

**STANDARD IIC:
RESOURCES:
TECHNOLOGY RESOURCES**

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III.C. Technology Resources

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

III.C.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.

Descriptive Summary

The College supports a wide variety of campus-wide technology services including computer labs, the College's public web site and the internal Intranet web site, printing services, graphics services, services for distance education, and network services. The campus-wide technology services are currently being functionally realigned in response to needs identified in the Accreditation Self Study of 2006 [[2006 Institutional Self Study Report in Support of Reaffirmation of Accreditation](#)].

In response to the previous self-study, the College contracted a Technology Consultant to review Campus technology support and make recommendations for improvement. The results of this review and related recommendations were presented to the College in April 2010 [[William Pritchard, Technology Consultant, "Strategic Technology Plan for Honolulu Community College," Presentation - April 29, 2010](#)]. A key recommendation was to consolidate Information Technology services for the campus. A corresponding IT Strategic Plan was also developed [[Information Technology Strategic Plan 2010-2015](#)]. Following a period of extensive campus dialog including two rounds of campus-wide Town Hall meetings [[Campus Communication](#)], the College is in the process of implementing the recommended structural realignment of the IT Strategic Plan. The College reorganization proposal is described in the Executive Summary for the Reorganization Proposal Request for University of Hawaii Honolulu Community College [[Executive Summary for the Reorganization Proposal Request University of Hawaii Honolulu Community College](#)], associated charts for the reorganization [[Charts for Reorganization](#)], and functional statements for the units of the proposed organizational structure [[Functional Statements for Reorganization](#)]. The reorganization proposal is currently in the process of review by the UHCC System and bargaining units. Any comments and concerns will be addressed and incorporated into the proposal as needed, and the reorganization is expected to be approved during spring or summer 2012. Pending final approval, the College is proceeding informally to implement the functional realignment. While not all elements of campus technology resources for student learning and institutional effectiveness are being changed, a significant portion of them are now in transition. Overall organizational changes with newly identified goals are summarized here.

Different elements of Information Technology, educational media, networking, telecommunications, desktop support, and student computer labs that were administered

by individuals working in different campus departments, now operate under one Chief Information Officer. Previously the Information Technology Center (ITC) was functionally located within the Pacific Center for Advanced Technology Training (PCATT), an organizational unit of the College that provides noncredit training in advanced technologies of interest to the local professional community. The alignment of ITC under PCATT and the existence of multiple technology support units in different academic units was confusing to many faculty and staff at the College. As part of the Campus reorganization, the CIO now reports to the VCAA instead of the PCATT Director. This realignment of the organizational reporting chain is currently pending formal University System and bargaining unit approval. This functional realignment has centralized the management of information and data communications with a clearer focus on educational effectiveness and campus efficiency.

Campus-wide technology services are now managed in the following functional areas:

1. The Information Technology Center (ITC) under the direction of the Interim CIO provides:
 - a) Network Services that include campus network and Internet connectivity both wired and wireless for students, faculty and staff.
 - b) Operations providing campus server maintenance, IT security in conjunction with the university, telecommunications with Voice-Over-IP telephony, and all network cabling plus new equipment installation including standard replacement.
 - c) User Support providing open student computer labs, computer (desktop) maintenance, classroom educational media (audiovisual) maintenance, faculty/program support, and all incident and request reporting through the new ITC Call Center.
 - d) Purchasing and Planning consolidating all IT/network connected technology purchasing and provisioning campus wide. This is designed to implement controls on technology purchases to improve technology selection for effectiveness, implement new technology campus wide, and develop a detailed budgeting model based on centralized purchasing.
 - e) The CIO is an administrative level position providing strategic planning and management as well as operational management of ITC and other elements of technology on the campus.

2. A new Academic Support Division includes the following organizational units to provide improved support for student academic success.
 - a) The Design Center includes the print shop and graphics services that were previously provided by the Educational Media Center (EMC), and the campus Web Master, who provides technical, design and content support for public campus web sites and for the internal intranet portal that provides administrative, operational, and governance support for all campus units and communities.
 - b) The Student Success unit provides student learning assistance such as access to computer labs, study rooms, make-up testing, and other learning assistance previously provided by the College Skills Center (CSC).
 - c) The Library is responsible for planning, developing and delivering a

variety of educational resources, information and learning services that are applicable across various academic programs. This includes the development of online materials for student use and instruction in the use of library material and information services and maintenance of hardware and software of systems used in performing library functions. The Library receives support for their computer resources from ITC.

- d) Policy, Planning and Institutional Research maintains the student information system, prepares management information reports, and coordinates with university Institutional Research under administrative direction.
- e) The Educational Technology unit provides Distance Education support and other instructional media support, with close coordination with and support from ITC.

This represents a very different structure for technology management and is primarily focused on improving efficiency and coordination of technology support services while designing the next stages of Internet based educational tools and services for the campus and its evolving communities. The campus reorganization of all components of information technology is a serious effort to clearly delineate the needs of the College and to create efficient procedures and new attitudes and skills among faculty and staff to meet them in a rapidly changing technology environment.

In addition to the centralized campus administration of technology services, various academic programs, such as Computing, Electronics, and Networking Technology (CENT); Communication Arts (CA); Architectural Engineering and CAD Technologies (AEC); Auto Body Repair and Painting (ABRP); Electrical Installation and Maintenance (EIMT); Refrigeration and Air Conditioning Technology (RAC); Sheet Metal and Plastics Technology (SMP); and Welding Technology (WELD), manage and maintain their technology requirements as required by the technology area of the program. The technology requirements for these disciplines are identified through the Program Review process. As these technology requirements are primarily managed internally by the programs, the focus of this study is the management of campus-wide technology services and support.

The process of Program Review has been increasingly emphasized as the means for programs and units to identify their improvement needs, including needs for technology resources. Program Review has been more clearly integrated into the College's planning and budget processes with the clear intention that Program Review is the fundamental method for programs and units to identify and obtain funding for improvement items. [[Integrated Planning, Resource Allocation, and Assessment - HCCP # 4.101](#); [Review of Established Programs - HCCP # 5.202](#)]. Additionally, the functional role of the Information Technology Center will include providing centralized procurement for information technology resources for campus-wide support services, and consultation for programs and units seeking to procure technology resources. This approach will provide oversight and support to ensure that programs and services are able to obtain the technology resources they need consistent with College and University procurement

policies.

Self Evaluation

The College meets the Standard.

Because of concerns previously identified about the structure of technology resource management, the College has initiated significant organizational changes to realign and improve delivery of technology support to the campus. Even though this reorganization is still in process, it is clear that the objective of the reorganization is to provide improved support for academic achievement on the campus.

There are some concerns that need to be resolved as the Campus Reorganization and the implementation of the IT Strategic Plan occurs. The first concern is that, the former Technology Advisory Committee (TAC), which still formally exists, has fallen into disuse. A temporary IT Working Group and subsequently a Technology Users Advisory Group (TUAG) were established in conjunction with the consulting study and development of the IT Strategic Plan. Both of these temporary groups have served their purpose. A new, informal faculty interest group has been created and has been meeting weekly with the Interim CIO in an advisory capacity. With the campus reorganization, the Interim CIO needs to reconnect with the formally established TAC. The TAC needs to review and propose changes to its charter to ensure that it is able to effectively serve in an advisory capacity to ITC.

The second concern is that the process for obtaining budget approval for replacing and upgrading computer technology related to the specific needs of an academic discipline needs to be clarified. The program review process, in which programs identify their needs for technology replacement and upgrades, is the foundation for the budget process in which program needs are ranked and prioritized for funding. ITC's role as a consultant comes into play in the procurement process when the program is preparing to submit, or has submitted, a purchase order to use allocated funds to procure equipment. Based on this year's budget process, it appears that the distinction between the budget process and the role of ITC in the procurement process is not clear to everyone. This distinction needs to be clearly stated, to ensure that academic programs that have specialized requirements for upgrading and replacing computers specific to their academic discipline continue to receive appropriate funding priority within the Program Review and Budget cycle for the Campus. The Campus procurement policy for IT is to be issued by the Chancellor's office as a formal College policy.

The third concern is that, even though we are optimistic that the current reorganization will tremendously improve the management and delivery of technology support services for the Campus, there will still be a period of transition following the formal completion of the reorganization during which the full implementation of the IT Strategic Plan is carried out. The current situation is still unsettled with many unfinished details. It is necessary to ensure that the Campus continues to be informed regarding the changes in ITC, and that the IT Strategic Plan is systematically implemented. To this end, the ITC

needs to provide Annual Reports or Program Reviews to the Campus that discuss the progress with respect to implementing the IT Strategic Plan. This annual report should also report on completion of relevant user/customer satisfaction surveys, as a means of assessing the degree to which the consolidation of technology services is achieving the major objective of improving the delivery of technology services for the Campus. This concern is being addressed with an annual IT Strategic Plan Report covering survey results on IT performance and Strategic Plan implementation, along with semi-annual strategic project presentations to the campus. The first of these will be available online in August 2012, covering all current IT projects related to strategic goals and objectives.

Actionable Improvement Plans

The College must complete the organizational restructuring of technology management for the campus. The formal approval of the Campus Reorganization, which will complete this agenda item, is expected to be obtained during spring or summer 2012.

The College must continue to implement the goals provided in the IT Strategic Plan 2010-2015. The consolidation of information technology support into one organizational unit has already been informally completed and is expected to be formally approved as part of the Campus Reorganization during spring semester. However, the IT Strategic Plan also delineates other goals including Student Success, Collaborative Decision-Making, Effective Resource Management, Assessment and Evaluation, Environmental Responsibility, Commitment to Innovation, Current Technology, and Diversity and Collaboration for the 2010-2015 time frame. These goals go beyond the scope of consolidating information technology support into one organizational unit. The ITC should report on the achievement of these goals as part of an ITC Annual Report or Program Review.

As part of implementing the IT Strategic Plan, ITC and the College must issue the College's IT Procurement policy describing the policy and process for procuring and replacing IT equipment.

The Technology Advisory Committee must review and update its charter to ensure that it is able to provide the necessary dialog between faculty, staff and the College's Technology Support organization. It should be noted that the IT Strategic Plan includes a goal to establish a Technology Governance Group to help provide oversight or feedback to campus technology practice. Inasmuch as the Campus already has a formally established governance body for this purpose, the charter for the TAC needs to reflect its proper, intended role as a governance body for technology. [[Technology Advisory Committee](#)]

In accordance with the existing IT Strategic goals pertaining to implementing new technologies to improve and streamline classroom support, the College should implement virtualized classroom support, enabling faculty and students to benefit from 24 hour, 7 days per week access to course-related materials.

III.C.1.a. Technology services, professional support, facilities, hardware, and software are designed to enhance the operation and effectiveness of the institution.

Descriptive Summary

The College provides a wide range of technology services, facilities, and support including computer labs and classrooms, audiovisual services, advanced technology training, distance education, and technology to support student disabilities services.

As a result of the Campus reorganization, the Information Technology Center (ITC) is the single organizational unit responsible for providing campus-wide technology services, support, and maintaining facilities with appropriate audiovisual equipment and computer hardware and software. ITC maintains records of computer systems and loaded software. Software is either purchased directly for small orders or is acquired through UH software licensing agreements in large quantities.

The Pacific Center for Advanced Technology Training (PCATT) offers noncredit training in advanced technologies to support the needs of the local community. PCATT determines its technology needs based on evaluation results from customers and staff members. PCATT abides by the recommendations of UH's Information Technology Services in its selection and use of application software, with some consideration to what similar offices at other community colleges in the UH system are using. [[Interview with Rose Sumajit, Interim Director for PCATT - March 2, 2012](#)]

Distance Education is offered through both Cable Television and online courses. Some Distance Education courses use both Cable Television and online technologies. The UH System has adopted the use of Sakai, an online open source learning management system, as a replacement for the previously used WebCT and Blackboard systems. The Sakai implementation in Hawaii has been locally named Laulima. Cable courses require students to be cable subscribers residing in areas that receive 'Olelo, the public access station for higher education programs. Cable classes are offered on Channel 355 from the various islands' (O'ahu, Kaua'i, Maui, Kona/Hawai'i) cable providers. Cable telecourses are filmed and produced in the Education Technology center television studio, which includes video cameras, switches, wireless microphones and receivers, lighting system, and computers with special software. Specialized nonlinear digital editing software is used for post-production. The finished product is transmitted from the UH Manoa master control server 'Olelo. For online classes, a student must have Internet access, experience with computer applications and e-mail, a UH e-mail account, and a current Web browser. This information is explained on the College's Distance Education web site. [[Distance Education](#); [Distance Education Interview](#)]

Student ACCESS provides equipment, resources, and services for students with visual, hearing, and reading disabilities. These include closed-circuit-television magnification systems, computers with assistive software, ergonomic and one-hand-use keyboards, large screen monitors, trackball mice, scanner, talking scientific calculator, Perkins Braille, Pocket Talker Pro voice amplifier, sign language, and audio cassette recorders

and players. Information about Student ACCESS services are posted on the Student ACCESS web page. Student ACCESS is identified as Disability Services on the Campus Reorganization chart. Its functions are not changed by the reorganization. [[Student ACCESS](#)]

Self Evaluation

The College meets the Standard.

Technology Support: The structure of technology support has been completely overhauled in response to the previous self-evaluation. The previous self-study found many inconsistencies and much confusion regarding which department was responsible for different aspects of technology support. Faculty and other users of technology support reported that they were not sure whom to contact for their specific technology needs, and unsure of the responsibilities of the different organizational units that provided technology support. The previous structure appeared to be unusual and unique to the College. This structure had evolved over time as the College's computer and network needs developed and grew. The different services provided by Computer Services and ITC were very confusing to faculty and staff. [[2006 Technology Resources Survey](#); [2006 Institutional Self Study Report in Support of Reaffirmation of Accreditation](#)]

Subsequent surveys conducted by ITC in fall 2009 and spring 2011 echoed the dissatisfaction with the unclear organizational structure and inconsistent delivery of technology support. In order to address the results of the previous self-evaluation regarding technology services, and to provide a more clear, consistent and uniform approach for the end users of technology on the campus, HCC embarked on a complete structural overhaul of the various departments that provided technology support. This reorganization was a complex and well-planned response to the criticism of technology support found in the last self study. [[ITC Fall 2009 Survey Results](#); [ITC Spring 2011 Survey Results](#)]

HCC hired an independent, outside consultant to evaluate how information technology was incorporated and used. Working with the consultant, HCC set out to develop a comprehensive information technology strategic plan. Developing the strategic plan was a large process with many involved. The goal of the process was to design a strategic technology plan that was: (1) aligned with the college's mission, vision and culture, (2) tied to realistic assumptions about the future, and (3) lays out specific goals. The development of the strategic plan took place over the three month period from January 2011 to March 2011. It involved over 65 people from groups including: the Technology Task Force, faculty, staff, administrators and students. Three day-long planning sessions were held, along with 10 brown bag lunch sessions open to all interested parties. Six web conferences and discussion boards were also conducted.

[[William Pritchard, Technology Consultant, "Strategic Technology Plan for Honolulu Community College," Presentation - April 29, 2010; Information Technology Strategic Plan 2010-2015](#)]

In support of its mission, Honolulu Community College will provide a positive and robust

*technology experience to students, faculty, staff and the larger community through careful planning and implementation. It will help them learn, teach, explore, collaborate, communicate and work effectively in a secure, accessible and dynamic environment. HCC will support technology training, innovation and exploration to enhance learning and the HCC experience via collaboration and sustainable practices.*¹

The result of these meetings was the formation of a comprehensive Information Technology Strategic Plan. One of the major initiatives to come from the strategic plan to address the previous issues regarding technology support is the creation of a central IT organization with a Chief Information Officer. This reorganization consolidates all information technology support under the Vice Chancellor for Academic Affairs (VCAA), in one organizational unit thus eliminating the confusion over the overlapping responsibilities and services of different organizational units. [[Information Technology Strategic Plan 2010-2015](#)].

HCC has begun implementing the strategic plan goal of consolidating technology support under one organizational unit. Currently the ITC is the sole organizational unit responsible for supporting media (audiovisual) and information technology. Computer Services has been incorporated into the ITC. ITC has been relocated from PCATT to the VCAA, and is now headed by its own administrator. This reorganization streamlines, simplifies and clearly delineates the responsibilities regarding technology support.

As part of the reorganization the Educational Media Center has been relocated to the Design Center under the new Academic Support Division. The Design Center functions are focused on printing and graphics support, coordination and production of graphics, print, and audio-visual materials, media production, and support for HCC nonacademic website design and development including the official Internet site and the internal intranet site. [[Executive Summary for the Reorganization Proposal Request University of Hawaii Honolulu Community College](#); [Charts for Reorganization](#); [Functional Statements for Reorganization](#)]

With one technology support organization, the confusion regarding technology support providers should be eliminated. ITC is responsible for technology support. In efforts to further streamline and provide a single source for technology support needs, ITC has developed a Help Desk, with one phone number now provided for all support needs. Now, instead of wondering whom to call for technology support, faculty and staff can simply call the Help Desk at extension '333'. This provides one common channel for all support problems and questions, and greatly simplifies the process of getting the technology support users need. [[ITC Help Desk Strategic Plan](#)]

The development of a Help Desk for technology support was a significant undertaking. The Help Desk Strategic Plan was developed to describe the goals and strategic objectives of the newly formed Help Desk. The stated goals of the Help Desk that should greatly enhance technology support are: (1) to provide timely computer services for the

¹ William Pritchard, Technology Consultant. "Strategic Technology Plan for Honolulu Community College." PowerPoint presentation, April 29, 2010, p.3.

entire campus, (2) to incorporate continual improvement, (3) to build a knowledge base, and (4) to provide training to faculty and staff. For computer services, the Help Desk has stated goals of responding to 90% of technology requests within 24 hours, and 100% within two working days. [[ITC Help Desk Strategic Plan](#)]

The Interim CIO has been a visible communicator regarding the changes in information technology services due to the reorganization. Faculty and staff have been informed of the creation of the Help Desk for technology support. ITC personnel have given briefings about new developments, held open meetings for the faculty and staff and updated the hard copy phone directory page that lists the guidelines for whom to call for computer assistance. ITC has set up an online site for creating and submitting “Trouble Tickets” via the web, using an open source software product named GLPI. This software product is designed for use as a free IT and Asset Management software that includes an administration interface. [[GLPI Description](#)] The HCC ITC Support web site for entering trouble tickets is a secured site and requires an authorized username and password for access. A screen capture of the interface is provided for reference. [[ITC GLPI Screen Capture](#)] The ITC web site that previously included the ITC missions and objectives, in addition to other information, has been taken off-line temporarily to be updated and has not yet been restored to service.

The Interim CIO has been implementing several new technologies on campus, and regularly sends information regarding such changes directly to the end users. [[ITC Email](#)]

While ITC is now the sole department providing information technology support, some departments with classroom computer labs have their own technology liaisons to perform day-to-day maintenance, troubleshooting, installation, and equipment procurement. Technology liaisons include faculty or staff who accept these duties in addition to their primary responsibilities, as well as staff for whom this is a primary duty.

Based on the 2006 focus-group survey of classroom/program labs, the adequacy of hardware, software, and technical support varied between units. Some departments considered their hardware and software sufficient for course assignments, but others did not have adequate resources. [[2006 Technology Focus Group Survey on Classroom Labs](#)] As of spring 2012 semester, some of the academic units reporting technology labs, including computer labs and labs supporting other technologies, include: ICS, CENT AEC, COSM, CA. Some of these labs are directly supported by ITC and some are supported by the program. Other computer labs on campus, supported by ITC include: CSC, the Native Hawaiian Lab, and the Library.

Previously there was a disparity in the support received by classroom/program labs. Some labs such as those with their own APT position rated their support as excellent while others need much more assistance. In some cases, units were not able to provide services due to insufficient support. The current status of the adequacy of support for the various labs on campus is currently unknown. A new survey is needed to identify all of the technology labs on campus and to assess the adequacy of the level of support for all labs.

Two major issues related to technology support were reported through the 2006 Technology Focus Group Survey on classroom/program labs. The first issue identified a lack of technology support personnel specifically for programs that provide College-wide services. The most recent Program Reviews for two of the organizational units that previously reported inadequate technology support now reflect that the technology support issues seem to have been resolved. The most recent Program Review conducted by the CSC, now the Student Success Center, describes a Computer Purchase Replacement Plan developed based on consultation with their own IT specialist and Campus IT specialists. This Program Review also reported that electrical upgrades needed to support additional computer requirements had been completed pursuant to the previous year's Program Review. The most recent Program Review for the Library reported that 17 computers are available for students to do research, write papers, and access the MyUH portal, Laulima and the Internet. Additionally, the Library has its own wireless network for students to access library resources and the Internet from their personal laptop computers. The Library indicated the need for additional funds to replace staff computers, printers, and to procure new ergonomic chairs for student computers. [[Annual Program Review Report for College Skills Center, 2010-2011](#); [Annual Program Review Report for Library, 2010-2011](#)]

The second issue identified by the 2006 focus-group survey related to the fact that the College's technical support is largely PC oriented. The concern was that there were no technical support personnel specializing in Macintosh computers, even though there were 150 Macintosh computers on campus. Some of the College's programs are Macintosh based, and when problems occur, the programs had to hire an outside consultant, using the programs' operating budget. [[2006 Technology Resources Survey](#)] According to the Interim CIO, ITC now requires that all new purchases of computers, whether PC or MAC, should include a minimum of a three year maintenance agreement. Because it is difficult to maintain MAC computers, it is more practical to obtain professional support from an authorized Apple service center than to provide in-house support. At the end of the original three-year maintenance agreement, a determination will be made regarding whether it is more cost effective to extend the maintenance agreement or to replace the equipment.

EMC, now the Design Center, has consistently completed program reviews including survey results of EMC services since the 2006 self-study. From the survey results provided, it is evident that personnel who have requested assistance from EMC are satisfied with EMC's services. [[Annual Program Review Report for Educational Media Center, 2010-2011](#); [Comprehensive Review for Educational Media Center, 2004-2009](#)]

Distance Education: Distance Education support is now provided by the Education Technology Center in the Academic Support Division. Distance Education assessment surveys have been performed each semester, except for Fall 2010 and Spring 2011, to assess Distance Education support. During the 2010-2011 academic year there was a different focus for assessment. The content of this survey is not specific to any particular course. The results of the Distance Education assessment surveys are posted on the HCC

Distance Education site. [[Distance Education Assessment](#)] The structure of this survey will be changed next year to reflect changes in services and technology. Distance Education will also be providing an electronic version of the standard course assessment survey instrument (Form G) used at HCC for online use. Until now, the course assessment form has only been available in hard copy. [[Distance Education Interview](#)]

Actionable Improvement Plans

ITC must complete a new survey to establish a complete inventory of technology labs on campus and determine the purpose of these labs, what type of equipment they provide, where they are located, and how they are currently supported and maintained.

Upon completion of the survey of campus labs, ITC should assess the adequacy of support for the labs identified, and recommend and implement corrective actions as needed. The results of this assessment and recommended corrective actions should be provided to the Campus as a report, ostensibly on the ITC web site, as part of ITC communication.

III.C.1.b. The institution provides quality training in the effective application of its information technology to students and personnel.

Descriptive Summary

The IT Computer Lab is the primary provider of IT training in support of Campus information technology services for students, faculty and staff. The Computer Lab offers beginning-level classes at the beginning of each fall and spring semester for a period of one to three weeks, depending on demand as indicated by registration for courses. Training is announced via email to faculty through the hcc-admin-announce mailing list, with the intention that faculty will post the information to make it available to students. The schedules for training sessions are posted and a sign up list is maintained outside the IT Computer Lab [[Student Computer Lab Training Announcements](#)]. This training is targeted toward students, but is also available to interested faculty and staff. The range of training offered during the past several years includes web browsers; the Google suite of applications including gmail, documents and calendars; Lualima, the online course ware used to support courses throughout the UH System; list servers; different versions of Microsoft applications including Excel, PowerPoint, and Word; the MyUH Portal web site used for registration, calendars, access to email, and access to Lualima; safe practices for browsing and computing; Thunderbird email; UH webmail, and training to move users of HCC email accounts to UH email accounts. The need for training is initially based on updates to existing software, migration to new software, or new software products that become widely used. Training for individuals and groups can also be requested, including training tailored to specific needs. The Computer Lab has not been performing training assessments, because the training is not intended as academic training, but agreed that user satisfaction surveys could be implemented as an assessment technique suitable to the intent of the training provided. [[Student Computer Lab IT Training and telephone discussion with Kay Grimaldi on March 2, 2012](#)]

The Native Hawaiian Center also provides a Computer Lab and related training that is available to students [[Native Hawaiian Center Computer Lab](#)]. According to the web site, applications available include word processing, spreadsheets, databases, presentation software, streaming media players, graphics software, and web design software [[Native Hawaiian Center Computer Lab Services](#)]. The Native Hawaiian Center Technical Specialist provides software training workshops for a variety of applications. Based on email discussion with the Information Technology Specialist assigned to the Native Hawaiian Center who is currently providing the training, he bases the training on applications he knows will be useful for students. He uses an evaluation sheet at the end of each presentation to determine whether the participants are satisfied with the session. [[Native Hawaiian Center IT Training](#)]

The Faculty Development Committee maintains an extensive web site with relevant and useful information for faculty. The committee also surveys faculty each semester to determine their interests and desires for training. Not much response is received, and technology training has not been requested for quite some time. [[IT Training – Faculty; Faculty Development Committee](#)]

The Staff Development Committee (SDC) strives to provide a staff development program that will enhance the professional and personal talents, skills, and competency of Civil Service and APT employees. [[Staff Development Council](#)]. The SDC's process for training is not yet as well developed as the Faculty Development Committee's process and the SDC is attempting to establish a systematic process for identifying and obtaining training for Staff. The Committee performed a survey in May 2011 to identify training needs. Training for computer applications, software and products has been identified as a need, as well as learning more about navigating the recently revised College Intranet web site [[Minutes, SSEC/SDC - October 12, 2011](#)]. As part of the effort to build a process for providing training, the SDC held an All Staff meeting in July 2011 focused on this agenda item. A survey was used to collect feedback and comments from participating staff [[APT, Civil Service, and Operations & Maintenance Meeting Evaluation Form - Friday, July 29, 2011 Session I](#)]. The SDC also compiled an activity log from their records regarding the activities that have been requested and sponsored by the Staff Development Committee, including some technology related training items. [[Staff Development Meeting & Activity Log as of 11/2/11](#)] One of the issues that has been discussed and resolved as a result of this process has been availability of funds for professional development opportunities for staff. The relevant procedures have been discussed and clarified through various venues, including the Faculty Senate Executive Committee [[Minutes, FSEC - September 2, 2011](#)]. A frustration the SDC has encountered with respect to establishing a process for identifying and procuring training has been lack of participation and support by Human Resources personnel, who are essential to the success of any effort to provide sustainable professional development for staff. In addition to the training provided through the SDC, staff may also obtain training through their departments, which provides an additional source for funding for training. The SDC would like to see more training sponsored by the SDC as a means of clearly establishing the SDC as one way for staff to obtain funding support for professional

development. The SDC has not been emphasizing internal training, such as that provided by the IT Computer Lab, because of the current need for the Computer Lab staff to support other activities and the organizational changes related to the current Campus reorganization.

In addition to the training provided by the Computer Lab and the Native Hawaiian Center, the Pacific Center for Advanced Technology Training (PCATT) provides specialized training opportunities such as the Apple Summer Institute and IT Summit each year. PCATT also provides training for a wide variety of technologies including Cisco Networking, Red Hat Linux, SUSE Linux, UNIX, and others. These training opportunities are open for faculty and staff from all of the Community Colleges in the UH Community College System, including HCC faculty and staff. Opportunities such as the Apple Summer Institute and IT Summit are targeted toward the needs of educational users including Department of Education high schools and the UHCC campuses and provided with no charge. PCATT sponsored training, such as Cisco Networking, is available to faculty and staff from all community colleges for free on a space available basis. PCATT assesses the effectiveness of all training it provides by means of user satisfaction surveys at the completion of the training. The most recent PCATT Program Review, for the 2009-2010 academic year, illustrates the range of training options PCATT provides that are potentially available to interested faculty and staff of the Community Colleges in the UHCC System. [[PCATT Program Review 2009-2010](#)] PCATT publishes a periodic catalog of the courses scheduled for the upcoming calendar quarter [PCATT Quarterly Catalog, Jan-Mar 2012]. The PCATT website also provides the schedule for current course offerings [[PCATT Course Schedule](#)].

As part of the Campus reorganization, the PCATT Director will also be assuming responsibility for Continuing Education at HCC, which consolidates the operational support for all noncredit training at HCC into one centralized location. The expectation is that this change will provide better support and coordination for Continuing Education for the College, and the opportunity to expand the types of noncredit offerings available. [[Interview with Rose Sumajit, Interim Director for PCATT - March 2, 2012](#)] The Continuing Education and Training web site provides additional information regarding the courses currently available. [[Continuing Education and Training](#)]

The Education Technology Center, in the Academic Support Division, plans, develops and delivers Distance Education support and other instructional media support. This support includes, among other things, training faculty in the use of instructional support media technologies. This training is delivered one-to-one and tailored to the interests and needs of the faculty. Distance Education assessment surveys are performed each semester to assess the support for Distance Education. The survey includes items allowing students to provide feedback regarding the technology support for Distance Education at HCC. The results of the Distance Education assessment surveys are posted on the HCC Distance Education site. The structure of this survey will be changed next year to reflect changes in services and technology. [[Distance Education Assessment](#); [Distance Education Interview](#)]

Self Evaluation

The College meets the standard, but there are areas in which improvement is needed.

A wide range of technology training is provided by the Computer Lab and topics are determined based on the technologies and software currently being used by the campus, including updating the training as software is updated. Specialized training sessions are created to support new technology, such as training that was performed during fall 2011 semester to support the transition to Voice Over IP (VOIP) Technology and to orient users regarding how to use the telephone instruments that would be provided in the transition. The campus maintains records of attendance for such training, but has not performed customer satisfaction surveys to document how well the training meets the expectations of users.

The Native Hawaiian Center Computer Lab provides training of topics of potential interest to students and has participants complete user satisfaction surveys for this training.

The Faculty Development Committee has a structured process for soliciting faculty input for professional development training that is not used extensively. The Staff Development Council is attempting to develop a structured process for providing professional development training, including technology related training, and needs to continue that process with improved support from Human Resources.

The Pacific Center for Advanced Technology Training (PCATT) provides specialized technology training that is available to all faculty and staff on a space available basis. PCATT routinely administers user satisfaction surveys to assess their training.

The Education Technology Center provides support for Distance Education courses and the design and development of instructional media at HCC. Surveys that include items related to technology support are given each semester to assess the satisfaction of students taking Distance Education courses.

Actionable Improvement Plans

The ITC Computer Lab will implement user satisfaction surveys as a means of documenting the degree to which technology training meets the needs and expectations of users. This will provide evidence of the effectiveness of the training being provided to students, faculty and staff.

The SDC must continue its efforts to establish meaningful and effective process for staff to obtain relevant professional development training.

The College HR staff must participate and provide required support for professional development training through the SDC.

The new Design Center must work with College committees to ensure that the Intranet sites for each committee are updated in a timely manner. Currently, the Intranet sites for several committees include out-of-date information, or do not include up-to-date information such as current committee assignments and current minutes.

III.C.1.c. The institution systematically plans, acquires, maintains, and upgrades or replaces technology infrastructure and equipment to meet institutional needs.

Descriptive Summary

The new organizational structure of ITC provides a clear, working structure aimed at meeting systematic planning, acquisition, maintenance and support for the technical infrastructure of the campus. The implementation of this structure makes possible the establishment of overall technology goals which will drive technology maintenance, upgrade and change as educational needs change as a partial result of technologically driven change in the communities that we support. The following goals are framework for this change:

1. To deliver services within the ITC Service Catalog in a timely fashion, including the following:
 - a) Plans, maintains, and procures computing and communications infrastructure.
 - b) Provides network architecture and design expertise.
 - c) Deploys and maintains networking equipment.
 - d) Provides data center and server operational expertise.
 - e) Deploys and maintains servers and distributed computer systems.
 - f) Provides and maintains voice and video network services.
 - g) Deploys and maintains virtual computing services.
 - h) Provides computer, server, and network software services.
 - i) Manages a campus-wide Call Center for students, faculty, and staff.
 - j) Develops standards for mobile productivity.
 - k) Develops and maintains information technology based educational support systems for classroom and online use.
 - l) Implements mobile device standards on equipment.
 - m) Provides classroom and lab computing, software and network support.
 - n) Installs and maintains the telecommunications system in coordination with the system provider.
 - o) Provides budgeting and procurement for all digital, data, network, voice, and video technology
2. To continuously update the ITC Service Catalog so that campus IT needs are met.
3. To provide training for faculty/staff wishing to upgrade their computer technology skills.
4. To develop/maintain a base level of expertise that allows common problems to be solved by all ITC personnel.
5. To develop and migrate the Campus information architecture to a Virtual Desktop Infrastructure that allows any course to have an online component that is accessible with any computing device over the Internet. The first goal of extensive virtualization and centralized management and distribution of services, software, processing resources and

storage is to alleviate the need for continuous replacement and upgrade of computing hardware. The implementation of Virtual Desktop Infrastructure breaks the link between information processing hardware and actual information processing. This reduces the need to maintain thousands of (currently over 2,000 on campus) dedicated computers while allowing end users (faculty, staff, and ultimately students) to have complete control of their ever changing needs in information processing power and storage. An additional goal is to slowly blur the boundary between institutionally provided devices for display and control of data and personal devices. This must happen at the Campus in the same way as it is already happening throughout the networked society that is coming to dominate the planet.

6. All end user IT equipment will be evaluated and replaced based on the following criteria. The evaluation of existing equipment for replacement will be completed in two ways: a) Existing equipment will be monitored via GLPI, our new equipment inventory, incident, and request system. [[GLPI Description](#); [GLPI Screen Capture](#)] This will provide data on problem reports and age. Replacement decisions will be made from that data. b) New equipment will be purchased with three year service contracts. Items will be replaced based on the proportion cost of service contract renewal against equipment replacement. If service contract renewal is greater than 50% of the replacement cost or is unavailable for the item the equipment will be replaced. The procurement policy for IT will be issued as a new policy by the Chancellor.

Self Evaluation

The College partially meets the standard.

Previous decentralized and unmanaged purchasing of technology by departments and programs produced extensive waste and, often, the purchase of inadequate or inappropriate technology to meet educational needs. In addition the lack of centralized planning did not allow the development of innovative goals in overall campus technological development. This is now being clearly addressed and corrected with effective goals and strategies.

Actionable Improvement Plans

The College must fully implement the ITC Service Catalog described above and Strategic Objectives to ensure timely delivery of services. [[ITC Strategic Objectives](#)]

In accordance with the existing IT Strategic Plan goals pertaining to implementing new technologies to improve and streamline classroom support, the College should implement virtualized classroom support, enabling faculty and students to benefit from 24 hour, 2 days per week access to course-related materials. [[Help Desk Strategic Plan](#)]

III.C.1.d. The distribution and utilization of technology resources support the development, maintenance, and enhancement of its programs and services.

Descriptive Summary

The centralization of all IT helpdesk, operations, planning and acquisition under ITC allows effective and expanded support for all educational programs and campus services. This improvement is based on the following changes:

1. Previously the establishment of specialized computer labs or classroom services were handled by faculty or one to two assigned technical staff with no coordination, the new model provides up to fourteen full time technical staff who can be assigned to projects or problems campus wide.

2. Maintenance has been a major problem with poor utilization of technical staff positions. This resulted in some programs being overstaffed for technical support while other programs and faculty in general were understaffed. This is now being corrected with a new centralized Call Center and web based inventory, incident tracking and request tracking system (see below). This allows assignment of nearly forty technicians, including student help, interns, and part time staff who can be assigned to projects or problem incidents to provide faster response to and resolution of reported problems.

3. Implementation of the GLPI open source inventory tracking, incident and request reporting system with intranet based direct web access for faculty and staff will provide a centralized management system providing extensive reporting and permanent records of all IT purchased hardware, software, incidents and history. This will allow data driven management decisions on specific system sustainability, performance and utilization. This will also allow efficient reallocation of hardware and system resources that become underutilized in their original environment but may be used for new projects and programs in other departments. [[GLPI Description](#); [GLPI Screen Capture](#)]

4. Centralized purchasing of IT resources including telecom and security appliances is designed to provide direct support to departments and programs in acquiring IT technology to meet educational goals. Proposed purchasing policy changes require all IT related procurement to begin with ITC consultation on goals, objectives, and necessary specifications for the desired educational result. This will prevent the purchase, from college general funds or grant monies, of inappropriate or poorly performing technical resources due to lack of knowledge of the rapidly changing IT infrastructure market. And, as previously stated, this also allows internal college reallocation of existing resources that may be available for new uses. It should be noted that determining academic improvement goals and requirements occurs in the program review and budget request process, which precedes the procurement phase. So, the ITC consultation described here would normally occur after the budgeting process has been completed while the program is preparing to submit purchase orders for procurement.

5. A significant component of new IT resources for the Campus is planned to be provided by virtualized IT systems and hardware. Virtualization technology is transforming all elements of the IT world by removing the link between data processing power and specific pieces of computer hardware. This has a range of very positive benefits for campus utilization of technology resources for educational programs. The primary and basic difference is in the efficiency of IT infrastructure. The standard campus (or business) server and almost all desktop computers normally operate at approximately 10% of capacity. This is not only wasteful but the unused capacity is not available to anyone else or at any other location. Physical systems in virtualized data centers operate at approximately 80% capacity and can create virtual machines, either

servers or virtual desktops, at any location with Internet connectivity to the campus virtual data center. For educational programs this allows provisioning fully-managed, personal virtual desktops for all faculty, staff and students. These are secure as they are actually stored in a fully protected data center and not on distributed machines that may be moved to any location on or off campus and may be stolen at any time. User files and content are always safe and under the control of the college IT staff preventing disastrous loss of department, program, faculty or student data. And the dog cannot eat a virtual report.

6. The evolving IT infrastructure being implemented on this campus will allow a new freedom to move the educational process of our departments and programs to an integrated physical and virtual reality. Specific options include the creation of extensive virtual environments for specific disciplines to allow project-based learning without the need to worry about expensive and quickly outdated hardware. For comprehensive community colleges offering a wide variety of technical programs, this will allow the expansion of engineering and technical simulations that can become increasingly realistic with efficient and scalable technical infrastructure common to all departments and programs. In addition, virtualized desktops for students in specific programs can be displayed on any Internet connected device creating a permanent virtual classroom environment for the duration of enrollment in the program or college. This will tremendously enhance the ability to work with new groups in target communities previously under served by the college. ITC is involved in pursuit of grants specifically targeting this development in line with College and System goals and objectives.

Self Evaluation

The College partially meets the standard.

The college has struggled with appropriate and effective technology utilization. The biological evolution of IT infrastructure in different parts of the college system could not and did not create effective technology for education. There are a number of areas that have been specifically identified as clearly inadequate:

1. Classroom technology has created a large number of classrooms with video, projectors, smart boards, Elmos and other devices but without a consolidated plan of purchase or implementation. This has resulted in differences from classroom to classroom making it very difficult for faculty to move comfortably from classroom to classroom with confidence in the technology that will be available. This needs to be corrected to make it possible to train faculty to use standard classroom technology while providing a consistent upgrade policy. Interviews suggest a significant number of faculty do not use classroom technology due to unfamiliarity with equipment in the different classrooms to which they may be assigned.

2. Unused technology stored in various rooms and classrooms around campus indicates the failure of the previous purchasing policy. This has been exacerbated by open purchasing policies which attempted to control manufacturer and model for desktop computers and laptops but which were ignored easily by departmental approval of other manufacturers and models of equipment. This has created a legacy of unhappiness among support staff, who could not support equipment that had been purchased.

Actionable Improvement Plans

The College must fully implement the ITC Service Catalog and Strategic Objectives to ensure timely delivery of services. [[ITC Services Catalog](#); ITC Strategic Objectives]

ITC must complete implementation of new IT purchasing policy in line with the goals listed above to achieve improved technology utilization and effectiveness for all disciplines, programs and departments.

In accordance with the existing IT Strategic Plan goals pertaining to implementing new technologies to improve and streamline classroom support, the College should implement virtualized classroom support, enabling faculty and students to benefit from 24 hour, 2 days per week access to course-related materials. Implementation of the IT hardware virtualization plan as part of the ITC reorganization will open technology resources to all campus faculty as workable option. This will also encourage the development of completely new programs to utilize IT technology to achieve campus educational goals. The active collaboration of departments and programs with a centralized ITC organization allow both assessment and continuous data driven analysis of the effectiveness of these tools.

III.C.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 for improvement.

Descriptive Summary

The HCC Policy document on Integrated Planning, Resource Allocation, and Assessment, HCCP 4.101 [[Integrated Planning, Resource Allocation, and Assessment - HCCP # 4.101](#)] formally establishes an integrated planning, budgeting, and assessment process for the campus. Some components of the process, such as the Implementation Plan, have been renamed to eliminate duplication and possible confusion between similar names. This policy provides a high-level description of the planning and budgeting process for the campus, including an example of the Implementation Plan document and a flow chart illustrating the Annual Budget Development process.

Instructional programs and academic support units perform Annual Program Reviews to assess performance relative to the UHCC System performance indicators. Comprehensive Program Reviews are completed at least once every five years to assess performance over several years [[Review of Established Programs - HCCP # 5.202](#)]. The UH Community College System has implemented a system wide web site for programs and student support services units at all Community Colleges to prepare and submit annual program review reports [[UHCC Annual Report of Program Data \(ARPD\)](#)]. This site was first used for reports by the College's instructional programs in 2010. In 2011,

the Student Services annual program review report has also been included on this site. The Honolulu College finalized executive summaries and reports for academic year 2011-2012 have been released for public viewing.

Of the assessment reports currently posted for academic year 2011-2012, several programs identify needs for technology-related resources including [Architectural Engineering & CAD \(AEC\)](#); [Auto Body Repair and Painting \(ABRP\)](#); [Computing, Electronics, and Networking Technology \(CENT\)](#); [Cosmetology \(COSM\)](#); [Early Childhood Education \(ECE\)](#) ; [Electrical Installation and Maintenance Technology \(EIMT\)](#); [Fashion Technology \(FT\)](#); [Human Services \(HSER\)](#); [Refrigeration & Air Conditioning Technology \(RAC\)](#); [Sheet Metal and Plastics \(SMP\)](#); and [Welding Technology \(WELD\)](#).

Annual Assessment Reports from years preceding the establishment of the system wide ARPD site are posted on the HCC Intranet web site [[Program Review](#)]. Reports posted on this site include Student Services reports for years prior to and including academic year 2009-2010; assessment reports for academic support units including Apprenticeship, College Skills Center, EMC, and the Library for years prior to and including academic year 2010-2011; and assessment reports for instructional programs and other support units such as PCATT for years prior to and including academic year 2008-2009.

The assessment reports posted for academic year 2010-2011 includes reports by the Apprenticeship program, College Skills Center, EMC, and the Library. The College Skills Center and EMC both included results of assessment surveys performed for their services. Both the College Skills Center and the Library included action plans that identified needs for technology resource improvements. The EMC report did not provide an Action Plan. The Apprenticeship report included an action plan that indicated a need for updating equipment, which includes technology resources related to the hard trades supported by Apprenticeship.

For the current year, each organizational division has generated budget requests for fiscal year 2013 based on the items identified in the current annual program review reports. The majority, but not all, of the budget requests have been posted on the Campus intranet web site for review by the members of the governance committees that have been ranking the requests. The reason that some budget proposals are not posted is because not all of the proposals were available at the time the VCAS made the information available for publication and the page has not been updated since the initial posting. This is the first year that this budget request form has been used. The form itself is comprehensive and designed to include review and comment by entities affected by the budget proposal. [[Planning Council Budget Information](#)]

Once the budget requests have been submitted, the College budget review process calls for the budget requests to be ranked by various governance committees including the Faculty Senate Executive Committee (FSEC), Staff Senate Executive Committee (SSEC), and Planning Council (PC). The FSEC has posted data related to the first round of the ranking process of these requests [[FSEC Budget Rankings - February 24, 2012](#)].

Upon completion of rankings by these governance committees, the Planning Council will review the rankings and provide recommendations to the Chancellor regarding funding priorities. The Chancellor makes the final determination regarding funding priorities. If the Chancellor's decision is different from the recommendations of the Planning Council, the Chancellor must provide a written explanation for the changes made.

Self Evaluation

The College partially meets the Standard.

There is an established budgeting and planning process that integrates technology resource planning with institutional planning. The budget process has also been modified to ensure that the needs identified through the program review process are being ranked and prioritized for expenditure of campus funds.

The budget process is evolving on a year-to-year basis. There are some concerns about the budget process, based on this year's progress, that reflect the unfinished nature of this developing process. As an example, the budget requests for the Tech II Division were assembled by the Tech II Dean. Instead of creating one budget request for each item identified on the program review reports for Tech II, the Dean chose to bundle multiple items together. Consequently, only 10 budget requests were submitted for Tech II as compared to 22 budget requests for Tech I. The Tech I Dean also prepared the budget requests on behalf of the Tech I programs. The instructions provided by the VCAS to the governance committees for ranking were that no more than 1/3 of the budget requests could be ranked as high priority, and the remaining items were to be split between rankings of medium priority and low priority. The ramification of bundling the budget requests, as the Tech II Dean did, is that the governance committees then could not rank each item individually based on need/importance. As an example, the sole budget item for the MELE program (TII-10) included funding for positions as well as operating budget. In order to give a high ranking to one part of the budget request, the entire budget request had to be ranked high. The end result of this bundling was that it was not possible to rank the individual requests independently.

A related concern about the process for submitting budget requests is that the program or organizational unit submitting the request has no place to identify its own ranking for the priority of the item. As a result, neither the Administrative Reviewers nor the governing bodies performing the ranking know how important the request is to the affected program. Consequently, there is nothing in the ranking process, as currently defined, that verifies the overall ranking obtained through the review process corresponds to the internal priorities of the program or department that is requesting the funding.

Another example of a problem with this year's budget process is budget request TII-5, a request for classroom computers for the CENT program in Tech II. On this particular budget request, the review comment from the Vice Chancellor for Administrative Services (VCAS) was "Difficult to comment on without Academic side comment. Also,

purchases such as this were determined to go through TUAG. TUAG has not provided feedback on process, criteria, etc. to determine pc acquisition."

This comment is a problem because the TUAG does not currently exist, the TUAG was not a governance committee with this kind of review authority, and the Proposed Workstation Replacement Policy the TUAG developed specifically noted that not all computers would be part of the proposed replacement pool and some programs, such as CENT, would conceivably continue to procure and install their own computers. The TUAG proposed policy does reference a central IT management authority, presumably ITC. There is nothing in the Proposed Workstation Replacement Policy that relates to the process for budget requests and ranking such requests for allocation of budget funds. [[TUAG Proposed Workstation Replacement Policy](#)]

What also remains unclear, is how systematically the College assesses the effectiveness of the use of its technology resources, and how effective the integrated planning process is with respect to providing support to those instructional programs and academic support units that have identified technology resources related needs. Some programs report in their annual reviews that they have received funding for resources and whether they have carryover items from previous years, but not all programs appear to be consistently reporting regarding their success in obtaining the funding requested from the previous year.

A possible way to assess the effectiveness of the use of technology resources could be (ITC) establishing a comprehensive inventory of the technology resources on campus, and performing surveys to determine to what extent various resources are being used. For resources that are used infrequently, or not used at all, determine the reasons for infrequent use. Possible reasons for infrequent use might be that faculty do not know how to use the resource, faculty don't know how the resource might be useful in their courses, or even that the resource has fallen into disuse because it no longer fits the curriculum. The data collected by such a survey could also be used to establish benchmarks to be used for identifying resource utilization levels as high, moderate, or low. The benchmarks and utilization levels could be used for long term tracking and evaluation of the effectiveness of resource utilization.

A possible way to assess how effectively the planning process is providing support to programs or units that have identified technology resource related needs would be to perform an audit of program reviews and budget requests each year to determine what percentage of items identified through program reviews, and subsequently submitted as budget requests, were funded. For items that were funded, check with the programs to verify they received the funds and were able to procure the requested technology. For items that were not funded, examine the program reviews and budget requests for following years to determine whether the needs were still being reported by the program as a continuing need and whether new budget requests were submitted, or whether the previous year's budget requests were carried over. Additionally, surveying programs to find out whether they were successful in getting their highest priority items funded would provide feedback regarding the satisfaction of the programs with the funding process.

Actionable Improvement Plans

All support units should perform annual reviews and provide annual reports that include Action Plans and discussion of areas or plans for improvement, including technology needs when appropriate.

Annual program review reports for instructional units should report on success in obtaining funding for procurement items identified on the previous year's review report, so it is possible to clearly identify which needs have been fulfilled and which have not.

The HCC Intranet web site, as a minimum, should provide a single location that provides links to ALL program review reports, including the reports posted on the Intranet, the reports posted on the UHCC System ARPD web site, and reports for any units that might also post their reports at separate locations. Access to these reports is currently fragmented and not particularly helpful.

The ITC should provide a comprehensive annual report on the status of Information Technology support at the College, including technology upgrades and improvements accomplished as well as continuing plans for technology upgrades and improvements. These reports should include a status report on the identification and fulfillment of technology needs of instructional programs and academic support units, if appropriate.

The budget request form should include an indication of the originating program's priority ranking (high, medium or low or a relative ranking number) for each request, as a means of ensuring that the governing bodies know how the programs internally rank their own requests.

Budget requests should be initiated by the originating program or organizational unit, so that each program is able to indicate its own priority (high, medium, low or a relative ranking number) for each request. Once the program has initiated the budget request, the divisional dean may assist in completing any additional information that might be needed, such as identification of other programs affected.

The review process for budget requests needs to provide sufficient information to governance bodies, such as the FSEC, SSEC, Kupa Ku Wai (KKW), ASUH, and the Planning Council, so they are able to understand and evaluate the requests being reviewed and ranked for distribution of funds. The information that should be available to the governing bodies include the program or unit annual program review and the budget request forms, including the originator's own ranking for the priority of the item.

Governing bodies should NOT rank budget requests for which they have not received sufficient information for the purposes of ranking. They should indicate the item was not ranked because insufficient supporting information was provided.

Administration should provide annual reports detailing actual distribution of funds in response to the annual program review and budget review process, so it's easy to determine which budget requests were funded and which were not.

Administration should assess the effectiveness of the budget process in meeting the needs of programs through the use of surveys to determine the degree to which programs and organizational units are satisfied that they were able to obtain funding for their most important requests through the annual budget process. As an additional measure of effectiveness, administration could audit and report on the outcomes of the budget process with regard to reporting the percentage of items that were funded according to organizational unit.

ITC and responsible programs should develop a comprehensive inventory of technology resources. Such an inventory might be initiated by using a survey of programs and organizational units to identify where the resources are located.

ITC should assess the usage of technology resources to determine how frequently such resources are being used. This might be included as part of an initial survey, as suggested above, to identify the resources and their location. Another option might be to perform usage assessment surveys incrementally based by location and the expected users based on the location of the resources.

III.C Supporting Evidence

[2006 Institutional Self Study Report in Support of Reaffirmation of Accreditation](#)

[2006 Technology Focus Group Survey on Classroom Labs](#)

[2006 Technology Resources Survey](#)

[2010 Instructional Annual Report of Program Data \(ARPD\)](#)

[Annual Assessment Reports Academic Support Units](#)

[Annual Program Review Report for Architectural, Engineering and CAD Technologies 2011](#)

[Annual Program Review Report for Auto Body Repair and Painting 2011](#)

[Annual Program Review Report for Communication and Arts 2011](#)

[Annual Program Review Report Computing, Electronics, and Networking Technology 2011](#)

[Annual Program Review Report for Cosmetology \(COSM\) 2011](#)

[Annual Program Review Report for Early Childhood Education \(ECE\) 2011](#)

[Annual Program Review Report for Electrical Installation and Maintenance \(EIMT\) 2011](#)

[Annual Program Review Report for Fashion Technology \(FT\) 2011](#)

[Annual Program Review Report for Apprenticeship Training, 2010-2011](#)

[Annual Program Review Report for College Skills Center \(CSC\), 2010-2011](#)

[Annual Program Review Report for Educational Media Center \(EMC\), 2010-2011](#)

[Annual Program Review Report for Library, 2010-2011](#)

[Annual Program Review Report for Human Services \(HSER\) 2011](#)

[Annual Program Review Report for Refrigeration and Air Conditioning Technology \(RAC\) 2011](#)

[Annual Program Review Report Sheet Metal and Plastics Technology \(SMP\) 2011](#)

[Annual Program Review Report for Welding Technology \(WELD\) 2011](#)

[Charts for Reorganization](#)

[Comprehensive Review for Educational Media Center \(EMC\), 2004-2009](#)

[Continuing Education and Training](#)

[Distance Education Assessment](#)

[Distance Education](#)

[Distance Education Interview](#)

[Executive Summary for the Reorganization Proposal Request University of Hawaii
Honolulu Community College](#)

[Faculty Development Committee](#)

[FSEC Budget Rankings - February 24, 2012](#)

[Minutes, FSEC - September 2, 2011](#)

[Functional Statements for Reorganization](#)

[GLPI Description](#)

[GLPI Screen Capture](#)

[Planning Council Budget Information](#)

[Integrated Planning, Resource Allocation, and Assessment - HCCP # 4.101](#)

[Review of Established Programs - HCCP # 5.202](#)

[Program Review](#)

[Information Technology Strategic Plan 2010-2015](#)

ITC 2012 Strategic Plan Project Status Report (pending)

ITC 2012 Strategic Plan Implementation Report (pending)

[ITC Services Catalog](#)

[Interview with Rose Sumajit, Interim Director for PCATT - March 2, 2012](#)

[Campus Communication](#)

[IT Training - Faculty, email from Jerry Cerny, March 1, 2012](#)

[ITC Email](#)

[ITC Fall 2009 Survey Results](#)

[Help Desk Strategic Plan](#)

[ITC Spring 2011 Survey Results](#)

[Native Hawaiian Center Computer Lab Services](#)

[Native Hawaiian Center Computer Lab](#)

[Native Hawaiian Center IT Training](#)

[PCATT Course Schedule](#)

[PCATT Program Review 2009-2010](#)

[PCATT Quarterly Catalog, Jan-Mar 2012 \(Hard Copy\)](#)

[Minutes, Planning Council Budget Planning Subcommittee - May 12, 2011](#)

[Staff Development Meeting & Activity Log as of 11/2/11](#)

[SSEC/SDC meeting minutes, Oct 12, 2011](#)

[Staff Development Council](#)

[Staff Meeting Evaluation Results for July 29, 2011 meeting](#)

[Student ACCESS](#)

[Student Computer Lab and IT Training at HCC, provided by Kay Grimaldi](#)

[Student Computer Lab IT Training, provided by Kay Grimaldi. Includes responses to questions sent by email and added notes per telephone discussion on March 2, 2012](#)

[Student Computer Lab Training Announcements](#)

[Tech II Budget Proposal and Request Form \(Replacement Computers for CENT\)](#)

[Technology Advisory Committee](#)

[TUAG Proposed Workstation Replacement Policy](#)

[UHCC Annual Report of Program Data \(ARPD\)](#)

[UHCC Annual Report of Program Data \(ARPD\)](#)

[William Pritchard, Technology Consultant, "Strategic Technology Plan for Honolulu Community College," Presentation - April 29, 2010](#)