

Technology Strategic Plan

2019-2021

OVERVIEW

Technology has a vital role in realizing the mission of Peninsula College. When technology strategies align with the College's mission, the impact can be transformative - advancing student success, enriching academic excellence, encouraging innovation, and delivering efficient, quality services.

This document represents the Peninsula College 2019-2021 Technology Strategic Plan.

The Peninsula College Technology Strategic Plan is a three-year plan that is an integral part of the overall planning process and establishes a shared vision for College technology. The plan is designed to leverage reliable and emerging information technologies to advance the College's mission and core themes and shape the future direction for technology College-wide.

The 2019-2021 Technology Strategic Plan is intended to update and replace the College's previous IT Strategic Plan and to be a living, breathing document that will be regularly reviewed and continuously improved. The plan also interacts with the Facility Master Plan to assure that capital projects incorporate and address technology needs.

The Technology Strategic Plan develops a series of specific goals and objectives to enhance the use and effectiveness of technology in alignment with the College's four core themes:

- 1. **Advancing Student Success**: goals that advance student success by providing technology and services that are professional, reliable, scalable, and secure. These goals are essential for the College to maintain operations, provide quality service, and increase efficiencies.
- 2. **Achieving Academic Excellence**: goals that leverage available technology to enhance the classroom experience. These goals promote excellence in teaching and learning and enable students and faculty to take full advantage of the College's technology resources.
- 3. **Fostering Equity and Inclusion:** goals that improve overall technology accessibility and use. These goals enable success for a diverse population of learners by removing technology barriers, increasing training, and supporting technology professional development opportunities.
- 4. **Strengthening Communities:** goals that provide the ability for the College to meet tomorrow's technology demands in an ever-changing technological world. These goals explore new technologies and implement modern, creative solutions.

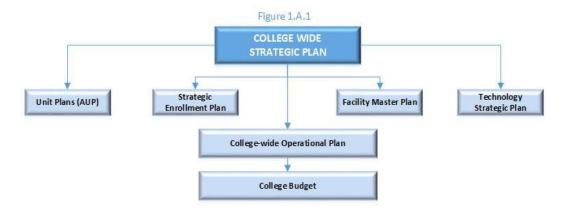
PURPOSE

The 2019-2021 Technology Strategic Plan (TSP) purpose is to:

- Align technology goals with institutional priorities and identify required funding
- Assure security and compliance of all technologies
- Assess and provide direction for technology systems, services, accessibility, and personnel
- Document technology infrastructure and equipment and establish a replacement plan
- Disseminate institutional knowledge on current technology needs and constraints
- Expand College-wide technology knowledge through professional development and training
- Anticipate academic and administrative future needs through innovative uses of technology

FRAMEWORK OF THE PLAN

Represented graphically below in Figure 1.A.1, the Technology Strategic Plan is an integral part of the College's comprehensive planning process that addresses College-wide technology. Specialized instructional and Facilities technology, such as SIMS, 3D printers, and DDC controls are not included in the 2019-2021 TSP. These types of technology are currently the responsibility of their respected departments and the procurement, repair, and replacement of these items are handled through the Academic and Administrative Unit (AUP) planning process.



The Process. The Technology Strategic Planning Committee is the appointed governing body for the ongoing development, review, and update of the Technology Strategic Plan. In adherence to the College's shared governance model, the committee is comprised of faculty, exempt, and classified employees who are appointed by the College President.

Once the 2019-2021 TSP is developed and approved by the committee, it will move through the College governance structure and be presented to and received by the Board of Trustees. Annually, the committee will review the plan and make revisions reflective of the current technology needs of the College.

The Goals. The Technology Strategic Plan develops a series of specific goals and objectives to enhance the use and effectiveness of technology in alignment with the College's four core themes. Each goal is considered complete when all objectives under the goal have been thoroughly addressed. The goals are divided into core technology categories under each core theme.

The Objectives. The Technology Strategic Plan's objectives are developed through environmental scans of existing technology, current technology gaps, and future needs that meet the goals in each core technology category.

The Actions. Actions for each objective will be further defined in the College's Operational Plan and individual Academic and Administrative Unit Plans (AUP). The action items will enumerate the specific activities or projects to meet each objective.

ENVIRONMENTAL SCAN

The Technology Strategic Committee evaluated the previous IT Strategic Plan and determined that an environmental scan was necessary to assess technology College-wide. The first environmental scan was a complete inventory of technology at the College. The second was a College-wide survey to identify technology needs and end user satisfaction.

Scan 1: Technology Inventory. The goal of the technology inventory is to identify the existing systems and their locations for all systems managed by Peninsula College. Additionally, the inventory allows staff to document system configuration, state and current usage. This data helps track how and where technology has been deployed and whether or not each system is being fully utilized. The inventory will support a prioritized replacement schedule. By maintaining up to date inventory, configuration and utilization the College can more effectively identify and manage security vulnerabilities.

The technology inventory will track all applicable information, such as description, location, department assigned to, device type, make, model, serial number, OS version, hardware address, date of manufacture, end-of-life as specified by the manufacturer, software operating system, network capabilities, and type of usage by the following categories:

- Security and Compliance
- Development and Testing
- Infrastructure and Server Systems
- Software and Hardware Platforms
- Cloud and Online Services
- Library, Learning labs, and E-learning
- End User Technology
- Multimedia Services
- Help Desk Services and Customer Support
- VOIP Telephone System

Reference Exhibit 1.A.2

Scan 2: College-wide Survey. A technology survey will reveal a wealth of insights into faculty, staff and students' utilization of technology. The Technology Strategic Committee will administer three surveys that will be focused on faculty, staff, and students.

- IT Faculty Survey –Conducted Yearly.
- IT Staff Survey –Conducted Yearly.
- Biennial PC Student Survey –Conducted every other year as part of Student Satisfaction Survey.

Reference Exhibit 1.A.3

TECHNOLOGY SYSTEMS, SERVICES, AND PERSONNEL

The Peninsula College technology, systems, and services support three campuses, located in three geographical locations spanning 125 miles, and several other offsite locations. The Systems, Services, and Personnel include:

Instuctional Technologies provide support for teaching and technology in both face-to-face and eLearning to ensure academic excellence.

- Library, Learning Labs, E-Learning
- Enhanced Multimedia Services
- Software and Hardware Platforms
- End User Technology Equipment
- Help Desk Services and Instruction Support

Web Based Services and Technologies expands and fosters access to content, materials, and ideas that encourages growth and ensures that equal access is available for instruction and assistance without barriers to technology. Web based Services and Technologies further creates leading-edge web and mobile services.

- Cloud and Online Services
- Interactive Website
- Content Resource Management Systems (CRM)
- Accessibility Enhancements for Technology Tools and Services

Adminstrative Technologies deploys advanced technologies to improve administrative processes through the coordination of network infrastructure personnel, systems development and customer support.

- Enhanced Multimedia Services
- Software and Hardware Platforms
- End User Technology Equipment
- Future Innovation
- Help Desk Services and Customer Support

Information Security and Compliance protects the ability of the College to conduct teaching and learning and provide services to achieve academic excellence and advance student success.

- Securing Infrastructure and Server Systems
- Deliver End User Training in Cybersecruity Best Practices

Development and Testing establishes an innovative continuous improvement model that encourages and enables innovative technologies that support the College's mission, core themes, and strategic priorities. It further generates opportunities for faculty to explore new developments in technology.

- Create a Research and Development Area for Testing New Technologies
- Utilize Student Programs and Interns for Proof of Concept Testing

IT Personnel. The Information Technology Department (IT) develops, manages and maintains the College's technology, systems, and procedures. The IT staff support technology operations on the main Port Angeles campus as well as all off-campus locations.

Collaboration between IT and all other departments is ongoing through formal and informal processes to ensure that communication and collaboration occur and is achieved by members of IT participating in departmental meeting, strategic committees, and planning units. Service areas are supported through a lead, backup, and support members to ensure cross-training, and shared decision-making.

INFRASTRUCTURE AND EQUIPMENT REPLACEMENT PLAN

The Replacement Plan serves as a vehicle for prioritizing and establishing a sequenced approach for managing the replacement and upgrade of infrastructure and equipment on an annual/cyclical basis against the backdrop of resource constraints. The following practices are implemented as a baseline for assessment, monitoring and maintenance of the replacement plan.

- Keep an up-to-date infrastructure inventory with end of life cycle.
- Create a prioritized replacement schedule
- Monitor systems and equipment for business continuity and business process improvements.
- Implement best practices in security policies for network and computer access, email and web applications, and stored data.

Priorities

This replacement plan is prioritized by considering staff impacts, maintenance, security, and sustainability requirements. Areas of consideration include:

- Technology-enhanced classrooms
- Network equipment and infrastructure
- Staff and faculty systems and other technology-related equipment
- Sustainability of support and maintenance of existing applications and services.

Replacement Plan Process

To ensure adequate access to current technology, the technology replacement plan will inform planning and purchasing, configuration and deployment, maintenance and upgrading. Aging and/or replaced technology will be assigned for reallocation or retirement and disposal in a safe, and environmentally sound process.

Instructional Use. The Information Technology Department tracks technology equipment in academic labs, classrooms, and all learning spaces. Software is used to scan all college-owned technology connected to and actively logged on to the network for asset, software, and hardware tracking.

Replacement of academic classroom technology is scheduled for every five to seven years, depending on available funding. Replacement priority is identified through current systems inventory, a helpdesk ticketing system, and a needs assessment. Academic computers, media components, displays, and equipment are replaced using the Student Technology Fee funds and supplemented by a campus technology replacement budget, departmental budgets, and grant funding.

Specialized instructional technology, such as Medical SIMS, Automotive and Welding Tools, and High End Art Equipment are not included in the 2019-2021 TSP. These types of technology are currently the responsibility of their respected departments and the procurement, repair, and replacement of these items are handled through the Academic Unit (AUP) planning process.

Faculty and Staff Use. IT tracks faculty and staff assigned technology and intends to replace equipment within the fiscal year in which it is determined to be end-of-life, where replacement entails either new purchases or reallocation of available equipment.

Approval Process. In alignment with Peninsula College's shared governance model, IT regularly collaborates with a broadly representative standing committee (Strategic Technology Planning Committee) in order to identify College technology priorities. Strategic Technology goals are created and assessed using feedback from students, staff, and faculty as well as end-of-life support dates, inventory measures, and security

requirements. Through an annual budget planning process, technology needs are then submitted through the Academic and Administrative Unit planning (AUP) process for budget considerations and approvals.

Procurement. Once final approval and recommendations are received, IT works with the Purchasing and the Business office to process paperwork with the preferred or designated vendor contracts and to review purchase for security, accessibility, and alignment to the College's technology goals.

Upon arrival, new technology is recorded, tagged, and inventoried by IT before it is deployed into production.

Recycling Plan. In coordination with Auxiliary Services, IT recycles all technology that are replaced and determined not to have a useful service life. IT ensures data on all media are removed before salvage and data sanitized correctly in accordance with the IT data security procedures. (See NIST SP 800-88 Rev.1 - https://csrc.nist.gov/publications/detail/sp/800-88/rev-1/final)

INFORMATION SYSTEMS SECURITY

The purpose of Information Systems Security to ensure an environment that maintains system confidentiality, data integrity, and availability by preventing unauthorized access to data, thereby preventing misuse of, damage to, or loss of data.

Priorities

- Compliance all technology is compliant with all local, State, and Federal regulations
- Confidentiality all information and assets are protected from unauthorized entities
- Integrity all data is real, accurate and safeguarded from unauthorized access
- Availability all authorized users have continuous access to all information and or resources

Also included is the security of off-site data storage, offsie-hosted public website, cloud computing, telecommunication, or application related services purchased from other state agencies as well as Internet-related applications and connectivity.

ACCESSIBILITY

Peninsula College is dedicated to providing a campus that is accessible, equitable, and inclusive to all. We must ensure all people; students, faculty, staff, and community members from a broad range of backgrounds, abilities, and life experiences, can participate in aspects of college life.

Much work has been done through our Services for Students with Disabilities, but our goal moving forward is to assess, identify needs, and plan to expand this service as a college-wide initiative by creating an ongoing accessibility workgroup consisting of representation from all areas of the organization.

DISASTER RECOVERY

The College's emphasis on emergency management planning has prioritized the need for technology and systems to develop a Technology Continuity of Operations Plan. It is vital for the college to have a plan for disaster, especially given our geographic location, with priority and recovery time objectives. Our goal during this 3-year planning phase is to explore, document, and recommend strategies in IT backup, recovery, and support.

2019-2021 TECHNOLOGY STRATEGIC PLAN GOALS

Consistent with the mission of Peninsula College, the 2019-2021 Technology Strategic Plan will pursue the following goals. These goals integrate technology systems and equipment college-wide to support the College's mission, core themes, and strategic priorities.

Advancing Student Success: goals that promote student success by providing technology and services that are professional, reliable, scalable, and secure. These goals are essential for the College to maintain operations, provide quality service, and increase efficiencies.

GOAL 1 - Technology Systems, Services, and Personnel

 Provide an environment with effective and efficient technology services, personnel, and processes.

GOAL 2 - Technology Infrastructure and User Technology Equipment

• Provide technology equipment that is scalable, adaptable, and provides a stable and constant connection to ensure the delivery of quality instructional

GOAL 3 - Information Systems Security

 Provide an environment that balances information availability with the security of sensitive and confidential information of all stakeholders.

Achieving Academic Excellence: goals that leverage available technology to enhance the classroom experience. These goals promote excellence in teaching and learning and enable students and faculty to take full advantage of the College's technology resources.

GOAL 4 – Instructional Technology

 Provide all learning spaces with the appropriate technology to promote the exchange of ideas, supporting innovations and working toward removing barriers for achieving student success.

Fostering Equity and Inclusion: goals that improve overall technology accessibility and use. These goals nurture a diverse population of learners by removing technology barriers, increasing training, and supporting technology professional development opportunities.

GOAL 5 - Accessibility

• Assess, identify, and plan to expand this service as a college-wide initiative

Strengthening Communities: Goals that provide the ability for the College to meet tomorrow's technology demands in an ever-changing technological world. These goals explore new technologies and implement modern, creative solutions.

GOAL 6 – Innovation and Training

- Implement ERP System to be able assist help students enroll, engage and manage their learning environment and develop applications that give current tools to staff for highly available and efficient business resources.
- Migrate to current tools that facilitate easy use of technology assets on campus and remotely with adequate training opportunities.
- Develop a robust and quality video conferencing service to be able to delivery quality service for a variety of learning modes both on and off campus.

2019-2021 TECHNOLOGY STRATEGIC PLAN OBJECTIVES

To measure the achievement of each goal, the 2019-2021 Technology Master Plan includes the following objectives.

GOAL 1 - Technology Services, Personnel, and Systems

- Objective 1.1 Administer a technology satisfaction survey to staff.
- Objective 1.2 Continue communications by being a part of the campus-wide planning initiatives.
- Objective 1.3 Regularly review systems procedures for maintenance and efficient usage.

GOAL 2 - Technology Infrastructure and Equipment

- Objective 2.1 Maintain up-to-date inventories.
- Objective 2.2 Provide efficient reporting for replacement schedule and budgeting.

GOAL 3 – Information Systems Security

- Objective 3.1 Adopt administrative procedures with standard operating practices that comply with laws and standards (e.g., FERPA, PCI and HIPPA).
- Objective 3.2 Monitor systems to detect and prevent security vulnerabilities and intrusions and keep systems patched and up-to-date.
- Objective 3.3 Provide user security awareness training.
- Objective 3.4 Build a Technology Continuity of Operations Plan.

GOAL 4 – Instructional Technology

- Objective 4.1. Administer a technology satisfaction survey to students.
- Objective 4.2 Develop a student available technology Help Desk system.
- Objective 4.3 Build a conduit for information sharing and assessment of Instructional needs.

GOAL 5 – Accessibility

- Objective 5.1 Create a campus-wide accessibility plan.
- Objective 5.2 Provide ongoing training to staff in accessibility practices.

GOAL 6 – Innovation and Training

- Objective 7.1 Assist in the migration to the WA State ERP system and develop applications to enhance tools.
- Objective 7.2 Migrate to cloud based office applications, Intranet services and collaboration tools.
- Objective 7.3 Create on demand and training sessions to aid in the transition of cloud based services and applications.
- Objective 7.4 Continuous to build video and sound assets to aid in keeping students, faculty and staff connected in a variety of modes for interpersonal interactions (e.g. hybrid classrooms, online classrooms, and remote meetings).

Reference Exhibits

1.A.2. – Enviromental Scans Example Hardware Inventory

M235a Inventory

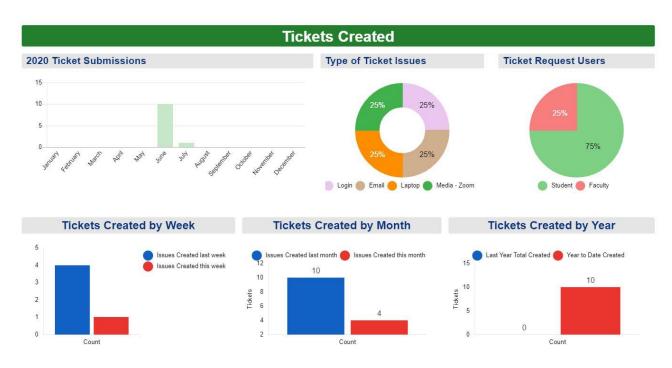
Chip Asset Serial # MB Description Location Intel Core2 DP35DP Quad2.40 Ghz A006154 Tower-PC 58339-17 M236 Intel Core i7 DP55KG A006960 2.80 Ghz 61249-04 Tower-PC M235a Intel Core i7 2.80 Ghz 61249-02 A006961 DP55KG Tower-PC M235a Intel Core i7 DP55KG 2.80 Ghz 61249-08 A006965 Tower-PC M235a ASRock AMD Phenom X4 890GX 55561-09 A005774 925 4 Core Extreme Tower-PC M235 Intel Core2 DP35DP Quad2.40 Ghz 58339-28 A006159 Tower-PC Surplus Intel Core i7 DP55KG 2.80 Ghz 62914-28 A007523 Tower-PC M235a Intel Core i7 61249-05 A006967 DP55KG 2.80 Ghz Tower-PC M235a Intel Core i7 DP55KG 2.80 Ghz 61249-09 A006966 Tower-PC M235a Intel Core i7 61249-12 A006963 DP55KG 2.80 Ghz Tower-PC M235a Intel Core i7 DP55KG 61249-14 A006958 2.80 Ghz Tower-PC M235a Intel Core2 DP35DP A006347 Quad2.40 Ghz Tower-PC M236 rc330klm11081303541 Intel Core i5 2.66 616669-10 A007046 DP55KG M235a ghz Tower-PC Intel Core2 DP35DP A006344 Quad2.40 Ghz No Serial Tower-PC m236 Intel Core i7 DP55KG 61249-17 A006955 2.80 Ghz Tower-PC M235a Intel Core i7 DP55KG 2.80 Ghz 61249-15 A006956 Tower-PC M235a Intel Core 2 No Serial A006362 DP35DP Quad2.40 Ghz Tower-PC m236 Intel Core i7 62914-11 DP55KG 2.80 Ghz A007555 Tower-PC M235a Intel Core2 No Serial A006360 DP35DP Quad2.40 Ghz Tower-PC m236 DP35DP No Serial No Asset Dead Tower-PC Surplus Intel Core i5 2.66 DP55KG 61564-04 A006997 ghz Tower-PC M235a Intel Core i7 DX58SD 2.67Ghz 58813-02 A006414 Tower-PC M235a Intel Core i7 DP55KG 61249-13 A006957 2.80 Ghz Tower-PC M235a

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Example Software and End of Life Inventory

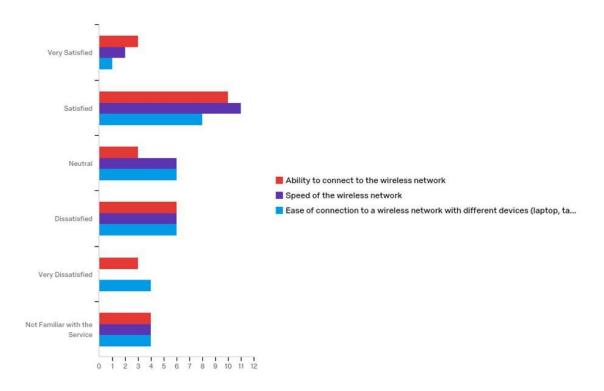


Example User Help Desk Reporting



Example Questions

Q12 - Please rate your overall satisfaction with the Campus (for students) wireless network



What technology service(s) is the most valuable to you for supporting your work?

WiFi

Evening support.

Canvas, Zoom, Outlook, laptops in classrooms.

Functionality of the campus network, classroom computing environments including student computers and instructor stations. The recording software, classroom display that has replaced the projectors and the classroom sound systems all make my teaching more accessible and engaging. I couldn't do what I do without these services.

Software support is helpful.

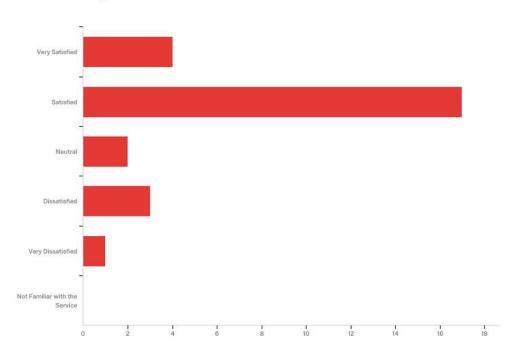
Having a live person when teaching ITV

A more accessible, user-friendly Sharepoint and College website would make my workdays considerably more efficient.

Web support.

Up to date computers and computer software. Easy access to internet. Canvas support.

Q30 - Please rate your overall satisfaction with technology available at Peninsula College.



Q32 - What was the number one issues you had with technology this year?

What was the number one issues you had with technology this year?

a couple of weather-related outages made it tough to get work done at certain points

The computer in my office needs an upgrade for faster connectivity. The memory has been increased, but it still spins and times out. I have submitted a request once. I will submit this issue to Tech Support again this summer.

Compatibility with the various software students use. Sometimes the software or the smartphones don't work well with Canvas.

New projector and volume control.

wireless access in the simulation room 201 E

Canvas Import from past quarter to the new one. The media was visible to me, but not students. Had to upload all media again in every class taught because it appeared as nothing or broken image links to students.

1) Laptop functionality in the classrooms. 2) Able to access the intranet remotely.

Helping students connect on their personal devices.

Outlook not connecting with the server - lock-ups, etc.

Technology Strategic Planning Committee Membership 2019-2020

2019 Committee

- Emma Janssen, IT Director
- Dennis Hill, Sr. Network and Telecommunication Administrator
- Christopher Woods, Procurement and Supply Specialist
- Eric Waterkotte, Faculty, Information Technology
- Tim Williams, Faculty, Instructional and Reference Librarian
- Cheyenne Tuller, Faculty, Basic Education for Adults
- Patty McCray Roberts, Director of Facilities Planning and Operation
- Mia Boster, Dean of Workforce Education

2020 Committee

- Emma Janssen, IT Director
- Dennis Hill, Sr. Network and Telecommunication Administrator
- Christopher Woods, Procurement and Supply Specialist
- Eric Waterkotte, Faculty, Information Technology
- Sherry Sparrowk, Faculty, Administrative Office Systems
- Dianna Chiabotti, Dean for Arts & Sciences, and BEdA
- Open Seat, Replacement in Progress (2/8/2020)