Verification Team Report

Program/Unit Information Technology
Date November 20, 2008

A. Identification of Program, Program Evaluation & Planning Team members, and Verification Team Members
Scott Rose, Stacy Hitchcock, Betty Malmgren

B. Status of Curriculum Revision
N/A

C. Statement of Completion
The report was complete.

D. Strengths of the Program
• IT functions in an ever-changing and increasingly complex “world” with limited staffing and resources.
• Help Desk and staff members’ ability to multi-task as well as willingness to respond to urgent/emergency needs.
• Efforts to keep up with technology innovations, given budget and staff limitations.

E. Areas for Program Improvement
• We agree with the analysis of the complex challenges of serving a diverse and growing campus community, external demands, and the challenges of the ever-changing nature of technology with limited budget.
• Challenges include the limitations of staff size.
• The physical location of IT is a valid concern; the danger of flooding is real. The district should provide a safe, appropriate location for this vital department which is key to campus infrastructure.
• Department and campus communication can be improved.

F. Summary of Verification Team Recommendations

The IT department serves a critical role and is a vital part of the NVC infrastructure.
• Need for additional staff, especially to support the website and instructional needs, is well documented.
• The district should consider relocating this department to safeguard equipment and provide improvements in working conditions for staff.
Program Evaluation Summary

Program: Information Technology

Complete the following sections based on the program evaluation completed. This summary will be forwarded to the Planning Committee after the verification phase is complete.

Program Achievements (major achievements, changes, implementations, progress since last program review)

In the past six years, the breadth and depth of the technology supported by Information Technology has grown immensely. Some of the major work performed is as follows:

- The department was vital in the implementation of the Enterprise Resource Planning (ERP) system, and rose to the challenge of learning and using new systems and database architectures, programming languages, and reporting and management tools. More functionality continues to be “rolled-out” through Web Advisor and third party software products. The new systems introduce configuration, integration, and troubleshooting complexities. Applications personnel do double-duty as systems and database administrators, resulting in the reclassifications of their positions.

- Self-service Web-based applications, especially those available to students, were rare at NVC six years ago. Since that time we have implemented an integrated suite of Web applications through WebAdvisor that allows students access to Student Services functions of the campus 24/7. Greater communication has been achieved between students, faculty, and staff through the use of these applications (for example, faculty can post grades throughout the semester and students can immediately see them). Other systems allow students or the public to view current course outlines of record, request official transcripts, purchase parking permits, and download standard forms—all of which required a trip to campus six years ago. These advances have increased the scope and complexities of the webmaster position, resulting in a revised job description.

- Network staff perform yeoman’s work in keeping a ten year old network running reliably while planning and expanding for more buildings, users, and varied needs. The plan for new network infrastructure was approved by President’s Cabinet and the Board of Trustees, a new network core is in place, and buildings will be upgraded next. Wireless and VOIP technologies are being explored and piloted.

- Two information technology computer specialists heroically provide support for 1500 PCs in approximately twenty instructional areas in addition to faculty and staff desktops. These positions, along with the network technician, were recently upgraded as a result of their increasingly complex work and the added responsibility of supporting telephone service.

- A distributed content management system implemented for the college website facilitates more timely updates of information available to the public by campus stakeholders.
Momentum in creating and adopting technology policies, plans and procedures increased as evidenced by a new technology master plan, a revised network usage policy and procedures, password change procedures, and a draft email procedure. The groundwork for increased campus collaboration on future technology policies and issues has been laid through user education and committee work.

Virtual server technology was adopted as a way to be “green”, contain server proliferation, and put a cap on server maintenance but also introduced complexities.

Campus data submissions to the Chancellor’s/System Office and federal government were high quality and on-time. Collaboration to further improve data quality is on-going.

IT provisions and supports Blackboard online course management system accounts and continues to make improvements in processes and procedures through faculty collaboration.

A streaming media server purchased by Title III is implemented, used by faculty, and supported by IT.

The department has valiantly kept up with increased responsibilities and expectations with no additional staffing and somewhat limited understanding on the part of the campus community regarding the amount and complexity of work performed to keep operations running relatively smoothly.

Strengths (unique characteristics, special capacities)

The department possesses dedicated, skilled, and intelligent staff willing to “go the extra mile” to help users advance the college and its mission to students and the community.

The ability of staff to prioritize and multi-task.

The opportunity for more cohesiveness between IT areas (network, desktop, and applications support) exists due to a small staff and proximity of work spaces.

Challenges (concerns, difficulties, areas for improvement)

Skeletal staffing levels

Network core equipment, servers, and centralized storage are all located below ground. Staff is anxious concerning the prospect of flooding after hours in light of the 1800 basement flooding in September, 2008. IT has experienced flooding during normal business hours when personnel were present to intervene. Water sensors which communicate to the network have been purchased and are being implemented. Troughs and sump pumps would be another safeguard. Schedule E contains further information regarding disaster recovery preparation that could be done.
- Equipment refresh practices on campus need strengthening
- Department and campus communication can be improved
- Systems are fragmented. The planned portal will increase user friendliness, provide efficiencies through single sign-on, and increase communication and collaboration.
- More reports are needed. Development time is being reduced now that staff have acquired SQL reporting tools experience. However the student system programmer is very busy with system administration, and day-to-day support for a number of student system modules. Power users and the IT Director help pick up the slack but they are impacted as well.
- The campus has made little headway in achieving recommended staff to printer ratios since a 1999 assessment. Much money is wasted on higher cost per page desktop printing.

Briefly describe the process used to complete the PEP

The IT Director compiled information from individual and group conversations with team members, committee work, and technology planning. PEP Part I and II and forms were made available for input, review and feedback.
Administrative Services Program Evaluation
Part 1

Office/Unit: Information Technology (IT)

Date: August 21, 2008

1. Mission
This section should be a short, clearly stated purpose of the program or services. In other words, what does the department contribute to the Napa Valley College (NVC) Mission? Write or revise your mission statement below. The NVC Mission is provided for reference.

Mantra “Partnering to develop a technology rich community”

The mission of the IT Department is to develop a technology rich community which effectively supports student learning in partnership with other college units and vendors. According to institutional purpose and need, IT skillfully administers the campus communications infrastructure; provides experienced support for instructional and administrative electronic resources and applications; procures, provisions and regularly maintains network, computing, and telephonic devices; and responsively supports faculty, staff, and student users.

2. Accreditation and External Reviews

A. Review the Accreditation Planning Summary (available on the PEP website “Documents”) and results of previous program evaluations. Discuss the status of the recommendations of the review teams that are relevant to the office/unit and how the unit has responded.

The 2003 Accreditation Planning Summary lists these items for technology:

- The college will establish procedures to coordinate the acquisition, maintenance, and replacement of all furniture, equipment, and both business and instructional computing systems.
- The college will evaluate the need for additional support staff to provide adequate maintenance of computers and equipment.
- The college will identify methods to ensure that adequate technology driven instructional computing resources are readily available to all disciplines and divisions.

The IT Department facilitates campus technology purchases. Over $500k per year is spent on hardware and software through Dell alone. Centralized purchasing results in volume discounts, lower total cost of ownership through standardization where possible, and better tracking and processing of licensing, warranties, and upgrades.
The need for equipment refreshing was re-emphasized in the 2008 Technology Plan which the IT Department participated in writing. The college set a goal of replacing equipment every five years but with 1500 PCs in service and a million dollar network infrastructure, it is fiscally challenging. IT includes five year warranties on equipment purchases and advises budget center managers when replacement planning needs to occur due to end of warranty or useful life. IT interfaces with the President’s Cabinet over larger purchases such as network and telephone switches.

The IT Director asks for additional support staff in annual budget requests and appropriate conversations. The IT Director actively participates in meetings regarding technology staffing led by the HR Director and attended by the VP of Instruction, VP of Business and Finance, and Dean of Instruction.

The IT Director, Network Administrator, Computer Support Technicians, and IT Support Specialist participate in hardware and software recommendations and review for all college programs. Program Evaluation & Planning technology requests are reviewed by members of the IT staff in addition to others.

B. Indicate the sources of information used in Question 2.A.
   _X__Accreditation Self-Study Planning Agenda
   ____Accreditation Final Report
   ____Previous program evaluation recommendations/objectives

C. Review the recommendations from any other licensing, evaluation, or accreditation bodies. Discuss the recommendations of the review teams relevant to the unit and how the unit responded.

   The NVC IT department participated in two information security assessments sponsored by the California Community Colleges Chancellor’s Office. The first assessment was conducted in Fall 2006, the second in Fall 2007. These assessments included vulnerability scans, penetration testing, data and systems analysis, as well as a review of policies, standards, and procedures.

   Overall, both assessments found and acknowledged appropriate technical measures in place to adequately protect information and systems from unauthorized access, tampering, theft, or destruction. For example, firewalls and access control lists are used to only allow legitimate traffic through and to protect systems from unauthorized access and threats from other networks. NVC IT systems were found to be physically secure with protection against natural and accidental disasters. The assessments also found NVC IT internal operating and security procedures to be very good. These procedures include regularly updating and patching systems to protect from vulnerabilities, as well as routinely scanning campus systems in order to proactively identify and mitigate risks. NVC IT in conjunction with the College Police also has a security incident response procedure that instructs staff how to respond to suspected illegal computer activities or security breaches.
Despite these positive findings, the assessment reports recommended the District to formalize, publish, and communicate computer use and information security policies to all employees, students, and relevant external parties. One report further recommended that “management should actively support security within the organization through clear direction, demonstrated commitment, explicit assignment, and acknowledgment of information security responsibilities.”

From this, NVC IT has been improving its security management plan. The plan includes the recent adoption and enforcement of an updated campus network and computer use policy. A new password policy is in place that requires passwords to have a minimum complexity and be changed on a regular basis. Through the use of a login banner, all users must now agree to abide by the acceptable use policy before being granted access. The recent implementation of network access control further protects from unauthorized access and rogue devices attaching to the network.

We are continuing to work on policies, procedures, and controls to not only protect our network and systems, but the exchange of information through all types of communication facilities. Part of this process involves the classification of all types of data. We currently have drafted an e-mail use policy that will include retention requirements. A policy that addresses information stored on and transmitted using laptops and other mobile device is also in the works.

D. If this office/unit is responsible for maintaining ACCJC Accreditation Standards, attach a description of how NVC is addressing each standard. This information will be used in the next Accreditation Self Study.

NVC is addressing Accreditation Standard 3C.

Technology resources are used to support student learning programs and services and to improve institutional effectiveness. Technology planning is integrated with institutional planning.

1. The institution assures that any technology support it provides is designed to meet the needs of learning, teaching, college-wide communications, research, and operational systems.

   a. Technology services, professional support, facilities, hardware, and software are designed to enhance the operation and effectiveness of the institution.

Projects to improve the operation and effectiveness of the institution are continuously underway:

   o The college ERP system was implemented in 2005 and functionality is added each year. E-Advising, Community Education, and budget lookup are the most recent additions.
   o The college website was redesigned two years ago and now employees campus-wide are able to design, author, and maintain content. Another redesign is scheduled for 2009.
o IT is implementing a web-based helpdesk system with knowledge base for user self-help which may reduce calls up to 80%. Other offices will be able to adopt the system to answer frequently asked questions as well as track and provide services.

o Computer hardware and software is standardized and consolidated to reduce total cost of ownership. Dell, Microsoft, VMware, and EMC are vendor partners.

o A new online orientation is available due to a partnership with a college counselor, consultant, IT, and others funded by matriculation funds. It is well-received by staff and students.

o The Hershey Singularity document imaging system is being deployed to speed processing of incoming transcripts and to reduce paper in offices. The product is web-based and secure and the cart check-out functionality is much like Amazon.com.

o College placement testing is now computer based and available year-round at both campuses.

b. The institution provides quality training in the effective application of its information technology to students and personnel.

Faculty and staff are trained formally and informally on computer applications in a variety of settings.

o New student orientations – students learn to logon, search for classes, and register using WebAdvisor

o New employee orientations – employees learn how to access WebAdvisor for web-based ERP applications and how to use best use the network and email. The IT website and the information available is displayed and discussed.

o Library – Adjunct faculty are trained each semester on using the college website and accessing WebAdvisor.

o The Teaching and Learning Center – Classes and drop-in labs are held on topics such as Excel grading, PowerPoint, and webpage creation.

o Building 2200 – faculty and staff train formally and informally on ERP applications.

o IT Breakroom – IT staff meet with vendors in-person and via the web and phone.

o Board room/Classified Lounge – Group trainings are held on an ad-hoc basis. A recent example is the Chancellor’s Office MIS staff training a large group of NVC personnel on best practices for MIS data integrity.

o The college website – instructions are posted for students regarding applying, registering, accessing Blackboard for online courses and for employees to request IT resources, access email from home, etc.

o The IT helpdesk – faculty, students, and staff receive hardware and software support.

c. The institution systematically plans, acquires, maintains, and upgrades or replaces technology infrastructure and equipment to meet institutional needs.
o IT staff monitor network, server, and telephone equipment; add components to strengthen performance and security; and communicate with budget center managers, the VP of Finance, and President’s Cabinet when refreshment or components outside the regular IT budget is needed. The budget and planning process is used to the extent possible.

o IT system maintenance is performed on a regular basis including Friday afternoons twice per month.

o System backup tapes are rotated to a safe in another building each week and then to a bank safety deposit box.

o PCs are purchased primarily with individual budget center funds using IT staff for planning, procurement, maintenance, and upgrades.

o IT informs system users prior to warranty expiration for refreshment planning. PCs are purchased with a five-year warranty. Some budget center managers do have equipment that is six and seven years old which can be frustrating for students and employees to use and for technicians to maintain.

Current projects related to this topic include a campus-wide network refresh, installation of Cisco VOIP phones at the Upper Valley campus and the Small Business Development Center to replace obsolete phone systems, the procurement of campus portal software to unify campus software applications and provide single sign-on, and planning for an Exchange 2007 migration to improve Outlook web access and increase disk space for information storage.

d. The distribution and utilization of technology resources support the development, maintenance, and enhancement of its programs and services.

Napa Valley College does extremely well considering the number of technology staff resources and financial resources. Server and network up-time is remarkably good. The help desk is rated very well.

o Two technicians deploy and maintain over 1500 computers and printers.

o A computer support specialist supports the help desk, procures technology assets for the campus, and performs data processing services for the campus.

o Two computer applications personnel support a number of student ERP modules in addition to finance and HR/Payroll.

o Two network support personnel support network equipment in thirty locations, a Windows LDAP/active directory environment, and more than thirty servers including a virtual server and storage area network environment.

o The department supports campus telephones using aged and less-than-reliable wiring which will be improved in some instances and migrated to voice-over-IP in others.

o A computer support technician works directly in the Business and Computing Studies division to support their programs.

o A technician is assigned full-time to the ESL/Language Lab to support that learning environment.
o An instructional computer support specialist supports faculty in learning and using technology for teaching and learning (currently vacant).

o A campus webmaster supports Datatel Web Advisor, the campus website, and other third party web applications including custom data collection instances.

o Two media services technicians support expansion and usage of multi-media in classrooms, computer usage in the general purpose computer lab outside their office, and check-out of instructional media.

o An alternate media specialist supports creation of appropriate media to facilitate disabled student learning.

Campus personnel participate in discussions regarding how to best augment technology positions on campus. One such example is the desire to outsource Blackboard help desk support to Presidium for 24 x 7 faculty and staff support for less than $14,000 per year. Another instance is the planned outsourcing of aspects of the Exchange 2007 migration. The project will be done more efficiently by a company that performs many migrations than by staff already working at capacity.

Equitable distribution of technology resources may be enhanced by the budget model being used this year. Rather than receiving the amount allocated in the prior year, budget center managers had to justify their need to receive more than 90% of the prior year’s budget. This may help under-funded budget centers purchase needed technology.

A challenging aspect of equitable distribution of resources in terms of hardware, software, and people resources is the following: Those that know how to articulate what they want in clear and sometimes persistent terms are more likely to get the resources needed. Some users are also more able to self-initiate projects and receive needed help with aspects. Technology committees and reporting structures are being analyzed and redesigned to assist with prioritization of projects to best serve the campus community including students.

2. Technology planning is integrated with institutional planning. The institution systematically assesses the effective use of technology resources and uses the results of evaluation as the basis of improvement.

o A Technology Master Plan was developed in May of 2008 and is being used in planning at many levels.

o There is a technology form as part of the PEP and budget and planning processes for programs to use to articulate their technology needs. Instruction Council and President’s Cabinet is involved in prioritization of requests.

o The IT Director and the Dean of Learning Resources and Instructional Technology are charged with keeping abreast of technology solutions within their respective areas. Staff with technology assignments and many users of technology do the same. A culture of continuous process improvement is emerging.

o IT participated in two network assessments arranged by the Chancellor’s Office. The need to increase and strengthen technology related policies was noted. IT is
working with the HR Director, the District Technology Advisory Committee, the Datatel Implementation Steering Committee, and the campus constituent groups to inform and collaboratively develop said policies. For example, the needs of the campus were solicited and considered when a password policy and network account expiration procedure was created.

E. Reflect on your responses in Section 2. Accreditation and External Reviews. If improvements or changes are needed, write objectives on Schedule A.

3. Services

A. What specific services does the office/unit offer?
The department provides the following services:
1) Administration of the campus communications infrastructure, servers, databases, centralized storage devices, and back-up processes and procedures
2) Purchase, provision, support, and replacement of network, computing, and telephonic devices
3) Software support for instructional and administrative systems, the campus website, and software applications whether web, network or client-based
4) Technology project planning, management, and participation
5) Business process analysis to increase efficiency
6) Assistance with expansion of online services and data collection
7) Coordination and submission of Management Information Systems data to the Chancellor’s Office (term-end, calendar, program awards, financial aid, and assessment)

How does the office/unit ensure that these services are meeting the needs of students and/or other clients? How do you evaluate how well the services are meeting the needs of students/clients?

Up-time of systems is one measurement of quality of service. NVC has exceptional network and server up-time for its staffing and budget levels.

We provide a centralized helpdesk with someone always responsible for answering phones between 8 a.m. and 5 p.m. A service level agreement with helpdesk response times and escalation procedures is posted as the first “quick launch” item on the IT webpage. 84% agree/strongly agree that “The IT Help Desk is welcoming and accessible” and 81% of survey respondents agree/strongly agree that “IT responds to inquiries and requests in a timely and professional manner.” Any concern about service quality or timeliness is promptly addressed.

We consider today’s students during design. One example is the NVC online orientation which IT facilitated as part of a group effort. The type of production and images were chosen in order to make it appealing to students. The finished product is a trendy, Flash Media production incorporating iPods, a variety of music, and student images. Viewers consistently give positive feedback and other colleges have asked to use it as a model. Another example is the selection of Google Apps for student email, communication, and
collaboration. The ad-hoc committee chaired by IT did not want students to have to pay $50 to purchase software in order to originate documents or to have to install multiple plug-ins. It would be easier for us to choose Exchange because of faculty calendar integration but we don’t feel that is the software environment students will be comfortable using. They are more familiar navigating Gmail or Hotmail.

We empower end users. Throughout campus, more and more is able to be done within areas rather than in IT, be it designing and publishing website content; printing, routing, storing and retrieving documents; or data processing. This is accomplished by partnering with vendors and power users to implement software solutions, with IT providing coordination, technology support, and guidance along the way. Most users are happier being able to perform tasks on their schedule rather than waiting for IT.

We compare ourselves with other institutions of higher learning and, in partnership with other college units, try to “catch up” with technology. The college has continued to enhance Datatel functionality in the three years since implementation of student, finance and HR/Payroll modules. We have online orientation, counselors are using e-Advising with students to create education plans, transcripts are being scanned into Datatel Colleague to improve evaluation services and timelines, and reports are being created and distributed using SQL Reporting Services. Datatel Colleague is now being used for Community Services classes and planning is underway for a web-based “Instant Enrollment” module for that population. Student email, single sign-on, and collaboration is being planned for in conjunction with Datatel’s SharePoint portal. Other colleges using Datatel products report they are having a hard time keeping up with us.

We ask the experts and incorporate feedback. The Chancellor’s Office MIS staff was recently invited to NVC. Director Myrna Huffman provided training to a large group in attendance. She stated that our data submissions are high quality and provided information about where we could do some fine-tuning. All data submissions receive zero errors prior to data load but that does not insure data quality: individual areas know their data best. Local queries and reports and Chancellor’s Office analysis reports are distributed to users for review. The availability of data mart reports for additional views into the data is communicated. The CORE group chaired by the IT Director has been expanded to include all MIS areas to further improve data quality and timelines.

We look for operational efficiencies within IT. One example is adoption of virtual server technology by IT and President’s Cabinet to lower total cost of ownership of technology solutions. Software can be provisioned more quickly on existing shared servers, reducing server administration and freeing up staff to perform other tasks. An added benefit is energy savings in keeping with the college commitment to being green. Another example of increasing operational efficiencies is implementation of a web-based helpdesk and knowledge base. Users will be able to self-help, help desk calls may be reduced up to 80%, and technicians can and will access tickets when mobile.

We work with groups on campus to ensure that our priorities are aligned with institutional objectives. In some cases, projects are prioritized by the Datatel CORE group, the Datatel
Implementation Steering Committee (DISC), the District Technology Advisory Committee, individual campus Vice-Presidents and the President’s Cabinet. In other cases, we work directly with department and division leaders.

B. How does this office/unit support student learning in NVC instructional programs?

IT staff create and deploy software images for computers in classrooms and labs and in faculty and instructional administrator offices. Users are supported by a centralized help desk.

- The IT support specialist currently provides login support for faculty and students utilizing the Blackboard online course management system. The IT Director is a backup.

- IT provides next level technical support to instructional assistants and the computer support technician working in instructional programs.

- IT provisions and maintains instructional servers that run instruction and curriculum-specific applications including streaming media.

- Staff provide instruction and curriculum related applications support. Help desk staff assist with implementation and support of client and network versions of instructional software. The webmaster and network personnel support WebCMS web-based curriculum development software and AdAstra course scheduling and facility usage software. Programmers develop and deploy reports such as one which enables the athletic director to monitor athletic eligibility from his desktop.

- IT automated the flow of test scores to Datatel which assists with prerequisite checking, appropriate placement of students into classes, and student counseling, all of which support student learning. Additional services were provided to implement computerized assessment at the main and Upper Valley campuses within the last year which allows for greater flexibility of assessment testing in English and Spanish in support of student learning.

- The webmaster plays a vital role in course schedule and catalog production which supports student enrollment. Past publications won prestigious awards.

- By ensuring data protection and back-up, the department safeguards district funding essential to support student learning.

- IT management is participating in discussions with Instructional management and Human Resources regarding technology staffing and reporting structures deemed to best support campus needs.

- The IT Director serves as an advisor for the Academic Senate Instructional Technology Committee.
The IT Director spearheaded the development of the 2008 Technology Plan which has sections devoted to aspects of Instructional Technology written by instructional personnel and IT members. The plan is available on the Internet at: http://www.napavalley.edu/Projects/602/Technology_Planning/NVC_Technology_plan_2008.pdf. IT is assisting with planning, prioritizing, and implementing projects on an on-going basis.

B. What future trends are likely to impact the office/unit?

Technology needs, expectations, and advancements are increasing rapidly. The staff is continually taking on more responsibility. At some point, quality of service and/or response time will be less than satisfactory without additional staffing. Multiple employees already have difficulty taking vacation without experiencing increased workplace stress. Therefore maximum leave balance limits are exceeded annually. This situation will not improve without addition staffing or a reduction in load.

The college administration’s commitment to evidence-based/data-driven decision-making will increase demands for enterprise resource planning reports which are limited due to the conversion to Datatel and the only recent migration to the SQL database. The student applications support person is performing systems and database administration and supporting a number of student modules so report development time on the student system is limited.

Integration of various data and voice systems require more planning and longer implementation timelines, and increase troubleshooting complexity.

More programs and services are becoming web-based which will put further strain on the one webmaster position.

There is demand for pervasive wireless Internet on campus which will further impact IT staff due to planning, implementation, and support.

C. Are services being offered on-line? If yes, describe.

Forms, procedures, policies, tech tips, and contact information are provided on a department website. Services are provided subsequent to emails to support@napavalley.edu and BlackboardLoginHelp@napavalley.edu. New helpdesk software being implemented has a chat feature which support personnel can use to interact with clients.

A knowledge base is being developed which clients and technicians can use to find answers to their technical questions.

D. Reflect on your responses to Section 3. Services. If improvements or changes are needed, write objectives on Schedule A.
4. Community Outreach

A. What recruitment/community outreach activities has the office engaged in or initiated?

IT is partnering with Admissions & Records to implement Web Advisor for parents.

The department has attempted to use student workers to augment staffing however the unit is only eligible for CalWORKs students. The students have been satisfactory but have not stayed long due to life changes or the need for more wages.

The IT Director shares potential staffing sources with local businesses to assist with special projects.

NVC IT staff participate and present in Datatel and professional listservs, webinars and conferences in order to share their knowledge and expertise.

B. What has the office/unit done to establish relationships with secondary schools and/or four-year institutions?

The NVC IT Department interacts professionally with staff at Napa County Office of Education and the County Auditors office. The IT Director and the President of the Evisions company proposed and implemented a data exchange methodology which met NCOE requirements without extending the campus network, saving thousands of dollars in setup costs as well as on-going charges.

The IT Director and Network Administrator speak with colleagues at four-year institutions regarding implementation of technology solutions. The network administrator participates in meetings and conferences held by CENIC, our network provider, and attended by personnel from four-year institutions. He also maintains his professional relationships with former colleagues at UC Berkeley and Sonoma State University.

The IT Director is assisting with a security conference held by UC San Bernadino.

The IT Director is a regular donor to Mills College and the network administrator is an active Sonoma State alumnae.

C. What has the office/unit done to establish relationships with businesses and community organizations?

The unit has positive relationships with its primary vendor partners: AT&T, Blackboard, Cisco, Datatel, Dell, EMC, Hershey, NEC, and VMware. The group participates in email exchanges, telephone calls, meetings, webinars, conferences, and trainings. A myriad of other businesses partners are interacted with on a daily basis.
The network administrator participates in meetings and conferences held by CENIC, our network provider.

The IT Director regularly attends statewide Chief Information Systems Officer Association (CISOA) conferences where interaction with colleagues and vendors occurs. She served as a regional representative and Vice-President of CISOA and was active in planning the 2006 annual conference. The IT Director is the CISOA representative for the CENIC Secure IT 2009 conference planning committee which involves vendor interaction.

The IT Director interacts regularly with the Chancellor’s Office MIS staff as part of an effort to achieve high quality and timely MIS submissions.

D. Reflect on your responses in Section 4. Community Outreach. If improvements or changes are needed, write objectives Schedule A.
5. Enrollment Trends and Client Satisfaction

A. Review available data and describe recent trends.
   1) Have there been significant fluctuations in the level of service over the past five years? If so, explain.
      There has been dramatic increase in service over the past five years due to the following factors:
      - The on-going implementation of the Datatel ERP including Web Advisor
      - Increased technology adoption and expectations of users and the speed at which technology advances
      - Expansion of campus network nodes, users, and usage levels
      - An increase in the number of software applications supported
      - Storage requirements which have grown exponentially
      - Security requirements necessitated by illegal Internet activity as well as ever-expanding state and federal laws
      - The added responsibility of supporting telephone equipment at three sites, two of which are obsolete, using forty year old cabling which can be unreliable.
      During this time there have been no additional positions allocated. Some staff members receive excess vacation notices each year: time spent away from the office can increase stress rather than alleviate it which is a disincentive to use leave.

   2) Are there external factors such as community demographics or the economy that have affected the program? What are the plans to address these factors?
      The recent downturn in the economy makes vendors more likely to decrease pricing to achieve sales. IT staff will maximize discounts received.

   3) Are there internal factors that have affected the program? What are the plans to address these factors?
      The department is still supporting legacy and Datatel R17 equipment since migrating to Datatel R18. Discussion is taking place to identify data needed and determine data migration methodologies. This will reduce support requirements and maintenance fees.
      Versions of documents are proliferating. IT is working with users to implement best practices such as emailing links rather than documents and collaborating using network versions.
IT is working with facilities to address copper cabling improvements needed for reliable service for telephones, alarms, and credit card processing and fax machines as well as power needed in network closets to support power-over-ethernet for voice over IP.

B. How does the office/unit impact student enrollment and retention?

The unit supports systems which receive and retain student enrollment and grade data. A high level of up-time, reliability, and database integrity is required.

The campus webmaster and Datatel systems administrator work with the Assistant Dean of Admissions and Records on a continuing basis to improve the usability and flow of student processes from website visit, to admissions application, to web registration, soliciting feedback from others. The webmaster recently assisted the outreach committee with their new website.

The unit supports retention efforts by developing reports, now facilitated by a SQL database environment. A Datatel retention module which would be supported by IT is being considered by the campus Matriculation Committee.

C. Review the hours of operation and the results of satisfaction surveys. Discuss whether the office/unit hours are scheduled appropriately to meet needs.

The IT help desk operates from 8 a.m. to 5 p.m. Monday through Friday. The hours were expanded during the first two weeks of the Fall 2008 semester to support evening instruction but there were very few calls. However, 17% of survey respondents disagreed/strongly disagreed that IT’s hours of operation are sufficient to meet the needs of students, faculty, and staff. Three survey respondents wrote narratives requesting expanded hours of operation, one specifically mentioning support for offices and services open after 5 p.m. It’s possible that demand would increase if expanded hours were available and advertised consistently.

One user mentioned that the times sites are worked on are most inconvenient. However, Cabinet approved every other Friday afternoon for system maintenance and there has been very little negative feedback since this vital window of opportunity was implemented. It’s also possible that the reference was to Blackboard hosted services outside the scope of IT.

D. Discuss the results of the satisfaction survey identifying areas for improvement and continued success.

There were many positive areas in the survey which the department would want to continue to model:

- 81% of respondents agree/strongly agree that “IT responds to inquiries and requests in a timely and professional manner.”
o 84% of respondents agree/strongly agree that “The IT Help Desk is welcoming and accessible.”

o Many respondents wrote about staff knowledge, customer service, helpfulness, dedication, friendliness, professionalism, responsiveness, and follow-up.

A recurring theme in the survey was that additional staffing is needed:

o Only 28% of respondents agree/strongly agree that “The staffing of IT is sufficient to meet the needs of students, faculty, and staff” and 43% disagree/strongly disagree.

o There were seventeen written requests for more staff.

Although the majority of people realize the IT is understaffed, a few respondents were chagrined that the department does not welcome supporting additional Macs and PDAs and does not provide more training. The need for training was also identified in the Technology Plan. IT consistently delivers the message that expanded services require more staffing. Resources for online help for Office 2007 and Vista are being communicated by IT and the TLC. IT will offer Outlook training in fall 2008 through the TLC.

Communication could be improved. Additional emails and a newsletter were suggested. Additional emails are being sent and a newsletter is being discussed. It will likely be sent by a district technology committee since many projects involve other departments too but IT will either take the lead or contribute departmental articles.

A few negative comments were actually due to lack of awareness or misinformation:

o One respondent mentioned there is no support for Blackboard when in fact, IT operates a student and faculty help desk for support of course shell creation, enrollment upload, and logon assistance.

o Another respondent was unsure if IT knew there was a Mac lab on campus. IT was involved in planning and implementing the lab and IT actually created a technically difficult dual boot software image necessary for instruction which impressed Apple support.

o A couple of respondents thought IT separated Blackboard nursing sections but it was done by another department without IT’s awareness, and IT was also affected by having to reactively fix the problem for confused faculty and students. This issue is being addressed.

Planned projects to provide student (hosted) email, develop more Datatel reports, improve the Web Advisor roster, and update the website will address some concerns.

E. Review client/staff ratios and financial data and describe recent trends.

Strata Information Group stated in their 2003 Technology Assessment:
As a small College, NVC will always have difficulty providing sufficient technical support resources to meet needs. As a guideline, the Total Cost of Ownership standards defined in the State’s TTIP program might be of value to determine staffing minimums:

- 1.0 FTE Network and Systems Administration for each 300 PC’s on campus
- 1.0 FTE Technical Management support staff for each 500 PC’s on campus
- 1.0 FTE Web Administration support staff for each 12,000 FTES
- 1.0 FTE Administrative Systems support staff for each 12,000 FTES
- 1.0 FTE Level I support staff for each 150 PC’s on campus
- 1.0 FTE Applications development staff for each 6,000 FTES
- 1.0 FTE Network staff for each 12,000 FTES

We have 1500 PCs on campus and one network administrator, one network technician, and two PC technicians. We far exceed employee to PC levels for network and systems administration, technical management support staff, and level I support staff. Individuals on campus increasingly desire support and connectivity for personal devices as well which increases the type and number of devices supported.

E. Reflect on your responses to Section 4 Enrollment Trends and Satisfaction. If improvements or changes are needed, write objectives on Schedule A.

6. Student Success and Equity

A. Describe programs, practices, and services that support and enhance student and/or employee understanding and appreciation of diversity.

The IT Department is actually a model of diversity with two women in non-traditional roles and a variety of races represented: Native American, India Indian, Hispanic, Iranian, and Caucasian. The quality of interaction internally and externally with employees and students is enriched by diversity. Users often interact with individuals with whom they feel most comfortable.

B. What methods are used by staff to address the needs of a diverse student population?

There are as many as twenty different areas of student computers for which IT assists with procurement, deployment, and maintenance. The computer technicians image student computers with instructional software targeted for use by students at various learning levels. Certain workstations funded by DSPS are equipped with specialized software for disabled students. The webmaster assists users who post information in languages other than English and the website is Section 504 compliant for screen readers.

C. How does this office/unit support student services within the college?

The unit supports student services in many ways including the following:

1. Assisting with technical aspects of web content creation and/or delivery including online orientation and outreach multi-media
2. Procuring, implementing, maintaining, and troubleshooting network equipment, storage, servers, PCs, telephones, and peripheral devices
3. Providing systems administration, database management, and technical support for Datatel admissions/registration and financial aid modules
4. Automating data import and export such as CCC Apply application data and CAPP assessment data to Datatel, enrollment and graduation data to the national student loan clearinghouse, and Cal Grant GPA data to a state agency.
5. Creating queries and reports and assisting power users to do the same
6. Assisting with implementation, testing, and maintenance of applications such as the SARS-Grid appointment system, SARS-Call appointment advising system, the Datatel e-Advising module, and the Hershey Singularity document management system including automated transcript processing
7. Providing MIS submission resources for CalWORKS, DSPS, EOPS, financial aid, and matriculation
8. Supporting categorical program use of Datatel screens, third party database applications, home-grown applications, and contract programmers.

D. What has the office/unit done to formalize links with instructional programs?

1. The network administrator works closely with campus planning and program coordinators concerning technology aspects of campus construction projects including network infrastructure planning.
2. The campus webmaster supports scheduling and curriculum web applications. He also provides publications support, as do the applications support personnel at times.
3. Division chairs were invited to stakeholder meetings during technology master plan development.
4. IT acts as a next level technical resource for personnel assigned to Business and Computing Studies and the ESL Language Lab.
5. The IT Director serves as a resource to the Instructional Technology Committee.
6. Members of IT meet with instruction council or program staff as invited or needed for special projects such as computer lab upgrades.

E. Reflect on your responses to Section 5. Student Success and Equity. If improvements or changes are needed, write objectives on Schedule A.

7. Current Budget

A. What is the source of revenue that supports this office/unit (state categorical, grants, district, other)? Identify the amount and percentage of funding from each source.

The unit is entirely funded by district funds.

B. Since the last review, what percentage increase or decrease has occurred in the budget?

N/A
C. What progress has been made by the office/unit to obtain funds or donations to enhance the budget?

The unit assists other units with their grant applications by providing technology recommendations, pricing, and data but has not participated in their own grant. The district also technically supports grants awarded the district or region.

8. Planning and Budget Requests

While answering the questions in this section, consider the staffing available, the existing budget, as well as the objectives that you included on Schedule A. Schedule A will be used as the office/unit plan and Schedules B-F will be used to justify requests for additional resources.

A. Office/Unit Plan. Reflect on your responses to all of the questions above. If improvements or changes are needed, write objectives on Schedule A. Add other objectives that will further the mission of your office/unit. The objectives must support the NVC Strategic Plan Goals and Objectives. In the right column of Schedule A, identify all additional resources that are needed to accomplish these objectives.

B. Faculty and Staff. Summarize the staffing resource needs identified in Schedule A. Discuss any changes needed. Complete Schedule B. Request for Permanent Faculty and Staff form as needed.

C. Operational Budget. Are operational funds appropriate to enhance program success? If not, how would additional operational funds be used to enhance program success? Complete Schedule C Request for Operating Budget Augmentation form as needed.

D. Program-Specific Equipment. Discuss the strengths and weaknesses of the program-specific equipment available to enhance program success. What needs remain? What strategies are planned to meet those needs? Complete Schedule D Program Specific Equipment Request form as needed.

E. Technology. Discuss the strengths and weaknesses of the technology available to enhance program success. What needs remain? What strategies are planned to meet those needs? Complete Schedule E Technology Request form as needed.

F. Facilities Improvement/Renovation. Discuss the strengths and weaknesses of the physical resources available to enhance program success. What needs remain? What strategies are planned to meet those needs? Complete Schedule F Facilities Improvement/Renovation Request as needed.

G. Professional Development. Using the results of the Faculty/Staff Accomplishments survey, summarize the professional development activities undertaken by faculty and staff. Based on the goals that resulted from this program evaluation, complete the Schedule G Professional Development Needs form to indicate what areas of focus have been identified for future faculty/staff development.
Note: Budget requests for Travel and Conference should be addressed on Schedule C. Operating Budget.

H. Learning Resources/Media Materials. What learning resources (i.e., books, periodicals, videos) are needed to enhance program success? Complete Schedule H Learning Resources/Media Materials Request form as needed.
## Administrative Services Program/Discipline Plan

### Unit Name: Information Technology

<table>
<thead>
<tr>
<th>NVC Strategic Goal #1 - 5</th>
<th>Program Evaluation Section</th>
<th>Objectives</th>
<th>Priority In Rank Order</th>
<th>Program Activities/Actions</th>
<th>Resources*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 through 5</td>
<td>2 through 6</td>
<td>Work with campus police on emergency services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>NOTE:</strong> PRIORITIES SUBJECT TO REVIEW AND CHANGE BY PRESIDENT’S CABINET, TECHNOLOGY COMMITTEES, AND MANAGEMENT DISCRETION.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 through 5</td>
<td>2 through 6</td>
<td>Replace information and communications infrastructure to ensure reliable services</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Implement Lynx server for emergency communication
2. Implement mobile laptops for patrol cars and officer field access
3. Ensure accurate 911 info
4. Partner with Police Chief and PIO to create emergency website
5. Assist with implementation of digital signage instances
6. Implement photo and ID badge system with campus police
7. Upgrade Exchange server for faculty and staff email
9. Partner with facilities to replace copper cabling needed for reliable phone, alarm, credit card processing, and fax service.

*Resources: Any additional resources you will need to accomplish the objectives. Please be realistic.

- $12k one-time, $30k to keep up-to-date. VOIP will require.
- $25k hardware, software and services
- Up to $100k
| 1 through 5 | 2 through 6 | Improve student, faculty and staff communication and collaboration. | 3 – multi-phase 18 month project | • Implement new network infrastructure equipment  
• Pilot VoIP phone equipment at UVC and SBDC. Train users.  
• Convert campus website to Microsoft SharePoint  
• Plan for and implement student active directory accounts  
• Establish vendor partnership and integration for hosted student email  
• Design, implement, test, and maintain portal  
• Produce or contribute to technology newsletter  
• Clarify and communicate technology request processes  
• Research options to expand wireless communication and report to President’s Cabinet.  
• Research and implement classroom and teaching technologies with other stakeholders | $25k | $10k one-time integration cost |
| 1 through 5 | 2 through 6 | Improve business processes | Existing offices parallel 3. New offices 4. | • Continue to implement Hershey Singularity product including electronic forms, workflow, and Catapult product for Datatel integration | Scanning stations, PC and monitor upgrades, and departmental training – cost to be determined (tbd) |
| 1 through 5 | 2 through 6 | Increase the number of student educational plans | Parallel 3 | • Continue report development • Continue to support and improve Datatel e-Advising to increase the number of student educational plans | |
| 1 through 5 | 2 through 6 | Evaluate and implement relevant new collaboration technologies | 5 | • Design, propose, implement, and test VoIP phones on main campus. Train users. • Partner with users to increase use of Datatel Communications Management and SARS-Call. | |
| 1 through 5 | 2 through 6 | Improve business processes and communication | 5 | | |
| 2 and 4 | 2 | Increase and strengthen technology related policies | Parallel 3 | Continue to work with HR, technology committees, and constituent groups to develop and implement policies. | Legal counsel review of draft policies |
| 2 and 4 | 2 through 6 | Improve processes to meet security, archival, retention, and restoration requirements | Parallel 3 | • Classify campus data to determine security, archival, retention, and restoration requirements by synthesizing data from local experts, and the education and technology fields. • Meet with vendor partners to explore alternatives | Assistance from campus stakeholders and possible consulting services - tbd |
| 2 and 4 | 2 through 6 | Facilitate accurate measurement of student success and maximize funding. | Parallel 3 | - Improve backup and recovery procedures as funding allows  
- Implement disaster prevention measures  
- Test restore processes periodically  
- Communicate, advocate for, monitor, and process needed data corrections to the extent possible.  
- Implement registration student survey to capture low-income data  
- Facilitate further data integrity training  
- Continue to develop measurement reports  
Possible monies to develop survey more quickly - tbd  
Funds for training resources - tbd |
|---|---|---|---|---|
| 2 and 4 | 2 through 5 | Review and improve institution-wide processes in order to be more efficient | 6 | - Provide business process mapping services  
- Implement more process handling to reduce manual processes  
- Partner with users to employ more online data collection and retrieval practices  
- Partner with administrative departments to implement workflows to make processes more efficient.  
- Partner with vendors to increase speed of improvements where savings justify  
Funds for staff training on workflow in Datatel, Hershey, and SharePoint - tbd  
Funds for vendor services - tbd |
<table>
<thead>
<tr>
<th></th>
<th>3, 5, and 6</th>
<th>Improve measurement of student success</th>
<th>5</th>
<th>Facilitate a mini-grant to fund development of reports to measure course completion, retention, persistence by ethnic group, and/or others tbd.</th>
</tr>
</thead>
</table>
| 2 | 5 | Conduct department satisfaction surveys annually and benchmark | Annual – priority not applicable | • Plan timing  
• Update survey instrument with assistance of Research Director and authorize data collection  
• Analyze results  
• Plan for & implement changes |

* New requests should be defined on resource forms and included in the unit budget.

**Program Evaluation Section**
- 2. Accreditation & External Reviews
- 3. Services
- 4. Community Outreach
- 5. Enrollment Trends and Client Satisfaction
- 6. Student Success and Equity

Internet address: [www.napavalley.edu/apps/comm.asp?$1=262](http://www.napavalley.edu/apps/comm.asp?$1=262)
REQUEST FOR NEW PERMANENT
FACULTY AND STAFF
PROGRAM/UNIT NAME: INFORMATION TECHNOLOGY

Accreditation reference: Human resource planning is integrated with institutional planning. The institution systematically assesses the effective use of human resources and uses the results of the evaluation as the basis for improvement.

Project additional needs above and beyond the current status. Please include in your projected needs any known position that will be vacated due to retirement. List in priority order. Replacement positions are not guaranteed. Information will be used in the faculty and staff prioritization processes.

<table>
<thead>
<tr>
<th>Job Title and Justification</th>
<th>N/R*</th>
<th>FTE</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Technology Computer Specialist</td>
<td>New</td>
<td>1.0</td>
<td>24</td>
</tr>
</tbody>
</table>
| Two persons currently support over 1500 PCs which is an unreasonable workload. Adding another technician to the help desk would make it feasible for the help desk to support the Photo/Art Mac lab and the additional 150-200 workstations proposed for the new Library/Learning Resource Center.

<table>
<thead>
<tr>
<th>Web Administrator</th>
<th>New</th>
<th>1.0</th>
<th>28.5</th>
</tr>
</thead>
</table>
| An additional 1.0 FTE is needed to improve functionality, user-friendliness, support and integration of increasingly mission-critical and visible web applications including a new portal, Web Advisor, and Ad Astra.

<table>
<thead>
<tr>
<th>Information Technology Network Specialist</th>
<th>New</th>
<th>1.0</th>
<th>24</th>
</tr>
</thead>
</table>
| This position is necessary due to the increased number of users and devices using an increasingly complex network. In addition, IT absorbed telephone support without additional staffing which impacts the current Information Technology Network Specialist and one Information Technology Computer Specialist.

<table>
<thead>
<tr>
<th>ERP Systems Administrator</th>
<th>New</th>
<th>1.0</th>
<th>28.5</th>
</tr>
</thead>
</table>
| Needed due to the increased complexity of the Datatel Colleague system including more modules, exponentially more data tables, a more varied and complex architecture, and the desire for integration of third party software solutions when feasible. Would help resolve current inequities in functions and workloads of Senior Programmer/Analysts and benefit district decision-makers and all ERP users due to faster implementation of increased functionality.

<table>
<thead>
<tr>
<th>Information Security Officer</th>
<th>New</th>
<th>1.0</th>
<th>28.5</th>
</tr>
</thead>
</table>
| This position would be responsible for continuously increasing awareness and requirements of laws and regulations pertaining to information security. Benefits include institutional endorsement of topic importance, more manageable IT workloads, protection of college public
image, and lessened risk of conducting legally mandated costly mailings after security breach(es).

Submitted By:      Approved By:

____________________________  ______________________________
Budget Center Manager           President/Vice President
TECHNOLOGY REQUEST

PROGRAM/UNIT NAME: INFORMATION TECHNOLOGY

Accreditation reference: Technology planning is integrated with institutional planning. The institution assures that any technology support it provides is designed to meet the needs of learning, teaching, college-wide communications, research, and operational systems.

In order to determine the feasibility of your idea, it is necessary to consult with the Information Technology (IT) Department. It is important that all computer related technology be centrally coordinated. This will allow the IT Department to know the full picture of the need, to plan for adequate capacity of equipment and infrastructure, and to ensure standardized equipment is purchased, if possible. It is equally important that all technology requests are consistent with the NVC Technology Plan.

List in priority order.
Provide a general description of the project that includes:

1. The equipment needed, students and/or staff who will be served, and how often it will be used.
2. Will installation and maintenance support be required?
3. Where will the equipment be located? Will space need to be modified?
4. Describe the infrastructure requirements (i.e. network, power, connectivity, security, etc.)
5. Software support needed (i.e. new licenses, upgrades, system integration, ongoing support)
6. Is additional furniture necessary?
7. Useful life of equipment – when will the equipment need to be replaced?

In order to protect district digital information and processes from disaster, another instance of a data center or “co-location” is recommended. The co-location would require network equipment, power, connectivity, security, servers, storage, software licensing, and equipment racks. Software licensing at the primary site would also be needed. The equipment would have a five year replacement cycle. Cost could exceed $250,000.

Cost estimates will be provided for priority projects only.

Submitted By:      Approved By:
________________________  _______________________
Budget Center Manager     President/Vice President

Internet address: www.napavalley.edu/apps/comm.asp?$1=262
FACILITIES IMPROVEMENT/RENOVATIONS REQUEST
PROGRAM/UNIT NAME: INFORMATION TECHNOLOGY

Accreditation reference: Facilities support student learning programs and services and improve institutional effectiveness. Physical resource planning is integrated with institutional planning.

This request is for small capital construction projects such as remodeling a small area, reconfiguring walls, building shelving, etc. Generally, projects should be under $5,000. Larger scale projects will be considered in bond construction and renovation plans.

In order to make sure that your idea meets legal requirements or is even feasible to do, we ask that you consult with the Director, Facilities Services, and address the following items on the form.

List in priority order.
Provide a description of the project that includes:
- How the project supports the mission and objectives of your program
- Project description
- Location of the proposed project
- Health and safety impacts of the project
- On-going maintenance that will be necessary

If IT is not relocated, we request that a drop-ceiling be placed in the conference room. The room is increasingly used for virtual and in-person meetings with vendors and staff. A ceiling would help normalize noise, including that generated by an air conditioner outside the room, and reduce temperature. There are no negative health and safety impacts or maintenance required. Thank you.

Cost estimates will be provided for priority projects only.

Submitted By:          Approved By:
___________________________  ___________________________
Budget Center Manager     President/Vice President

Internet address: www.napavalley.edu/apps/comm.asp?$1=262
PROFESSIONAL DEVELOPMENT NEEDS
PROGRAM/UNIT NAME: INFORMATION TECHNOLOGY

Accreditation reference: The institution provides all personnel with appropriate opportunities for continued professional development, consistent with the institutional mission and based on identified teaching and learning needs.

Please identify the professional development needs required for faculty and staff to stay current in the discipline, office technology, diversity, safety, instructional methods, and other areas. Specific training and estimated number of attendees are requested.

1. What training needs have been identified from your program review?

   Please see item 3.

2. What pedagogical training needs have been identified in your program review?

   Current and best practices in IT technology

3. What types of technology does your program use? What technology training needs have you identified?

   - Apple
     Operating systems
   - Cisco
     Networking: wired, wireless, and fiber-optic based
     Virtual private networks (vpn)
   - Datatell
     Annual technical training week
     Annual Datatell Users’ Group conference (DUG)
     California Community College Users’ Group conferences (3CDUG)
   - EMC
     Storage Area Network management
     Data management software
   - Microsoft
     Active Directory
     ASP.Net
     Exchange Server
     Info Path
     Share Point
     SQL Server
       Database Management
       Management Studio Express
       Reporting Services
Administrative Services Program Evaluation
Revised December 2007

Visual Studio
Windows
  PC Operating Systems
  Server Management
  • Integration
    Java
  • Technical writing
  • Telephony
    Phone switch operation and management
    Voice over Internet Protocol (VoIP)
  • VMWare
    Virtual server creation and management

4. What are the leading publications specific to your discipline and/or program?

Our vendor partners have web sites with valuable articles, help tools and best practices. The companies also offer manuals, magazines and classes, some of which are online.

Submitted By:    Approved By:

______________________________  ______________________________
Budget Center Manager         President/Vice President

Internet address:  www.napavalley.edu/apps/comm.asp?$1=262