TECHNOLOGY GOALS AND STRATEGIES

The technology goals and strategies are based upon institutional program review, accreditation standards, an assessment of current needs, internal plans, and a review of external trends in academic and administrative computing in higher education. The technology goals are umbrella statements that provide direction for change. The following implementation grid includes a timeline of specific action items that are measurable activities to further the goals and strategies of the plan.

In order to demonstrate the relationship of the Technology Master Plan to the ACCJC/WASC Accreditation Standards and SWC Strategic Plan, each strategy is followed in brackets by references to the applicable accreditation standards and strategic directions of the College.

- A. STUDENT ACCESS: Provide secure student access to learning resources and support services for all college locations.
 - **A.1. Identity Management**: Develop and implement a new user account system that requires students to individually log into college network resources, such as the wireless network or lab computers. (SWC Strategic Plan (SP) 2009-12, pg 16)
 - **A.2. Computer Lab Operations:** Develop college standards to adequately staff and support all current and future student computer labs. As technology is consistently evolving, the District will support and adapt to those changes. (SWC SP 2009-12, pg 50-51 In-Process (IP)
 - **A.3. Computer Lab Hardware and Software:** Conduct ongoing evaluations of the adequacy of student computer lab hardware and software to meet the needs of instructional programs. These evaluations, to include program review plans and the age of the computers, will serve as important criteria for prioritizing the replacement of lab hardware and software. (SWC SP 2009-12, pg 50-51 IP)
 - **A.4. Online Courses and Programs**: To increase student access, provide the technical infrastructure and support for current and future additional online courses and programs, such as online tutoring. (SWC SP 2009-12, pg 18)
 - **A.5. Online Learning and Support Services:** Provide online access to all learning resources and student support services to assure equitable access and to meet identified student needs. (SWC SP 2009-12, pg 50-51 IP)
 - **A.6. Virtual Desktop Computing:** Develop and implement a cloud-based and/or server-based virtual desktop environment that enables authorized network access to specialized instructional software from any college computer. (SWC SP 2009-12, pg 50-51 IP)
- **B. INSTRUCTIONAL TECHNOLOGY:** Support the success of all students through the development of instructional technologies, including the delivery of instructional media for use on- and off-campus and Institutional Research. Instructional materials must meet the electronic and information technology accessibility requirements of Section 508, comply with applicable federal and state laws, and embrace Universal Design for all people.
 - **B.1. Instructor Support:** Provide faculty training, support, and adequate staffing for the development and delivery of instructional technology resources to students on- and off-campus. (SWC SP 2009-12, pg 53)
 - **B.2. Online Lectures:** Develop standardized and automated processes for capturing on-campus lectures (audio and/or video and/or leure resources) to publish online. (SWC SP 2009-12, pg 18)
 - **B.3. Smart Classrooms:** Complete the installation of interdisciplinary new media systems in all relevant classrooms. Then develop new standards for smart classrooms and begin upgrading older classrooms to meet the new standards. (SWC SP 2009-12, pg 18)

- **B.4.** Instructional Content: Develop new processes for efficiently licensing and delivering copyrighted and captioned instructional content to students on and off-campus. (SWC SP 2009-12, pg 18)
- **C. STUDENT SERVICES**: Develop, update, and implement Student Services information system and communication services.
 - **C.1. Processing Calendar Development:** Develop and review on a periodic basis to determine sustainability and functionality. (SWC SP 2009-12, pg 50-51 IP)
 - **C.2 Financial Aid:** Conduct ongoing evaluation of Financial Aid services to determine student friendly access and consistency with mandated timelines. (SWC SP 2009-12, pg 16)
 - **C.3 Matriculation System:** Update and maintain matriculation systems for getting information out to students in a timely manner through improved technology. (SWC SP 2009-12, pg 50-51 IP)
 - **C.4 Reporting Enhancements:** Enhance the reporting systems to improve and automate matriculation data and services. (SWC SP 2009-12, pg 16)
- **D. CAMPUS COMPUTING**: Develop and improve secure and reliable computing systems to increase institutional effectiveness and provide long-term support for campus computing needs.
 - **D.1. Custom Application Development:** Standardize the development and maintenance of custom applications for research, instruction, student services, and college operations in order to improve institutional effectiveness. (SWC SP 2009-12, pg 50-51 IP)
 - **D.2. Network Application Support:** Develop standardized procedures for requesting network applications and services. Use the SWC Help Desk to centralize user support requests for network applications. (SWC SP 2009-12, pg 50-51 IP)
 - **D.3. Computer Hardware and Software Standards:** Maintain up-to-date computer hardware and software standards for institutional purchasing and support. Replace computers as determined by Program Review to ensure adequate computing resources for students, faculty, staff, and managers. (SWC SP 2009-12, pg 50-51 IP)
 - **D.4. Network Access from Off-Campus Sites:** Develop a secure, client-less, login method for authorized employees to access network resources from off-campus locations. Ensure that this login method can be applied to future network applications. (SWC SP 2009-12, pg 50-51 IP)
 - **D.5. Printer Standards and Support:** Develop standards to fund the purchasing, installation, repair, and support of office and lab printers and supplies through a centralized clearinghouse. (SWC SP 2009-12, pg 50-51 IP)
 - **D.6. Institutional Software Licenses:** Create a centralized clearinghouse for institutional software licensing and require that all software purchases go through it. Provide ongoing funding for software, such as office-productivity, online courses, antivirus protection, website development and content management as determined by Program Review. (SWC SP 2009-12, pg 50-51 IP)
 - **D.7. Policies and Procedures:** Develop policies and procedures for college-wide technology requests, usage, services, and support, to be reviewed on an annual basis. (Appendix X). (SWC SP 2009-12, pg 44)

- **E. NETWORK INFRASTRUCTURE:** Upgrade and maintain the network infrastructure to support comprehensive wireless, voice, video, and data communications with high availability and recoverability.
 - **E.1. Wireless Access:** Upgrade and expand the existing wireless infrastructure to implement comprehensive wireless access for students, employees and authorized guests throughout all college locations. (SWC SP 2009-12, pg 50-51 IP)
 - **E.2. Network Infrastructure Standards:** Continue to update network infrastructure standards to be applicable to all existing and new SWC buildings. Implement the new standards to ensure high availability and quality of service for voice, video, and data throughout the College and District. (SWC SP 2009-12, pg 50-51 IP)
 - **E.3. Network Management:** Implement enterprise level network management tools to monitor and control all critical network resources at all college locations. Develop emergency response procedures for network outages or attacks. (SWC SP 2009-12, pg 50-51 IP)
 - **E.4. Network Storage:** Provide secure and centralized network storage, backup, and recovery services to meet the needs of the College. Develop a data archiving and retrieval process. (SWC SP 2009-12, pg 50-51 IP)
 - **E.5. Disaster Recovery:** Develop a multi-tiered disaster recovery plan to restore access to critical information resources in case of a catastrophic outage. Determine ways to proactively minimize risks. (SWC SP 2009-12, pg 50-51 IP)
 - **E.6. Administrative Server Virtualization:** Expand and maintain virtual servers to replace physical servers, promote "Green IT," support disaster recovery, and extend the capacity to offer additional network services and solutions. (SWC SP 2009-12, pg 50-51 IP)
- **F. TECHNOLOGY SUPPORT:** Provide ongoing training, staff, funding, and technology support services to meet the needs of students, faculty, staff, and managers.
 - **F.1. Service Level Agreements:** Develop service level agreements (SLAs) at all SWC Help Desk locations. (SWC SP 2009-12, pg 50-51 IP)
 - **F.2. Technical Staff and Managers:** Hire additional technical staff and managers to meet the recommendations of Program Review. (SWC SP 2009-12, pg 54)
 - **F.3. Technology Training for Operations and Support:** Provide ongoing training and support in the use of productivity technologies for faculty, staff, and managers. (SWC SP 2009-12, pg 61)
 - **F.4. Technology Training for Learning and Instruction:** Provide ongoing training and support in the use of instructional technologies for students, faculty, staff, and managers. (SWC SP 2009-12, pg 61)
- **G. DIGITAL COMMUNICATIONS:** Develop and support multiple, digital means of communication between the college, community, and all constituencies.
 - **G.1. Unified Communications:** Coordinate with CSS to implement a system that unifies all forms of communication, including voice-mail, email, and emerging technologies. (SWC SP 2009-12, pg 57)
 - **G.2. District Portal:** Research, develop, and implement a district portal for college communications, student communications, and access to college support services and online forms. (SWC SP 2009-12, pg 50-51 IP)

- **G.3. Website Development:** Continue to develop the navigational structure and provide adequate support and staff for the SWC website to improve access for all users at all levels of proficiency. Ensure that all faculty and all departments have current and accurate information on the college website (SWC SP 2009-12, pg 50-51 IP)
- **G.4. Video Conferencing:** Upgrade and support audio and video conferencing resources to connect individuals/groups between SWC and off-site locations. (SWC SP 2009-12, pg 50-51 IP)
- **G.5. Time-Sensitive Notifications:** Implement a college-wide emergency notification system that can be used to send alerts to students and/or employees in a matter of minutes. Such a system would use multiple forms of communication, such as text messages, phone/voice-mail, email, and emerging technologies. Utilize the system for any time-sensitive notifications. (SWC SP 2009-12, pg 50-51 IP)
- **G.6. Emerging Communications:** Experiment with emerging technologies to enhance effective communication and institutional effectiveness. (SWC SP 2009-12, pg 50-51 IP)