



ANTELOPE VALLEY COLLEGE

**COMPUTER AND INFORMATION TECHNOLOGY PLAN
2007-2010**

Antelope Valley College

COMPUTER AND INFORMATION TECHNOLOGY PLAN 2007-2010

I. Background

“The mission of the Antelope Valley Community College District is to serve the community by placing student success and student-centered learning as our number one priority through higher educational standards and innovative programs and services in a professional, team-driven environment.”

*Antelope Valley College Catalog 2007-2008
Mission, page 8, paragraph 1*

This Computer and Information Technology Plan is derived from and supports the goals and information technology needs described in the AVC Educational Master Plan, updated in August 2007.

II. Development and Update of the Computer and Information Technology Plan

The Information Technology (IT) Committee¹, a participatory governance committee, has the broad responsibility of developing information technology policy and direction for the district in support of the institutional mission and vision. Therefore the IT Committee initially prepared the district’s Computer and Information Technology Plan, in accordance with requirements from the California Community Colleges’ System Office, for consideration by the Strategic Planning and Budget Council.

A small working group of the IT Committee completed the first draft of the Computer and Information Technology Plan which was then considered by the full IT Committee as part of the committee’s FY 2003/2004 agenda. In 2004, the IT Committee submitted the approved Plan to the Strategic Planning and Budget Council, the College Coordinating Council and the College President. The IT Committee has updated this Plan in accordance with the 2007 Educational Master Plan. The Computer and Information Technology Plan is posted on the district’s Web site.

III. Computer and Information Technology Vision

Information technology is an essential tool for productivity in virtually all career fields, businesses and industries, including higher education. The use of information technology is an essential skill for students in all academic, technical and vocational disciplines. In addition, information technology can be used to enhance the learning environment and provide students

¹ Appendix A: Information Technology Committee Charter and Mission Statement

with the widest possible array of learning experiences related to a variety of learning styles. Furthermore, the use of information technology by college employees is fundamental to the support of our educational services. Therefore, Antelope Valley College is committed to providing students and employees with access to the information technology resources necessary to sustain and enhance the learning and workplace environments.

IV. Computer and Information Technology Guiding Principles

Guiding principles describe the fundamental values used to make decisions regarding the acquisition and use of information technology. The following is a list of AVC's Information Technology guiding principles.

1. Student access and success are the primary focus for the use of information technology.
2. Information technology must be responsive to changing student, institutional and community needs.
3. The mission of the district drives decision-making regarding the use of technology within the district.
4. AVC is committed to providing ongoing professional development and training opportunities for all employees so that they may gain and maintain currency in the use of information technologies.
5. Technology, alone, is not sufficient. AVC must also have consistent, high quality technology support accessible for students and employees.
6. AVC recognizes that technology planning is an ongoing process and that goals and strategies must be reviewed for currency so they remain relevant to the needs of the district.
7. Decisions about information technology resource allocations are made in a collaborative manner with appropriate participation of individuals throughout the district.

V. Computer and Information Technology Goals and Strategies

The following is a list of the Information Technology Goals and Strategies for 2007-2010. The goals are intended to be long-term, major targets or end results related to the survival, values and growth of AVC, while strategies are defined as activities and resource allocations designed to achieve the long-term goals. These goals and strategies were developed and updated by the Information Technology Committee to support the AVC Educational Master Plan, based on the information technology vision and guiding principles.

Student Access and Success ²

Goal #1: Use information technology to enhance access, learning, retention and student success.

Strategies:

- 1.1. Develop and implement methods to support and enhance identified student needs related to the use of information technology in the curriculum and in student support areas.
- 1.2. Provide a variety of ways in which students can gain access to information and services, including assistive technology where applicable.
- 1.3. Review and revise the district's current IT equipment inventory as needed to assure that the State Community College System Office baseline standards³ of access to computers for students and employees are met or exceeded.
- 1.4. Continually assess the district's IT equipment and collaborate with appropriate administrators when upgrades of outdated or below-standard computers are identified.
- 1.5. Ensure that technology is accessible to persons with disabilities.
- 1.6. Promote and maintain consistent technical standards for classroom-based technology.⁴
- 1.7. Ensure that information technology is available to support developing community needs as reflected in the academic programs.
- 1.8. Advance and promote emerging technologies.

Operational Efficiency

Goal #2: Use information technology to improve the efficiency of college operations.

Strategies:

- 2.1 Maintain minimum functional standards for office and service area computing in accordance with the State Community College System Office baseline standards.
- 2.2 Develop and continuously update a district computer and information technology disaster recovery and business continuity plan.
- 2.3 Strategically use information technology as an operational resource to facilitate communication and provide open access to information.

² Educational Master Plan Guiding Principle 2 states "Provide students and employees with access to current and reliable technology resources necessary to sustain and enhance the teaching and learning environment." Educational Master Plan Guiding Principle 7 states "Implement a streamlined "Student Services One Stop" approach utilizing campus resources through technology that provides 24 hour online access." Educational Master Plan Strategic Goal 7 states "Provide students and employees with access to the information technology resources necessary to sustain and enhance the learning and workplace environment."

³ Appendix B: TCO Baseline Standards

⁴ Appendix D: AVC Technology Standards document

- 2.4 Use available information technologies to facilitate internal and external communication.
- 2.5 Develop processes by which each division/department within the district may create and maintain relevant content for the district's Web site.
- 2.6 Where feasible and secure, facilitate off-campus access to district information technology resources for employees.
- 2.7 Ensure the availability and reliability of communication infrastructure, including telephone and network services.
- 2.8 Maintain and communicate to all employees the district's "Computer Use and Electronic Mail Guidelines."

Cost Effectiveness and Stewardship⁵

Goal #3: Practice good stewardship over our information technology resources to maintain the cost effectiveness of district investments in these resources.

Strategies:

- 3.1 Plan for and maintain the telecommunications and network infrastructure to facilitate and support growth and changing requirements.
- 3.2 Prioritize information technology spending in accordance with institutional goals, establishing priorities that are practical and sustainable.
- 3.3 Develop a multi-year computer and information technology expenditure plan [Information Technology Services area budget], including planned and budgeted equipment and software upgrades.
- 3.4 Re-deploy usable equipment when feasible and salvage parts from below-standard computers prior to disposal in order to provide the broadest possible access to technology in a cost effective manner.

⁵ Educational Master Plan Assumptions, Challenges and Opportunities # 5 states "*Technology needs will continue to change as technology advances, and the college will provide modern facilities with updated infrastructure that supports teaching and learning.*" Educational Master Plan Technology section states "...students and staff at AVC will expect emerging technologies to be part of their college experience..."

Professional Development and Support

Goal #4: Maximize use of the district's information technologies through information technology-related professional development, training and support resources.

Strategies:

- 4.1 Provide adequate technical resources to support computer and information technologies in labs, classrooms, service areas and offices.
- 4.2 Provide on-going information technology-related professional development and training programs for all district employees where financially feasible.
- 4.3 Continue collaborative approach to addressing technology needs and issues through the district's Information Technology Committee.
- 4.4 Use existing professional development avenues such as the Staff Development and Flex programs to provide information technology-related training opportunities for employees.
- 4.5 Provide discipline-specific training on information technology tools and applications required in the performance of job duties.
- 4.6 Provide specific training related to policies associated with ADA requirements, fair-use copyright law, intellectual property, and other topics related to the institutional mission.
- 4.7 Provide current information to all district employees about what computer and information technology is available throughout the district and how to access and use it.

VI. Alignment

This Computer and Information Technology Plan is aligned with the district's Institutional Plan, as well as the technology direction and objectives developed by the California Community Colleges System Office. Most importantly, this plan supports the program specific information technology requirements identified in the AVC Educational Master Plan. The following table outlines the alignment of the Computer and Information Technology Plan goals with the information technology plans and requirements of the AVC Educational Master Plan.

| 2007 Update: Computer and Information Technology Master Plan Goals | | |
|--|--|--|
| <i>1. Use information technology to enhance access, learning, retention and student success.</i> | | |
| <i>2. Use information technology to improve the efficiency of college operations.</i> | | |
| <i>3. Practice good stewardship over our information technology resources to maintain the cost effectiveness of district investments in these resources.</i> | | |
| <i>4. Maximize use of the district's information technologies through information technology-related professional development, training and support resources.</i> | | |
| | | |
| Educational Master Plan Requirement | Educational Master Plan Section, Pages | Computer and IT Master Plan Goals |
| Technology Support Staff for Instruction and Service Areas | Guiding Principle #2, 7; Guiding Principle #7, 9-10; Assumptions, Challenges and Opportunities, 17; Institutional Learning Outcome #4, 24; Strategic Goal #7, 25; Technology, 71-72; Business and Computer Studies, 82, 85-87; Health Sciences, 92; Instructional Resources and Extended Services, 112-113; Language Arts, 126, 129-130; Math Science and Engineering, 140, 142, 147; Technical Education, 171-173, 178; Visual and Performing Arts, 186, 189-190; Information Technology Services, 231-235; CalWORKs, 247-248; Disabled Student Services, 252, 254; EOPS, 258; STAR Student Support Services, 261-262; Admissions and Records, 267; Counseling, 272, 274-275; Financial Aid, 278, 280; Job Placement Center, 294-295, 297-298 | 1, 2, 3, 4 |
| Wireless Internet / AVC network access for students and employees | Guiding Principle #2, 7; Guiding Principle #7, 9-10; Guiding Principle #9, 10; Strategic Goal #7, 25; Technology, 71-72; Business and Computer Studies, 85-87; Instructional Resources and Extended Services, 112, 116, 119; Language Arts, 126, 129-130; Math Science and Engineering, 147; Maintenance and Operations, 218; Information Technology Services, 231-235; CalWORKs, 247-248; Disabled Student Services, 252, 254-255 | 1, 2, 3 |

| Educational Master Plan Requirement | Educational Master Plan Section, Pages | Computer and IT Master Plan Goals |
|---|--|--|
| Alternative media and emerging technology development and support | Guiding Principle #7, 9-10; Guiding Principle #9, 10; Assumptions, Challenges and Opportunities, 17; Institutional Learning Outcome #4, 24; Strategic Goal #7, 25; Technology, 71-72; Business and Computer Studies, 80-81, 83, 85-87; Health Sciences, 95-97; Institutional Research and Planning, 102; Instructional Resources and Extended Services, 108, 110-113, 115-116, 118-120; Language Arts, 125-126, 130; Math Science and Engineering, 142, 146; Physical Education and Athletics, 154; Social and Behavioral Sciences/Child and Family Education Program, 164; Technical Education, 173, 180; Visual and Performing Arts, 185, 193; Information Technology Services, 231-235; Institutional Advancement and Foundation, 243; CalWORKs, 247-248; Disabled Student Services, 252, 254-255; EOPS, 258; STAR Student Support Services, 261-262; Admissions and Records, 267; Counseling, 272, 274; Financial Aid, 278-280; Job Placement Center, 294-295, 297-298 | 1, 2, 4 |
| Online (internet-based) technology support | Guiding Principle #2, 7; Guiding Principle #7, 9-10; Guiding Principle #9, 10; Strategic Goal #7, 25; Technology, 71-72; Business and Computer Studies, 80-81, 85-87; Health Sciences, 91, 95-97; Instructional Resources and Extended Services, 108, 110-113, 115-116, 118, 120; Language Arts, 125, 130; Math Science and Engineering, 141-142; Social and Behavioral Sciences/Child and Family Education Program, 161; Information Technology Services, 231-235; Institutional Advancement and Foundation, 243; Disabled Student Services, 255; STAR Student Support Services, 261-262; Counseling, 272, 274; Financial Aid, 278-280; Job Placement Center, 294-295, 297-298 | 1, 2, 3 |

| Educational Master Plan Requirement | Educational Master Plan Section, Pages | Computer and IT Master Plan Goals |
|--|--|--|
| Technology modernization, computer upgrades and “smart” classrooms | Guiding Principle #2, 7; Guiding Principle #7, 9-10; Guiding Principle #9, 10; Assumptions, Challenges and Opportunities, 17; Institutional Learning Outcome #4, 24; Strategic Goal #7, 25; Technology, 71-72; Business and Computer Studies, 83, 85-87; Health Sciences, 96-98; Institutional Research and Planning, 104; Instructional Resources and Extended Services, 111-113, 115-116, 118-119; Language Arts, 125-126, 132; Math Science and Engineering, 142, 147; Physical Education and Athletics, 154; Social and Behavioral Sciences/Child and Family Education Program, 164; Technical Education, 171-173, 178, 180; Visual and Performing Arts, 188-190, 192-193; Business Services, 199; Auxiliary Services, 202; Maintenance and Operations, 218; Risk Management, 227; Information Technology Services, 231-235; Institutional Advancement and Foundation, 240, 243; CalWORKs, 247-248, 250; Disabled Student Services, 252, 254-255; EOPS, 258-259; STAR Student Support Services, 261-262; Admissions and Records, 267; Counseling, 272, 274-275; Financial Aid, 278, 280; Information and Welcome Center, 289; Job Placement Center, 294-295, 297-298; AV SOAR, 301 | 1, 2, 3 |
| Technical Training | Institutional Learning Outcome #4, 24; Strategic Goal #7, 25; Strategic Goal #9, 25; Technology, 71-72; Instructional Resources and Extended Services, 114; Language Arts, 132; Information Technology Services, 231-235; CalWORKs, 247-248; Disabled Student Services, 252, 254; EOPS, 258; STAR Student Support Services, 261-262; Admissions and Records, 266; Counseling, 274; Job Placement Center, 297-298 | 1, 2, 3, 4 |

VII. Implementation

In support of the strategic program direction identified in the Educational Master Plan, and in accordance with the goals and strategies of this Computer and Information Technology Plan, the Information Technology Services area will collaborate with appropriate constituents to enhance and maintain student access to information technology resources. The Information Technology Services area goals⁶ and operational plans support the goals and strategies of this Computer and Information Technology Plan. When proposed activities require development of policies or procedures regarding the use of district information technology resources, or when a determination of information technology replacement and installation priorities is required, the Information Technology Committee will develop recommendations for such policies, procedures or priorities.

A centralized fund will be maintained as part of the Information Technology Services area budget that will be used to upgrade and replace computer equipment campus-wide. The Information Technology Committee will review replacement and upgrade proposals for compatibility with the replacement and upgrade criteria, and identify priorities for such proposals. Criteria for replacement or upgrade will include available funds, staff-to-equipment ratio for positions requiring computer access, availability of existing equipment, capabilities of equipment required to perform the job function, and age of existing equipment. Information Technology Services will execute computer replacements and upgrades in consultation with the appropriate dean or director of the area where the equipment is used. All computers must meet the district's minimum baseline standard configuration as determined by the Information Technology Committee in order to enable cost-effective service and support.

Similarly, planning for the acquisition and deployment of new software applications must be coordinated with Information Technology Services to insure the availability of adequate infrastructure and support resources.

⁶ Appendix C: Information Technology Services department vision, mission and goals

Appendix A: Information Technology Committee Charter and Mission Statement

Revised: November 2003

Information Technology Committee *Charter and Mission Statement*

The Information Technology Committee (ITC) is a shared governance committee.

The members of the committee serve in a representative capacity of their constituencies. Members should regularly communicate with their constituents on issues relating to campus wide information technology and provide feedback to the ITC.

The purview of the committee shall be the establishment of policies regarding the use of information technology (IT) resources at AVC. Use policies and guidelines are to be established and published for all faculty, staff, students and non-affiliated individuals with regard to use of AVC's IT resources.

Additionally the committee will help to establish priorities for replacement and installation of IT resources to optimally support the educational mission of AVC.

The committee is further charged with alerting and briefing the chairperson of pending issues that may impede, strengthen or otherwise impact upon the information technology area.

Membership includes representatives from each campus constituency, including but not limited to: faculty, staff, and students. The chairperson of the committee will be the Director of Information Technology or appropriate designee. Membership to the committee will be as periodically elected or appointed from the areas represented. Membership will also include the ITS Director (Chairperson), the Vice President of Academic Affairs and the Web Administrator, whose terms shall be permanent, and the Co-Chair who shall be elected annually by the Committee.

The Chair of the committee will be responsible for bringing issues to the committee, coordinating meeting dates to maximize attendance, reporting and publishing the actions of the committee to the college community and the President of AVC.

Appendix B: TCO Baseline Standards

The following standards were provided to California Community College District budget managers responsible for the Fiscal Year 2002-2003 Telecommunications and Technology Infrastructure Program (TTIP) Certification for Expenditures. At Antelope Valley College, the budget manager is the Director of Information Technology Services.

Technology Plan II TCO Model

Student PC Baseline Standards

| | | |
|------|---|---|
| A1.a | PCs for student | One PC will be dedicated to student use for every 20 FTES. |
| A1.b | PCs for student with assistive technology | 10 percent of all computers in this category will be configured with assistive technology to provide increased access to students with disabilities. |
| A2 | Printers | One printer rated at 8 ppm or greater will be dedicated to every 30 student computers. |
| A3 | Office Software | 80 percent of student computers will have access to word processing, spreadsheet, and presentation software. |
| A4 | E-mail | 100% of students will have access to a college provided email account, which enables off-campus access, for the period of their enrollment (Currently under discussion with TTAC) |
| A5 | Internet | 80 percent of student computers will have access to the Internet via a browser. |
| A6 | Virus detection software | Each student computer connected to the Internet will be protected by anti-virus software. |
| A7 | Student Online Services | 80 percent of student computers will have access to all student online services provided by the college. |
| A8 | Refresh rate and currency of computers | PCs will be replaced on a three-year basis. This requirement is consistent with industry practices. |
| A9 | Online Library and Learning Resources | 80 percent of student computers will have access to electronic library databases and the library card catalog. |

Faculty PC Baseline Standards

| | | |
|------|--|---|
| B1.a | PCs for Full-time Faculty | One PC, with appropriate assistive technology as needed, will be provided for every full-time faculty member. |
| B1.b | PCs for Adjunct Faculty | One PC, with appropriate assistive technology as needed, will be dedicated to part-time faculty for every part-time FTEF. |
| B2 | Printers | One printer rated at 8 ppm or greater will be dedicated to every 25 faculty computers. |
| B3 | Office Software | 100 percent of faculty computers will have access to word processing, spreadsheet, and presentation software. |
| B4.a | E-mail for Full-time Faculty | 100 percent of full-time faculty will have access to campus e-mail via their computer. The E-mail system will enable off-site access. |
| B4.b | E-mail for Adjunct Faculty | Each district/college will provide adjunct faculty with a campus e-mail account upon request. |
| B5 | Internet | 100 percent of faculty computers will have access to the Internet via a browser. |
| B6 | Virus detection software | Each faculty computer connected to the Internet will be protected by anti-virus software. |
| B7 | Faculty Online Services | 100 percent of faculty computers will have access to all faculty online services provided by the college. |
| B8 | Refresh rate and currency of computers | PCs will be replaced on a three-year basis. This requirement is consistent with industry practices. |

| | | |
|-----|---------------------------------------|---|
| B9 | Online Library and Learning Resources | 100 percent of faculty computers will have access to electronic library databases and the library card catalog. |
| B10 | Digital Media Services | Optical-character recognition and image scanning are available to faculty. |

Administrative and Classified Staff PC Baseline Standards

| | | |
|----|---|---|
| C1 | PCs for permanent administrative and classified staff | One PC, with appropriate assistive technology as needed, will be provided for each of 80% of the permanent administrative and classified staff. |
| C2 | Printers | One printer rated at 17 ppm or greater will be dedicated to every 25 staff members. |
| C3 | Office Software | 100 percent of staff computers will have access to word processing, spreadsheet, and presentation software. |
| C4 | E-mail | 100 percent of permanent staff will have access to campus e-mail. The E-mail system will enable off-site access. |
| C5 | Internet | 100 percent of staff computers in this category will have access to the Internet via a browser. |
| C6 | Virus detection software | Each staff computer that is connected to the Internet will be protected by anti-virus software. |
| C7 | Administrative Online Services | 100 percent of staff computers will have access to job-related administrative online services provided by the college. |
| C8 | Refresh rate and currency of computers | PCs will be replaced on a three-year basis. This requirement is consistent with industry practices. |

Support Baseline Standards (Based on a 5x8 schedule)

| | Position | Description | Basis | Minimum |
|----|--|---|---|---------|
| S1 | Computer Technician | Installs, configures, repairs, & maintains computer hardware and software including servers and assistive technologies. Maintains network connectivity and provides customer support. | 1 / 125 computers (for all college / district computers) | 1 |
| S2 | Computer lab/classroom technical assistant | Provides simple technology maintenance and assists faculty & students during and out of class with technology issues. | 1 / 75 computers (for all computers in labs and classrooms) | 1 |
| S3 | Network Engineer / Technician | Designs, installs, configures, repairs, & maintains campus backbone(s), networks, and WANs | 1 / 500 computers (for all college / district computers) | 1 |
| S4 | Webmaster / Web Administrator / Web Designer | Designs and maintains the district's / college's Web infrastructure and Web site | 1 / 4,000 FTES | 1 |
| S5 | Instructional Designer / Technology Specialist | Assists faculty with integrating technology into curriculum | 1 / 100 FTE faculty (PT & FT) | 1 |

| | | | | |
|-----|---|--|---|----|
| S6 | Multi-media technician | Installs, configures, repairs, & maintains multi-media equipment (satellite downlink, broadcast equip., microwave, head-end delivery, etc.) | 1 / 300 FTE faculty (PT & FT) | .5 |
| S7 | Multi-media production specialist | Supports faculty with multi-media production, delivery, and operations. | 1 / 200 FTE faculty (PT & FT) | .5 |
| S8 | Technical Training Specialist | Trains staff and faculty. Runs a technology training center. | 1 / 300 FTE faculty & staff (PT & FT) | 1 |
| S9 | Instructional Application Developer / Administrator | Designs, installs, configures, repairs, & maintains software applications to support instruction (e.g. systems analyst, programmer, systems administrator roles) to include support for email, library systems, course management software, listserves, and newsfeeds. | 1 / 200 FTE faculty (PT & FT) | 1 |
| S10 | Communications Technician | Installs, configures, repairs, & maintains communication systems and wiring | 1 / 1,000 FTE staff and faculty (FT & PT) | 1 |
| S11 | Helpdesk Technician | Provides a central point of contact to receive reports of technical problems from students, faculty, and staff. Documents all requests and notifies appropriate service area. Provides technical answers to questions. | 1 / 5,000 FTES | 1 |
| S12 | Technical Manager | Manages technical personnel & sub- functions | 1 /10 technical staff | 0 |
| S13 | Director or higher level manager who supports instructional systems | Manages overall instructional technology function. Acts as liaison with academic administration. | 1 | 1 |

Key Definitions

| Term | Definition | Applies to: |
|------|--|--|
| PC | Personal computer: Any system which is based on Intel or AMD chip architectures, thin clients (such as Sun's "Sunray"), and Apple computer systems such as the Macintosh series qualify. | All Students, Faculty, Administrative and Classified Staff Baselines |

| | | |
|-----------------|---|---|
| Offsite access | The email system will have the capability to allow members to access their accounts via home or remote computers. Current email system standards in 2001 that facilitate this are SMTP, MAPI, and POP3. Offsite access does not imply the requirement for a college or District to employ remote access services – RAS (e.g. modem dial-up services). | B4.a, B4.b, C4 |
| Staff computers | Requirements for services referring to “staff computers” apply only to the personal computers assigned to permanent staff members as personal workstations (and not to all computers that may be dedicated to supporting administrative functions). | Administrative and Classified Staff Baselines |

Appendix C: Information Technology Services (ITS) Area's Vision, Mission and Goals

ITS Vision: To provide reliable, accessible, high quality information technology services supporting the district's needs and fostering positive change.

ITS Mission: We provide a stable information technology (IT) infrastructure and protect the accessibility, integrity and availability of the district's IT resources for our students, employees, alumni and community members. We apply our technical competence toward effective management and efficient utilization of these resources, while exploring and appropriately developing emerging technologies to meet the challenges of the district's changing IT needs.

ITS GOAL 1: Ensure reliability of ITS infrastructure and district IT equipment, computer-based resources, processes and procedures.

ITS GOAL 2: Facilitate secure access to district computers, computer-based resources and other information technologies available to students, employees, alumni and community members.

ITS GOAL 3: Strive to provide high quality, seamless technical support to our IT user community.

ITS GOAL 4: Collaborate with others, both within and outside the district, to implement quality IT solutions and support to meet the district's needs.

ITS GOAL 5: Collaborate with others, both within and outside the district, to identify, assess and develop emerging information technologies to encourage appropriate use of IT resources and foster positive change in District operations.

Appendix D: Antelope Valley College Technology Standards