

**Ohlone College Accreditation Narrative
Standard IIC – Technology Resources**

DRAFT

C. Technology Resources

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

IIC1. *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.*

IIC1a. *Technology services, professional support, facilities, hardware, and software are designed to enhance the operation and effectiveness of the institution.*

DESCRIPTIVE SUMMARY

The Information Technology (IT) department of Ohlone College serves the faculty, staff, and students through a series of services that includes: administrative and instructional technology support; Information Technology infrastructure planning; Information Systems support for as the Colleague ERP system and 3rd party integrated computer systems (e.g., Timekeeper, Voyager, SARS, WebCT, etc.); telecommunication and networking support; instructional and classroom technology support; desktop technology support multiple platforms such as PC, Mac, and Linux in computer labs and administrative offices; wireless network and internet access across the campus.

The mission of IT department is to provide quality information technology (IT) services and solutions to faculty, staff, and students, by successfully aligning college and technology objectives through collaboration with the campus constituencies, in order to provide the most strategic solutions that facilitate and improve efficiency and effectiveness of the teaching and learning processes of the campus communities.

In the District Reorganization Plan 2005-2006, the IT Department was reorganized and the position of Associate Vice President of Information Technology (AVP-IT) was created. Under the reorganization plan, the AVP-IT is responsible for providing technology leadership to both Administrative and Instructional areas of the College. In this role one of the primary tasks assigned to the AVP-IT is to work collaboratively with faculty and staff in the development of a multi-year technology master plan for the college. Additional areas of focused attention for the AVP-IT are instructional and administrative technology planning for the Newark Center for Health, Science, and Technology (NCHST), and the new Student Services building.

The AVP-IT is responsible for providing instructional technology leadership. Working with the College's newly formed Instructional Technology Advisory Committee (ITAC) and Administrative Technology Advisory Committee (ATAC) the AVP-IT develops technology strategies to meet the college's goals and objectives. A primary objective for the for the AVP-IT is to collaboratively champions technologies, methodologies, and processes that support the Learning College Model and improves the effectiveness and efficiencies of the learning environment.

The IT department provides a wide range of technical and user support services to Ohlone's staff, faculty and students. The department is organized into five units: Applications Systems Support, System Administration Support, Network Operations Support, Desktop & Computer Lab Support, and newly added under the District Reorganization Plan, Instructional Technology Support, and MIS Reporting. Essentially these service areas provide support for the College's ERP application, Federal and State Reporting, voice and data wide-area network, 1800 computer workstations, administrative applications, and the WebCT online course management system. Additionally the IT department is charged with infrastructure planning for the implementation and operation of administrative and instructional technologies to support the Fremont and Newark campuses. What follows is a brief description of the scope of each of the IT sub-units:

Applications Systems Support: This unit is the Information Systems (IS) arm of the Information Technology department. As such, the group provides application development and system maintenance support services, as well as project management for the Datatel Colleague ERP application and the other IS applications used to support instructional and administrative functions of the college.

Systems Administration Support: Maintains and supports the computing operations center that houses the College enterprise servers and applications; provides application and user administration support (e.g., application integration, account creation); support administrative and instructional applications (e.g., email, security, wireless, and Web Hosts); installation and maintenance of operating systems, allocation of storage space, managing and tuning systems to assure an efficient and reliable operating environment; provides nightly backup and recovery services to assure that the operating environment can be restored in the event of a disaster.

Network Operation Support: Provides infrastructure and support for the College's data network, serving all desktop clients and host servers for the District, offices, classrooms and labs; support for College's telecommunications systems including telephone lines, units, PBX switch, and voicemail, plus special-purpose lines dedicated to video-conferencing. This includes planning and installing and maintaining all network wiring and equipment to ensure the integrity of the voice communications and data network requirements of the Districts' wide-area-network.

Desktop/Computer Lab Support: Provides technical support for personal computing technology throughout the college; set-up new and reassigning computer workstations, delivering and installing computer systems; install and maintain functionality of software packages such as; web browsers, word-processors, spreadsheets, presentation, calendar applications, databases, anti-virus, e-mail clients, instructional/academic applications for administrative offices, classrooms and instructional labs; : manage the computer assets of the College, manage warranty repair process, negotiate and manage individual and site licenses for supported software, update software packages with new releases as required. The support includes network connectivity and communication, software installation, assistance, and troubleshooting, system recoveries, and printing. This unit also operates a college-wide Help Desk to facilitate technology-related problem determination and resolution for all supported systems.

Instructional Technology Support: Provides support to faculty and students for the Colleges' Distance Learning program using WebCT. This includes WebCT user administration, course design and integration. Additionally this unit provides support to faculty in integrating technology into the classroom. This includes training and consulting on pedagogy, technology, and methodologies to support faculty and students. (See 2005-2006 Distance Education Program Review for details more information on this program area).

SELF EVALUATION

Strategy, Plans and Budgeting

Feedback received through college-wide forums, faculty, staff, and student focus groups, and responses to campus climate surveys reveal significant inconsistencies in the IT department ability to fulfill its mission to provide quality IT services and solutions to faculty, staff, and students. Synthesis of the available information suggests the reasons for this include dramatic changes to Ohlone's organizational context (i.e., reorganization, staff reductions, budgetary rollbacks, etc.) over the past three to five years. Additionally IT department leadership has experienced fluctuations with changes in the personnel who provide vision for technology and the role of the IT department.

The current strategy for IT is to perform reactive technology-related services in response to customer requests to the best of their ability, given resource and budgetary constraints. This current operational posture reflects a reactive "Utility" model of IT service delivery rather than a mission driven mission driven strategy for service delivery. The result is a lack of formal planning and definition for what the IT department seeks to accomplish over time. Additionally, IT services provided are not clearly defined or communicated to the campus community. As a result of its uncoordinated reactive approach to meeting the technology needs of the college, the IT staff work frantically, yet make little progress on address key institutional technology resource needs.

Budgeting for information technology is not performed in comprehensive manner across the campus in connection with an overall Information Technology strategy. The budgeting process for information technology is an incremental process, whereby budget adjustments are made by independent justification for new financial outlays. Campus departments may also allocate portions budgeted moneys for information technology, independent of campus-wide IT initiatives. The result of this approach to technology resource budget is a wide disparity the IT platforms, tools used throughout the institution. The corollary effect of this allocation method, is a resulting strain on the IT department's ability to provide consistent levels of support.

Organizational Structure, Culture and Management Processes

The IT department is aligned according to a traditional IT stovepipe or silo organizational model, separated into five units: Applications Systems Support, System Administration Support, Network Operations Support, Desktop & Computer Lab Support, and Instructional Technology Support. These units operate independently of one another and coordination between the units is limited.

The traditional IT organizational alignment, the utility service model orientation, and the lack of strategic focus have prevented the department from effectively achieving a customer focus. The IT structure, culture and management processes still contain vestiges of past management practices. It is only recently, with a change in IT leadership, that there has been an opportunity

and freedom to evolve into more efficient and effective modes of operation. It should be noted that there is common recognition by IT staff of the organizational impacts caused by the limitations of previous management practices. However, while this level of recognition does exist, IT staff's lingering mistrust of management in general continues to slow the rate of progress toward change. Nonetheless real progress to developing a new culture within the department is beginning to take hold. With most things affecting the IT department remaining the same, this change seems to be driven primarily by two factors, one the new IT leadership, and secondly the infusion of fresh perspectives and positive attitudes toward the work environment by new unit members who are weighed down with the legacy of the previous IT culture.

IT Staff

The IT department is currently funded for 30.5 FTE staff members. Current staffing level is at 84% or 25.5 FTE. The average staff member tenure is 15 years. However this average is skewed by two staff members with over 30 years of service. Factoring out these extremes the resulting average tenure is 7 years.

As was noted earlier in this report the IT department is organized around a traditional IT organization structure which is best described as silo or stovepipe. In this configuration individual staff members have skills in one technology area and operate as functional specialist. The problem with this orientation is that staff members often don't see beyond their own functional expertise to the bigger picture view that multiple technology expertise is required to support our integrated IT environment. The current IT staffing orientation contributes to high levels of inefficiencies as most technology issues are handled serially rather than holistically.

The current IT staffing configuration is a result of several factors: lack of a focused IT department mission and strategy, current CSEA orientation, and staff member comfort zone. The College has recently embarked on a "New Ways to Work" initiative. Staffing plans developed under this initiative will increase job alignment and staffing efficiencies through broader job configuration. The IT department is currently developing a staffing plan in alignment with this new initiative. This plan will address the IT staffing inefficiencies associated with current staffing structure.

IT Role	Funded Staffing	Current Staffing	Staffing Level
Management	3	3	100%
Administration	1	1	100%
Application Support/MIS	6	5	83%
System Support	3	1	33%
Network Support	3	2	66%
Instructional Tech Support	2	2	100%
Desktop/Lab Support	12	11	92%
Title III Support	.5	.5	100%

IT Staffing Tenure

0 – 1 Year	2
3 – 5 Years	7
5 – 10 Years	12
10 + Years	5
AVG.	9.1 years

Service Delivery Policies, Standards, and Management

In the mode in which the IT department operates today, few service levels are established between IT and user groups. Additionally no consistent methodology is employed for project prioritization or expectation management when projects or services may be delivered. Service delivery is often based upon organization hierarchy and individual relationships rather than an institutional service delivery strategy

Information Technology Infrastructure

The current Ohlone IT infrastructure is not based upon an enterprise information technology architecture model. A review of the college’s IT infrastructure acquisition history reveals that most of the technologies and systems in place grew organically in response to the needs of individuals departments. As a result technology islands exist with little or no integration of user applications and data. Common negative effects include: redundant processes and systems, poor data quality, and increased costs of maintaining poorly leverage infrastructure.

Of the information technology that does exist, 90% of it is past its life-cycle and requires constant maintenance and monitoring to keep function. Recent major component failures of student and business IT infrastructure highlight the vulnerability of campus operations. Additionally the college does not have an up-to-date IT Business Continuity Plan in the event of a major systems failure.

PLANNING AGENDA

Technology Planning – Complete the five-year Technology Master that was commissioned by College Governance Groups.

Work with the CSEA to approve and implement the New Ways to Work IT staff model.

Implement following technology upgrades:

- Colleague R18 upgrade
- Network Infrastructure upgrade
- Server Consolidation project

III C1b. The institution provides quality training in the effective application of its information technology to students and personnel.

DESCRIPTIVE SUMMARY

In 2005 Ohlone College was awarded a Title III Grant to improve institutional effectiveness. One of the primary objectives stated in the Grant proposal was to “adopt a new Learning College model leading to widespread institutional reform.” A key development strategy for accomplishing this objective was the adoption of active and collaborative learning methodologies. The Grant also include the specific goal of improving student, faculty, and administrator use of ERP data for decision making

During the 2006-2007 academic year the College has made significant progress in implementing the Learning College Model component of its Title III Grant project as can be seen in the table below:

CDP Related Goals	Measurable Objectives	Yr.1 05- 06	Yr.2 06- 07
Develop across the curriculum teaching methods and technologies that hold the most promise to improve success of under prepared students	1.1 Increase the number of full-time faculty trained in active and collaborative learning methods from 5% to 75% by end of Spring 2010 (Year Five) compared to initial baseline Year 1 – 5% to 20% Year 2 – 20% to 40%	A	A
	1.2 Increase the number of faculty trained in active/collaborative learning methodologies from 20% in 2005 to 40% by 9/07 Year 1 – 20% to 40% Year 2 – 40% to 60%	A	A
	1.3 Achieve engagement of 100% of full-time faculty in new learning methods and systems by end of Spring 2010 (Year Five) Year 1 - Faculty mentors 0 to 8 12 Improvement Projects approved & scheduled Year 2 – Faculty mentors 8 to 16 12 Improvement projects implemented 16 Improvement projects approved & scheduled	A A	IP A A
	1.4 Achieve engagement of 15% of part-time faculty in new learning methods and systems by end of Spring 2010 (Year Five)		

In addition to the Title III activity, the Ohlone College library has developed an Information Competency requirement for students. In 2004-2005 these requirements became a graduation

requirement for AA/AS degrees issued by the institution. This requirement is Ohlone's way of ensuring that students know how to locate and use information effectively and ethically in the Internet age.

Additionally Ohlone College meets this standard by the student support services provided in the Instructional Computer labs in Hyman Hall, the Learning Resource Center and other computer labs throughout the campus. College instructional support staff provide one-on-one consultation when students have any computer related questions, such as school presentation projects, online searching, online classes, online registration and data retrieval and transferring, data conversion and printing, etc. Tutors are hired and trained to help students taking computer science classes and multimedia courses.

SELF EVALUATION

Although the College has made substantial progress in demonstrating compliance with this standard, there is still opportunity for improvement. While the aforementioned data reveals specific examples of faculty and student activities that demonstrate how the College provides effective training IT-related training to these constituencies, the IT-related training of classified staff has room for improvement.

A recent survey of the IT classified members conducted by the College' HR department revealed a perception among IT staff member of training inequities especially when compared to opportunities for training available to faculty members. Follow-up discussions with IT staff members about their survey responses revealed that their perceptions of inequities was caused more by the impact of attending training than by the lack of training opportunities. More specifically IT staff commented that they felt penalized when they did attend training because while they are participating in training their work doesn't get back-filled. Thus when they return from training their workload has increased, thus IT staff feel a disincentive to attend available training.

As a result of the issues associated with attending training, IT staff often foregoes formatted training. However still recognizing the need for some sort of training, technology support staff resort to learning these new skills on the job by trial and error and reading technical manuals. This is a very painful and inefficient way to stay up with technology.

IT staff trained in the latest technologies and with knowledge of college operations are essential to effectively applying information technology to meeting the needs of students and faculty.

PLANNING AGENDA

Develop and implement individual staff specific training development plans to address staff training needs.

Work with the CSEA and the HR department to implement Classified Flex Program. This program will provide the incentives and back-fill resources needed to encourage classified IT staff to take advantage of available training opportunities.

III C1c. The institution systematically plans, acquires, maintains, and upgrades or replaces technology infrastructure and equipment to meet institutional needs.

DESCRIPTIVE SUMMARY

The current Ohlone IT infrastructure is not based upon an enterprise information technology architecture model. A review of the college's IT infrastructure acquisition history reveals that most of the technologies and systems in place grew organically in response to the needs of individuals departments. As a result technology islands exist with little or no integration of user applications and data. Common negative effects include: redundant processes and systems, poor data quality, and increased costs of maintaining poorly leverage infrastructure.

Of the information technology that does exist, 90% of it is past its life-cycle and requires constant maintenance and monitoring to keep function. Recent major component failures of student and business IT infrastructure highlight the vulnerability of campus operations. Additionally the college does not have an up-to-date IT Business Continuity Plan in the event of a major systems failure.

Like many colleges Ohlone College has worked under an informal Computer Replacement Plan that was driven by the budget availability. Wherein each department/division used their individual funds and prioritized the order and timing for computer replacements within their respective areas based upon their unique needs and available funds. Occasionally there are additional funds that are made available by the appropriate vice president to cover unique situations, such as new faculty or staff hires. Furthermore academic computer labs/classrooms are often funded by categorical or grant programs such: VTEA, instructional equipment money, TTIP, or general funds, depending on availability.

SELF EVALUATION

The College recognizes that its current approach to technology planning, acquisition and maintenance does not fully comply with this standard. To address this deficiency the college has charged the AVP-IT the task of facilitating a task force to develop a five-year Technology Master Plan. Additionally to ensure a process of on-going review, prioritization, and budget recommendation of instructional and administrative technology needs, the college has charged the AVP-IT to implement two technology shared governance groups: ITAC – Instructional Technology Advisory Committee, and ATAC – Administrative Technology Advisory Committee.

Although these two groups were proposed and formed at the end of the 2005-2006 academic year, they didn't start meeting until mid-way through the fall 2006 semester, due to scheduling conflicts of the AVP-IT. This delayed start impacted the ability of ITAC and ATAC to influence the technology planning process as much as was anticipated when they were formed.

The concept of a shared governance approach to institutional technology decision making is sound and been demonstrated to be effective for other institutions. Furthermore feedback from faculty and staff focus groups, program review recommendations, and campus surveys reveal the interest of the institution to participate in the level of decision making.

PLANNING AGENDA

Complete the Technology Master Plan and present Board for Approval after review and consultation with campus shared governance groups.

Implement regular and effective meetings of ITAC and ATAC

Develop a Technology Life-cycle process for all classroom, faculty, staff, and infrastructure technologies.

Develop technology funding strategies that will ensure a sustainable technology infrastructure.

IIIC1d. *The distribution and utilization of technology resources support the development, maintenance, and enhancement of its programs and services.*

DESCRIPTIVE SUMMARY

The IT department is organized around a traditional IT organization structure which is best described as silo or stovepipe. In this configuration individual staff members have skills in one technology area and operate as functional specialist. The problem with this orientation is that staff members often don't see beyond their own functional expertise to the bigger picture view that multiple technology expertise is required to support our integrated IT environment. The current IT staffing orientation contributes to high levels of inefficiencies as most technology issues are handled in isolated fashion rather than holistically.

The current IT alignment of staff to support technology resources does not support the view of the technology resources as strategic to the mission of the college. Of the department's 30.5 FTE only 20% or 5 staff members are primarily assigned to supporting the enterprise applications and systems. Currently the lion's share of the IT staff is focusing on operational vs. strategic systems. To achieve the full value and effectiveness of our IT infrastructure the current staffing alignment needs to be re-configured with emphasis on strategic systems and initiatives.

The current IT staffing configuration is a result of several factors: lack of a focused IT department mission and strategy, current CSEA orientation, and staff member comfort zone. The College has recently embarked on a "New Ways to Work" initiative. Staffing plans developed under this initiative will increase job alignment and staffing efficiencies through broader job configuration. While the IT department has submitted its plan to the CSEA and HR department, the timeline and process for approval and implementation are unclear.

SELF EVALUATION

A review of the IT activities of the college since the last Accreditation visit shows significant progress. However, this progress still falls short of compliance with this standard. The College's current technology distribution and utilization model does not reflect an enterprise approach. This factor is significant because the college has expressed its intention to move to high-integrated technology environment. In this new environment faculty student, and staff access to and reliance on technology increases dramatically.

While the College recognizes the important role that technology resources can have on the teaching and learning process, it is also critical to recognize IT staff as a critical IT resource that

needs to be distributed and utilized effectively to support the development, maintenance, and enhancement of its programs and services.

PLANNING AGENDA

Work with ITAC, ATAC and the IT staff to develop an IT Enterprise Architecture Plan for the College in alignment with the Technology Master Plan.

IIIC2. 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

In 2006, a process was initiated to develop a master plan specific to technology. The college recognizes that the purpose of technology strategic planning is to align the framework of campus technology with college goals, directions, and priorities and furthermore to bring about an ongoing process that will continually assess the relationship between these elements. The process is an endeavor to identify how we use technology at Ohlone College, how we wish to use it and, lastly, how to make a successful transition from one to the other. The scope of the plan is not limited to the Information Technology department. The scope is college-wide, with a particular focus on student needs.

To facilitate the development of the college technology strategic plan, the AVP-IT was charged with forming the Technology Master Plan (TMP) task force. This task force is responsible for guiding the Ohlone College's Information Technology Strategic Planning process. This group's charge is to define a vision, establish goals, and develop a plan that will result in the blueprint for information technology implementation and sustainability. Once developed and approved by the Board of Trustees, responsibility for overseeing the implementation of the TMP will rest with the AVP-IT and the College's two technology committees: the Instructional Technology Advisory Committee (ITAC), and the Administrative Technology Advisory Committee (ATAC).

SELF EVALUATION

While the Technology Master Plan Task Force began its work in the fall of 2006, it got off to a late and slow start. This delay in the planning process was due to scheduling and resource constraints of the AVP-IT. A review of the efforts of this group to date reveals the active participation of a small but dedicated group of faculty and staff.

It was the goal of the College for the Technology Master Plan to be reviewed through the various shared governance groups and presented to the Board of Trustees before the end of the Spring 2007 semester, regrettably this was not achieved.

PLANNING AGENDA

Complete the Technology Master Plan and review through the College's shared governance groups.