Student System be included", a ***five year staffing plan developed by the Vice President of Information Technology***

Strides in improvement to technical support for users include:

- ***Improvement in the use of web pages to provide updated technical information to faculty, staff, and students with more improvement coming.***
- ***Implementation of Peregrine to develop a single point of contact among users for technical support***

Other improvements are delayed due to the lack of staff increases necessary to support all users.

Initiative #6 ***2003 Update***

The process of technical support continues to evolve in the Information Technology Services department. The Acting CIO has consolidated the administrative and academic support under a single manager. These level 2 and level 3 support technicians are hardware/software experts. The Helpdesk is currently under review and will be redesigned as the Banner support needs are fully recognized.

The support for web programming is growing for the College. The need for a staff of web design experts is becoming a necessity as we move toward the Luminis

Portal solution with the Banner implementation. These positions are defined as are awaiting budget authorization for hiring.

Overall the technical support for the faculty and staff still needs improvement. Communication and training are necessary for the existing staff as well as the redesign of functions within the ITS department. These plans will be incorporated into future technology plans.

Initiative #7
Develop more "smart" classrooms
Supports: IS#1, IS#5, IS#9, IN#8

Discussion
"Smart" classrooms are technology-enhanced instructional rooms that would be appropriate to create at the College in the near future. At a minimum all College classrooms must have access to the Wide Area Network either through hard wire or wireless connectivity.

A Smart Classroom will have a permanent teaching station equipped with:

- touch panel controls for all classroom devices including lighting
- ventilated, secured lower area containing rack mounted hardware described below
- podium style top for lecture materials
- external duplex outlets providing electric power for ancillary devices
- external face plate with inputs for video, audio, and PC data.
- Lighting to be in distinct zones: perimeter and interior to allow for lighted student work area with dimmed projection area
- A networked computer with a DVD-ROM drive
- A ceiling-mounted projector (RGB & Video)
- CATV connected to the projector
- A wall-mounted projection screen that resists edge curling
- Sufficient dry erase marker boards for all subjects
- Optional interactive whiteboard
- Rack-mounted stereo audio amplifier
- Wall mounted stereo speakers
- A rack-mounted VCR
- A document camera
- As an option, all student may have access to a computer workstation

The Coordinators of Academic Computing and Academic Technical Support will provide a set of specifications for the software and configuration of computers used in the Smart classrooms.

Year 1
7-1. All classrooms at the College, including the Regional Centers, will have network connectivity.

7-2. We will create 2 Smart classrooms without student workstations.

11/29/00 – The College has purchased wireless technology to provide coverage for the Bonnell Building. Portions of this system can be relocated if requirements arise in other buildings. Academic Computing is pulling together specifications for the level 1 and level 2 stations. A determination will be made as to what will be needed during the 2000 – 2001 capital budget cycle.

Year 2
7-3. We will create 5 additional Smart classrooms without student workstations.

7-4. We will create 2 Smart classrooms with student workstations.

Year 3
7-5. We will create 5 additional Smart classrooms without student workstations.

7-6. We will create 2 additional Smart classrooms with student workstations.

Initiative #7 ***2003 Update***

All classrooms have been wired for connectivity for both AV rolling computer cart systems or faculty workstations. The issue of a standard proxy for Internet access is being addressed through the Infrastructure Upgrade and will be completed prior to the end of the spring semester.

The new Center for Business & Industry has five smart classrooms on the 2nd floor and eleven on the 3rd floor. Three prototypes have been constructed and are in use on the main campus.

Initiative #8

Provide video production and transmission capabilities to support distance education, multimedia classroom presentations and College marketing

Supports: IS#2, IS#8, IS#9

Discussion
In order to reach a wide audience, both for instruction and for marketing purposes, the College needs access to video and multimedia production capabilities and the ability to uplink video materials to satellite communication channels to broaden our scope of delivery. This capability will enhance the College's marketing efforts, capabilities to partner with other institutions and to deliver courses to multiple locations simultaneously.

Year 1
8-1. Acquire satellite uplink capability.

8-2. Develop and/or acquire through outsourcing multimedia and video production capability, both on-site and through partnerships.

Initiative #9
Extend the network to all classrooms and offices and make it 100% reliable
Supports: Everything

Discussion
Networking has quickly moved into the category of "utility" services and it is reasonable today to expect that the campus network will reach everywhere that other utilities do, such as electricity. To be able to communicate easily and efficiently and to be able to send and access information regardless of location are no longer optional for any educational organization; they are requirements.

The minimum configuration will include a network outlet in every classroom and office on both the Main Campus and the Regional Centers, capable of at least 10MB transmission.

Year 1
9-1. Extend the network to include every classroom and office on the Main Campus. Faculty and administrative staff will be able to rely on having a working network connection at their desk with reliable access to the Internet, local servers, network printers, and email. Instructors will be able to bring a computer to any classroom without advance arrangements and connect it readily to the Internet. The necessary network bandwidth will be provided as demand steadily increases.

9-2. Explore the possibility of wireless transmission for certain locations.

9-3. Examine networking needs for purposes other than data, such as HVAC, security, and other monitoring capabilities.

11/29/00 – Wireless technology has been purchased to deliver network services to classrooms and other open areas in the Bonnell Building. Evaluation of the wireless technology will determine if expansion to all other areas of the main campus is desirable. Information Systems is conducting an evaluation of the current network infrastructure to determine what enhancements are required to provide the level of service specified in the Technology Plan. A key component is to deliver an individual logon at each station so that faculty who share computers in offices and access centers perceive the computer as personalized to their needs. The complaints received on the thin client systems will also be examined to determine if they are network problems or user training problems. In either case remedies will be proposed.

- ***Spring 2001***

Information Systems is developing an RFP to upgrade the network infrastructure. This infrastructure upgrade is a part of the total package necessary to support the Administrative/Student Systems conversion, the increased demand for Internet access, and additional computer deployments dictated by this plan. This infrastructure upgrade will allow for the increased bandwidth to each desktop of a minimum of 10Mg (in contrast to the shared 10Mg we currently deliver to all desktops) thus increasing reliability and availably of the network to all areas of the College.

Information Systems is working to develop a plan for disaster recovery. Included in this plan will be the ability to recover from a loss of data and to recover quickly from interruptions in network services. This plan will reduce network downtime thus increasing the reliability of the overall network. The plan will be presented to the TCC for review during the fall of 2001.

Information Systems recently purchased a Novell Academic License Agreement. This ALA package provides for unlimited Novell sever licensing that will allow us to better manage the increasing need for network resources from staff, faculty and students. Another part of this package is the Zenworks for Desktops 3 and Zenworks for Servers. These Zenworks products will provide hardware and software inventory capability, delivery of network applications, automatic distribution of software upgrades, roaming user profiles, remote management for helpdesk support, self-healing applications, and centralized management of College desktops and server. Novell's Groupwise product provides electronic mail, collaboration tools and calendaring. BorderManager Enterprise Edition is a suite of network services that will provide IS the ability to control outside access

to our Intranet and user access to the Internet, allow remote access to our Intranet and the Internet, establish a VPN using the Internet, and accelerate access to the Intranet and the Internet. The Single Sign-on bundle is a password-management solution that allows a secure, single-login access to applications, mainframes, platforms, and Web sites. All of these features will build on the functionality of the network thus increasing the availability of network services to all campus locations.

- ***April 2001***

Utilizing the 2000-2001 budget dollars allocated for network wiring, Information Systems is ensuring that all classrooms are network ready. Wireless technology is available for those areas of the college currently without network wiring.

Thin Client complaints have been reduced through efforts to upgrade the workstation hardware above the advertised 486-processor level. Redeployment of Pentium class systems (P5-60) to existing and new Thin Client users have been successful.

Year 2
9-4. Extend the network to include every space at all locations, including study lounges, laboratories, etc.

April 2002
All faculty offices and classrooms have been wired for network access, with the exception of 2 wet laboratories that will be done this summer.

Initiative #9 ***2003 Update***

The RFP 9111, Infrastructure Upgrade, was initiated in November 2002. The final hardware installation was completed with the wireless access points for the CBI building. All in-place workstations are in the process of being migrated to the new 100mg switch network environment. All new workstations are being migrated at the time of deployment. All computer classrooms have been migrated to the new environment. Currently, all known classrooms are wired for connectivity.

A new backup strategy is under development to ensure data reliability. The infrastructure upgrade provided fail-over connections from all major wiring closets as well as redundancy in the Cisco 6509 switch/router. Dark fiber already in place through out the College data plant was tested and is now being used as redundant connections for all main campus switch environments. The regional

centers are now on new Cisco routers with redundancy, however, we are still reliant on Verizon for lease line connectivity,

The Network team continues to work on reliability and monitoring methods for the College network. A study of reliability and downtime is under development and will be presented to the Ad Hoc Technology Committee on a quarterly basis.

Initiative #10

Put in place regular funding for lifecycle replacement of desktop hardware and software

Supports: Everything

Discussion

In order for the College's technology efforts to thrive, they must be based on a regular funding stream, and not rely solely on fluctuating, opportunistic sources like one-time grants. It is especially important to take into account that hardware needs to be replaced on a regular cycle and to build that replacement into the budget. The cost of setting up and installing the new equipment will be included in the budget for this initiative.

Year 1

10-1. Fund a three-year life-cycle for desktop hardware and software replacement. In the first year, replace all equipment older than three years.

11/29/00 – A concentrated effort is being expended to update the inventory files to get accurate statistics of the age of the computers in use. At first pass approximately one-third of the 2700+ computers used in classrooms, labs, and offices have been purchased prior to 1997 and are less than a Pentium 133 level. First priority for replacement will be computer classrooms, labs, and access centers. This involves approximately 400 computers and with a replacement cost of $1,350 will require funding of $540,000. The College Director of Budgets is exploring the possibilities of leasing to provide scheduled replacement for hardware and software. Parallel with the hardware evaluations, a software survey will be conducted using a purchased software package to determine software installed on all College systems. This will be compared to a purchased software inventory to determine the budget requirements to ensure license compliance. An upgrade schedule with associated budget requirements will also be developed. The costs associated with redeployment of computers from classrooms to faculty and staff will be significant. Also there will need to be clearly defined procedures to determine which faculty will need systems comparable to classroom systems.

Year 2
10-2. Fund the second year in the desktop hardware and software replacement cycle.

Year 3
10-3. Fund the third year in the desktop hardware and software replacement cycle.

Initiative #10 2003 Update

The funding for desktop hardware replacement is now in place. The current non-classroom lease cycle began in November 2002. The first 100 leased workstations were rolled out to Finance and Planning in support of the OASIS Banner implementation project. The next cycle of 200 systems will be ordered in March to continue the replacement for HR/Payroll and Student Affairs. The next fiscal year will support the replacement of all remaining administrative workstations as well as faculty office desktop units.

Initiative #11
Use a structured priority mechanism that allows the College to evaluate all other initiatives beyond what is in this plan
Supports: Everything

Discussion
We recognize that, in addition to the elements in this plan, there are initiatives that individual offices, departments, or areas are interested in pursuing. Also, we recognize that new initiatives will come up that we had not anticipated when formulating this plan. In order to accommodate these additional elements, we will use a priority mechanism that will be based on the Committee's consideration of the following points:

- Degree of the project's support of, and alignment with, the College's goals and objectives
- Impact on the quality of teaching and learning at the College
- Necessity of the project with respect to the needs and expectations of the College community
- Breadth of the project impact across the College
- Justification in financial terms
- Feasibility of the project from a technological and a logistical standpoint

11/29/00 – This will be a topic addressed by the Technology Coordinating Committee. A meeting will be set up to update the committee members of

progress to-date on the technology plan and to begin the deliberations on an agenda for the committee.

The Plan, Year By Year

Summary of Institutional Strategies, User Requirements, and Infrastructure Needs
Institutional Strategy 1: The College needs and wants to accommodate a changing student body.

Institutional Strategy 2: The College needs and wants to develop distance education projects.

Institutional Strategy 3: The College needs and wants to increase retention (enrollment management).

Institutional Strategy 4: The College needs and wants to focus on life-long learning.

Institutional Strategy 5: The College needs and wants to assure that all of the technology facilities on the Main Campus and at the Regional Centers are what they need to be to support the educational programs that are offered at each location**.**

Institutional Strategy 6: The College needs and wants to increase administrative efficiency (for example, reduce paper, do more self-service, promote user independence).

Institutional Strategy 7: The College needs and wants to establish minimum basic skill sets for everyone, job advancement and definitions, and new hiring standards for the future.

Institutional Strategy 8: The College needs and wants to expand partnership opportunities with public schools.

Institutional Strategy 9: The College needs and wants to create an image that has the public associate us with technology; we want to be thought of as a technologically forward-thinking institution.

Institutional Strategy 10: The College needs and wants to create an environment in which all faculty are in a position of making a well informed choice about using technology in their teaching, with barriers removed.

Institutional Strategy 11: The College needs and wants to be more data-driven.

User Requirement #1: Training, Development, Tutoring

User Requirement #2: Support Services

User Requirement #3: Personal Access to Personal Computers

User Requirement #4: Administrative Systems: Integration

User Requirement #5: Administrative Systems: Self-Sufficiency in Report Writing

User Requirement #6: Student and Faculty Self-Service, Web-based

Infrastructure Need #1: Help Desk

Infrastructure Need #2: Software Development Environment

Infrastructure Need #3: Migration Path for Administrative Systems

Infrastructure Need #4: Dealing with the "Thin Client" Strategy

Infrastructure Need #5: Training and Development of Technical Staff

Infrastructure Need #6: Extend the Network: Offices and Classrooms

Infrastructure Need #7: Network Reliability and Capacity

Infrastructure Need #8: Technology-Enhanced Classrooms

Infrastructure Need #9: Project Management/Planning

Infrastructure Need #10: Optical Scanning Capability

Infrastructure Need #11: Web Access to Administrative Data

Infrastructure Need #12: Public Lab Facilities, Including the Regional Centers

Infrastructure Need #13: Desktop hardware and software replacement cycle

Infrastructure Need #14: Desktop hardware and software consistency within offices/areas