

IT STRATEGIC PLAN 2016-2020



TABLE OF CONTENTS

3	Introduction
4	IT Services Mission
5	Methodology and Initiative Themes
8	Learning and Teaching
11	Student Services
13	Customer Service
15	Faculty and Staff Computing
17	IT Security
19	Infrastructure/Connectivity
21	Sustainability
23	IT Services Staff
26	College and District Initiatives
28	Chart summaries
33	Funding
35	Technology Planning and Budget Process
37	Equipment Standards

INTRODUCTION

Information Technology Services and the IT Council are pleased to present our strategic plan for information technology in support of the college's mission and goals. The planning process is part of our efforts to align and optimize IT resources and priorities in ways that best fit the outstanding teaching, learning, service and student activities at Seattle Central.

An excellent early technology plan from the Maricopa Colleges used the phrase "It's a river, not a lake" to describe the changing nature of technology. That still applies, perhaps more than ever. Not only does technology change within itself, but it changes us. Like living on a river, we expect the relative instability of living on the current and are always prepared for surprises.

One implication of this stream of changes is the cost of technology and related software, and the increased attention to learning for employees. We have committed to the technology stream, and it costs every year to stay in that stream.

The Maricopa report noted that, "We must not only be current with the current current, but must constantly adjust toward the center of the flow, neither to be caught in a back-eddy nor flung against the canyon wall on the outside of a sharp turn." That analogy makes sense now, as it did 20 years ago. We have all experienced the turbulence of the "computing stream". The result of not staying in the mainstream is ending up in a back-eddy. That's a peaceful place and the relative calm is tempting, but the stream keeps right on flowing. We need to spend energy and resources to keep current with the mainstream while judiciously experimenting with emerging technologies. There will be no peaceful lake of stable resources.

This plan is an attempt to guide Seattle Central through the rapids and currents of the technology river for the next four years. The plan is the product of impressive collaboration among many people. Every step of the way we found enthusiasm and willingness to help IT Services become more effective. Special thanks are due to Tanya Knannlein and the members of the IT Council's strategic planning committee.

Harriet Wasserman
Director, IT Services
and Chair, IT Council

SEATTLE CENTRAL IT SERVICES MISSION STATEMENT

Information Technology Services provides **technology resources** to students, faculty and staff, in support of educational excellence at Seattle Central College.

Vision for Seattle Central College 2020

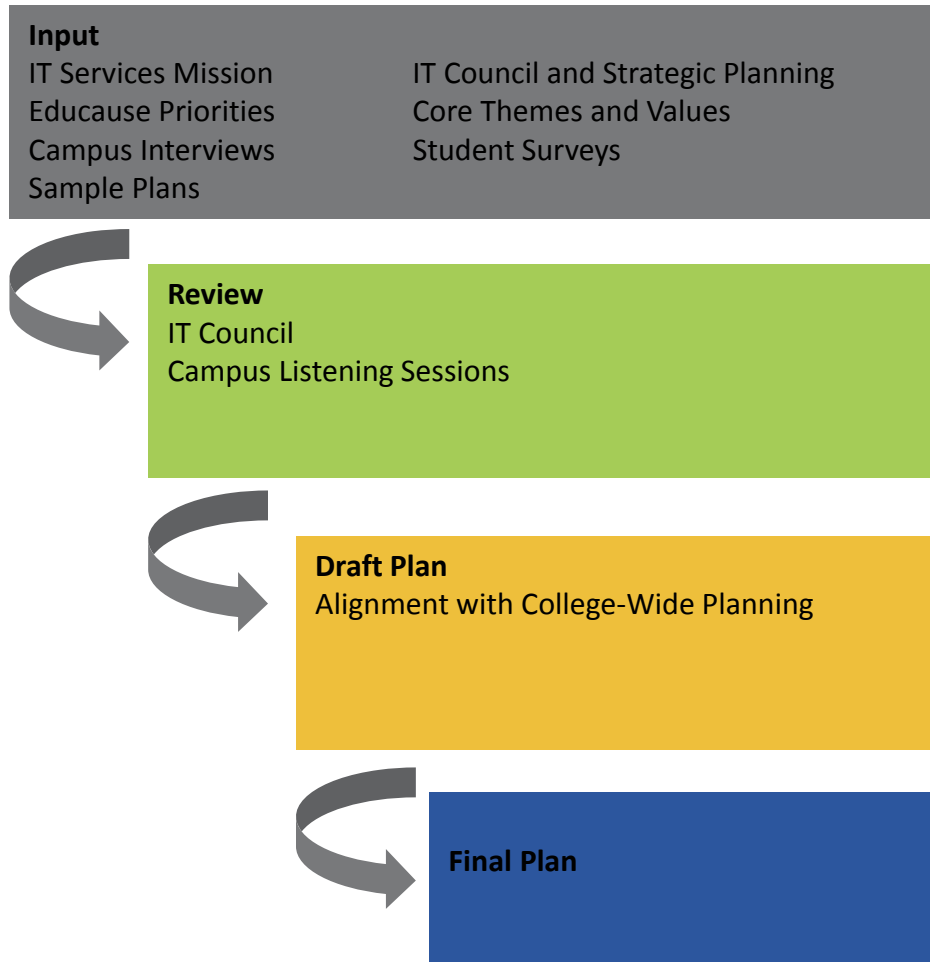
per draft 4/27/16

Seattle Central provides an environment of support for diversity, equity, and community where students are actively mentored, supported, and empowered to achieve their educational, career, and personal goals.

Seattle Central College Strategic Themes and

Priorities per draft 4/27/16

Increase Enrollment, Retention and Completion
Eliminate Institutional Racism, and Achieving
Equity and Diversity
Build Community



INITIATIVES

Through the planning process, initiatives were organized into the following categories

Learning and Teaching
Student Services
Customer Service
Faculty and Staff Computing
IT Security
Infrastructure/Connectivity
Sustainability
IT Services Staff
College and District Initiatives

CAMPUS INTERVIEWS

IT Strategic Planning Committee members and IT Council members volunteered to interview deans, department heads and key IT users across campus. Data was gathered and input into an Excel spreadsheet with anecdotal responses quantified.

Questions posed were:

- Who in your department or division, in addition to yourself, would be best to talk with about your technology needs?
- What technology is working well for you, or what do you do well with technology?
- For instructional areas: What are your current classroom needs? What are faculty IT needs? (include needs in their offices)
- For other areas: What are current key IT needs in your field?
- How can IT support your work?
- What IT related needs do you anticipate in the next 3-5 years?
- Which Educause top 10 IT priorities are most relevant?

Several major themes emerged from these interviews.

- Areas of effectiveness: Citrix; NEED responsiveness and interactions with several IT staff members.
- Current needs: file sharing and storage; WiFi; training; application compatibility within Citrix.
- IT Support Requests: live human response at the NEED line; program specific, updateable website; better integration between district and campus systems.

EDUCAUSE PRIORITIES

Educause is a nonprofit association whose mission is to advance higher education by promoting the intelligent use of information technology. With help from the IT Issues Panel and a representative sample of IT leaders in the community, EDUCAUSE has selected the 2016 top 10 IT issues and strategic technologies in higher education. The IT Strategic Planning Committee considered these national priorities in formulating our campus priorities.

1. Information security
2. Optimizing educational technology
3. Student success technologies
4. IT workforce
5. Institutional data management
6. IT funding models
7. Business intelligence and analytics
8. Enterprise application integrations
9. IT organizational development
10. E-learning and online education

SAMPLE PLANS

IT Strategic Planning Committee considered and referred to other institutional plans which served as inspiration for format and content.

- Boston College
- Allan Hancock College
- Stanford University
- Lehigh University

IT STRATEGIC PLANNING COMMITTEE

Co-Chairs:

Harriet Wasserman – Director, IT Services

Tanya Knannlein – Instructor, BITCA

Members:

Esteban Maldonado – Director of Grants, Strategic Initiatives and
Institutional Research

Eric Mead – Information Technology Specialist, IT Services

Jaime Cardenas – Instructor, Humanities and Social Sciences

Steve Conger – Instructor, BITCA

Yun Moh – Instructional Designer, eLearning

IT COUNCIL MEMBERS

Chairs:

Harriet Wasserman – Director, IT Services

Members:

Stephanie Delaney

Cherisa Yarkin

Wai-Fong Lee

Fred Goglia

Jacqueline George

Renee Jackman

Tanya Knannlein

Esteban Maldonado

Jim Cauter

Kevin Riley

Marlene Enriquez-Campos

Judy Blair

Yun Moh

Doug Romine

LEARNING AND TEACHING



A total of 1200 student PCs and 295 student Macs are supported by IT Services. Nearly all PCs run our standard instructional suite of over 120 applications, modified at instructors' requests. The student network includes 42 printers. There are 110 classrooms, each equipped with a projector, classroom computer, document camera and a laptop connection to the projector. Drop-in labs are in the Computer Center and in the Library. There are labs for Learning Support Network in BE 2102 and MESA in NP106.

Learning and Teaching

Support students and faculty in effective use of technology for learning and teaching.

Priorities

- ✓ Classroom technology
- ✓ Computer labs
- ✓ Accessibility
- ✓ Innovation

LEARNING AND TEACHING

Open computer labs:

- Library 60 student stations.
- Computer Center Open Lab 175 PCs and 16 iMacs.

Labs for class use:

- Computer Center 10 rooms with 30 to 35 stations each. Open to any classes, though three are reserved for IEP at most times.
- Basic and Transitional Studies 3 labs with 30 stations each. One room with 8 stations.
- Apparel Design Dedicated 25 station lab in BE 1150.
- International Education Dedicated 25 station lab in BE 1130. Also daytime use of three computer center labs.
- American Sign Language Dedicated lab in BE 1148 with specialized video recording.
- Creative Academy 9 labs with 25 to 30 iMacs each. Production center with 6 iMacs.
- Wood Technology Center 17 station iMac lab.
- Health Education Center 10 classrooms and one 11 station lab. Fall 2016, will add two 30 station labs, for class and open lab use.
- Seattle Maritime Academy 12 station lab.

The BITCA division operates and supports three labs and one presentation room on a separate network for IT instruction programs. Extended Learning operates two labs on a separate network, supported by ELearning staff.

LEARNING AND TEACHING

Strengths and Accomplishments

- Student computing equipment is current and well maintained.
- Skilled staff members are available in the Computer Center.
- Nearly all student computers feature the whole set of instructional software, allowing flexible scheduling.
- Universal Technology Fees and Computer Lab fees support software license costs and provide a reasonable replacement schedule for student desktop computers.
- Student computers are imaged weekly, so are patched and updated to current standards.
- Weekly imaging allows mid-quarter updates and revisions requested by faculty.
- Universal Tech Fee funds assist student computing.

Challenges and Opportunities

- There are no ongoing funds to support classroom technology. The computers themselves are adequate, but peripherals (printers, projectors, scanners, etc.) are woefully outdated.
- Maintaining separate software images for specialized use is complex.
- Instructors would like more time at the end of each break to test the upcoming quarter's student software.
- There are requests for added student laptops and related support.
- Electrical problems interfere with sound and with wiring in classrooms.

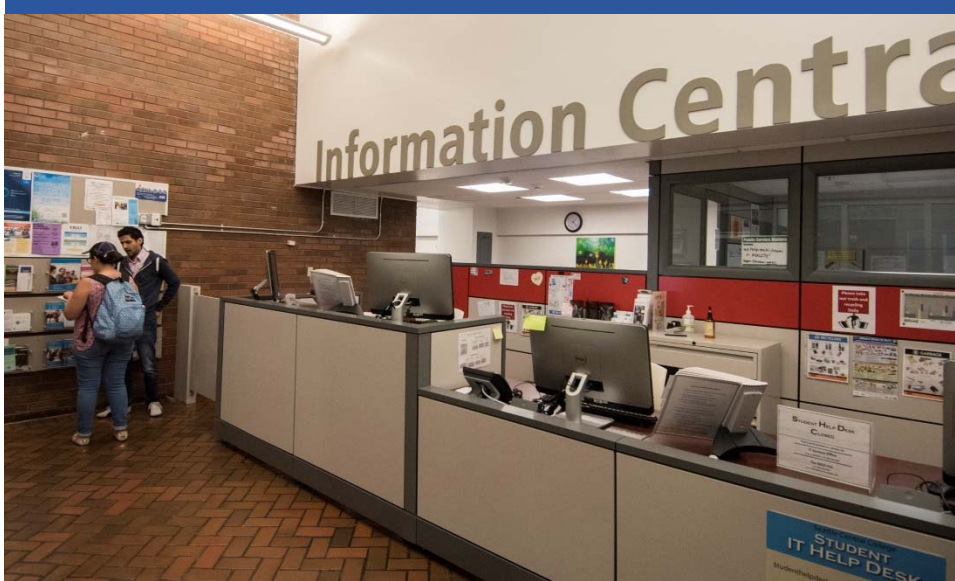
IT Services plans to

- Seek funds to equip classrooms with current technology, allowing flexibility to address current and future needs and varied teaching approaches.
- Schedule updates so as to provide faculty with time to test student net software changes, each quarter.
- Collaborate and assist faculty in researching and implementing curriculum-driven technology to enhance student experiences.
- Assure accessibility in labs and classroom across all college campuses: furniture, software, hardware.
- Work with E-learning to assure captioning of instructional videos.
- Meet with instructional staff and faculty to assure IT resources are aligned with instructional goals.

The college community can support these plans by

- Informing IT of upcoming technology needs.
- Identifying funds to align IT resources with instructional goals.
- Providing adequate electricity and cooling for labs and classrooms.
- Including IT Services in classroom and program planning.

STUDENT SERVICES



Student Services

Ensure students, regardless of physical and/or economic barriers, have access to IT Services and equipment that are user-centered and facilitate completion of educational and career goals.

Priorities

- ✓ Advising tools (portal/dashboard)
- ✓ Tablets/Chromebooks for student use in advising, registration and financial aid
- ✓ Tracking student use of systems and services
- ✓ Document scanning and storage

The Student Services area includes technology resources in many locations and departments. Student Leadership and Student Support programs are in buildings outside the BE complex. Enrollment Services, Financial Aid, Advising, Transfer Center, Career Center and Co-op Ed are in the main BE first floor complex. In addition to staff workstations, supported systems include three Advising workstations for students to access college websites, class schedules, grades; two Financial Aid workstations for accessing FAFSA websites; 21 Dell laptops for orientation and training in a dedicated room. Advising has Chromebooks and tablets for student use. Career Center includes a six station lab for career planning and resume work. Testing Center has two computer equipped rooms, with a total of 49 workstations. The College Transfer Center includes two computers where students can search for college information and complete applications. Staff members have Citrix systems and access to the HP/UX administrative services and SBCTC applications.

Strengths and Accomplishments

- Advisor Portal is working well.
- Testing Center meets certification specs and was recently expanded with new furniture and equipment.
- IT Services is responsive to requests.
- Orientation Center is equipped with laptops.
- Kiosk stations in Advising and Financial Aid help students.
- Advising provides Chromebooks and Samsung tablets.
- Universal Tech Fee (managed by student leadership) provides much needed student equipment.

Challenges and Opportunities

- Student and financial legacy systems are outdated.
- Moving to CTCLink/PeopleSoft will be a huge challenge.
- Appointment system is needed for Advising.
- Career Center needs to tally student use of their services.
- Many areas want to make more use of Canvas.
- Disability Services report lists many technology deficiencies.
- Better file sharing resources are needed.
- Running Start needs to scan/digitize many documents.
- Hershey imaging software is past end-of-life.
- Student leadership's needs don't fit either student or admin networks.

IT Services plans to

- Work with Student Services and district to implement needed tools.
- Assure software and hardware are accessible to all.
- Provide special setups to meet accessibility requirements.
- Investigate all possible ways to improve HP usability and dependability.
- Investigate replacement for Hershey system.
- Support display screens for campus communication.
- Ensure student information security.

The college community can support these initiatives by

- Including IT Services in planning.
- Providing feedback to IT.

CUSTOMER SERVICE



IT Services supports a helpdesk for faculty and staff, staffed from 8 a.m. to 6:30 pm. Monday-Thursday, 8a.m. to 4:30 pm Fridays, and from 9 a.m. to 1 p.m. on Saturdays. A 12 station training room is located in n BE 3110. A drop in lab (TLC) in 3111 is open to faculty and staff from 8 a.m. - 6 p.m. Monday - Thursday and 8 a.m. to 4:30 p.m. Fridays. Training sessions are scheduled for small groups and for individuals; help is available for individual projects and problems. A student helpdesk, funded by S&A fees, is open for students in room BE 1105 during the academic quarters.

Customer Service

Provide consistent, responsive, best-in-class IT services and support.

Priorities

- ✓ Help Desk operations
- ✓ Self-help options
- ✓ Training for faculty and staff
- ✓ TLC lab

Strengths and Accomplishments

- Helpdesk staff have excellent technical and customer service skills.
- Online EForm automates student help requests.
- New ticketing system makes the helpdesk more effective.
- NEED (helpdesk) is responsive to requests.
- TLC staff is praised for helpfulness and knowledge.
- Training schedule is flexible and adaptive to needs.
- Individual and small group training is offered on request.
- Training room projection was recently upgraded.
- S&A funded student helpdesk provides essential support.

Challenges and Opportunities

- Self-help tools are needed.
- Classroom equipment is varied, and lacks explanations.
- Migration to Windows 10/Office 2016 will require training.
- Support for Canvas/Panopto requires coordination between IT Services and Extended Learning.
- Faculty and staff need time to participate in training and to learn new technology skills.

IT Services plans to

- Increase help options by expanding self-help tools and providing online support options.
- Collaborate with stakeholders in research, acquisition and installation of new equipment.
- Add staff to assure quick helpdesk response.
- Create videos explaining classroom IT systems.
- Survey employees and students annually.
- Provide small group and individual training opportunities using a variety of modes.

The college community can support these initiatives by

- Submitting requests and questions to the helpdesk (NEED) immediately.
- Participating in IT training opportunities.

FACULTY AND STAFF COMPUTING



For faculty and staff use, IT Services supports 865 Windows 7 PCs and 33 iMacs, 225 networked printers, and a variety of related devices and software. Locations include Broadway campus, Wood Technology Center, Seattle Maritime Academy and the Health Education Center. Faculty and staff software is through a Citrix system. SVI and Siegal employees have Seattle Central Citrix accounts. There are about 450 concurrent Citrix users at any one time. Email is provided by the Seattle Colleges district, currently from a district-hosted Exchange server but soon to move to O365 cloud services.

Faculty and Staff Computing

Assure that faculty and staff have awareness of, access to, and support for current and emerging technologies. Promote cost-effective and streamlined administrative services.

Priorities

- ✓ Office computing resources
- ✓ File sharing
- ✓ Citrix system dependability and functionality
- ✓ Options for collaboration
- ✓ Eforms
- ✓ Conference room systems

FACULTY AND STAFF COMPUTING

Strengths and Accomplishments

- Citrix system works well and saves costs.
- With Citrix, high end desktops are not needed for employees.
- An EForms manager creates needed forms for the college.
- NEED (helpdesk) staff provide quick response to questions
- IT council has an active admin computing committee.
- District move to O365 will help with file sharing.

Challenges and Opportunities

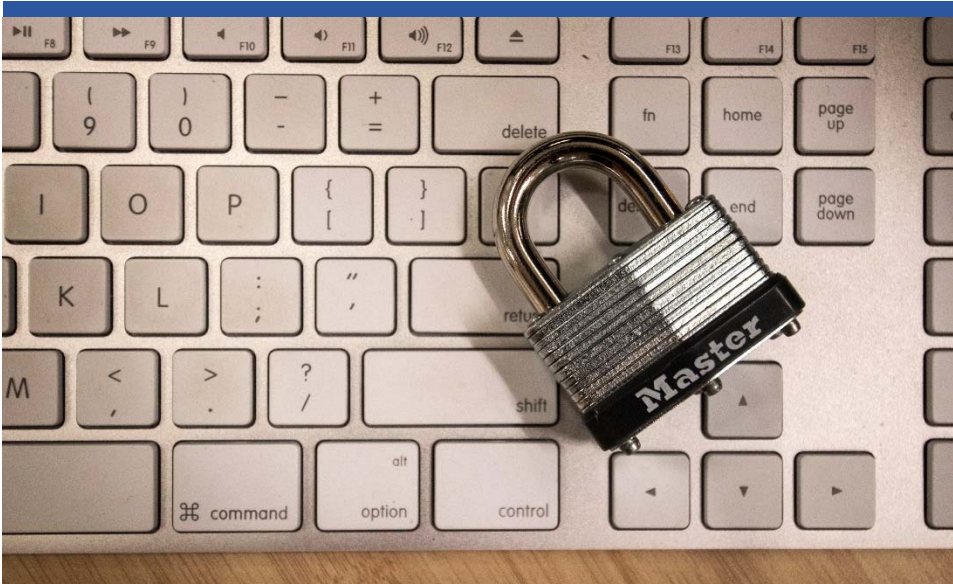
- File sharing methods are desperately needed.
- HP system for SMS, FMS and PPMS is antiquated.
- Conference room systems vary and are outdated.
- Improved collaboration and electronic meeting tools are needed.
- CTCLink/PeopleSoft will require adaptability, training and support
- Faculty/staff would like more laptops.
- Additions and updates are needed for Eforms.
- Passwords and logins are not coordinated between systems.

IT Services plans to

- Maintain sufficient Citrix licenses.
- Install most software in Citrix.
- Implement a robust file sharing system.
- Provide SQL support, replacing outdated Access databases.
- Assure offsite backup for Citrix files.
- Respond quickly to essential local desktop software requests.
- Create and support EForms.
- Update conference room systems.

The college community can support these plans by

- Storing files in the Citrix system, rather than on local drives.
- Submitting software and hardware requests in a timely manner.



Educational institutions are known to be targets for security attacks. Seattle Central implements hardware/software tools, as well as policies, procedures and training to protect our data and our equipment. The Seattle Colleges district maintains an IT Security Plan in compliance with state policies.

Information Technology Security

Improve IT security through ongoing awareness of information security vulnerabilities and threats, and by assuring technology systems are reliable and secure.

Priorities

- ✓ Confidentiality.
- ✓ Integrity.
- ✓ Availability.
- ✓ User awareness of security issues and threats.

Strengths and Accomplishments

- We have active representation on the statewide Security Council.
- College firewall equipment is state-of-the-art.
- Network managers and IT staff are security-aware and careful.
- All employees have access to SANS security training.
- SBCTC constantly provides updates and warnings.
- The Seattle College District has an excellent Security Plan.

Challenges and Opportunities

- Compliance with regulations is complex.
- Colleges present a huge security target.
- Phishing and related scam attempts abound.
- Employees and students do not always heed security precautions.

IT Services plans to

- Observe all state and district security and confidentiality requirements.
- Act immediately on SBCTC warnings.
- Assure that systems are patched and updated.
- Provide security training to all faculty and staff.
- Support robust firewall devices.

The college community can support these plans by

- Remaining vigilant to IT Security threats.
- Participating in security training.
- Observing security requirements.
- Keeping personal systems updated for malware and virus protection.

INFRASTRUCTURE / CONNECTIVITY



Seattle Central supports wired networks for students and for employees. A separate network provides Wi-Fi. The student network supports 1200 PCs and 270 Macs, with 16 physical servers, 82 EDGE switches and 5 backbone switches. Connections are to the main student server room. All student computers connect at 1 GB. Fiber connects the floors in BE and SAM and all our remote sites. The faculty and staff network includes 24 physical servers and 75 virtual machine servers for the Citrix system, and an additional 8 servers including two hypervisors and our virtual machines. About 20 old 100 Mb switches remain on the faculty-staff network; the rest are operating at 1 GB. Wi-Fi was recently upgraded, partly with student fee funds, to a modern 1102-AC system. We continue to add access points as needed to assure excellent Wi-Fi service.

Infrastructure/Connectivity

Provide systems that are secure, reliable, integrated and that enable the work of our faculty, staff and students.

Priorities

- ✓ Cloud services to replace onsite data centers.
- ✓ Internet connectivity.
- ✓ Wi-Fi network.
- ✓ Servers and switches.
- ✓ Operating systems.
- ✓ Fiber and copper wiring.

INFRASTRUCTURE / CONNECTIVITY

Strengths and Accomplishments

- 1 GB fiber network connects directly to the PNW Gigapop.
- Fiber is available to all locations.
- Server management staff are highly skilled and dedicated.
- Network design optimizes speed.
- Wi-Fi network is built to the current standard.
- Student network is being upgraded to 10 GB using student fees.
- Servers are current and adequate to our needs.

Challenges and Opportunities

- There is no ongoing source of funds for infrastructure.
- 10 GB connectivity will soon be needed.
- Hiring skilled staff is difficult with state salary rates.
- Some admin switches are far past end-of-life.
- Scheduling downtime is complex.

IT Services plans to

- Utilize cloud base services when cost effective.
- Add Wi-Fi points as needed to assure coverage.
- Implement 10 GB connectivity, first for students, then for all.
- Acquire and install current network switches.
- Implement Windows 10 and future OS updates.
- Research and implement IPv6.

The college community can support these plans by

- Providing electrical and cooling services needed to maintain IT functions.
- Investigating providing generator power to student MDF.
- Recognizing that college facilities include IT infrastructure, when allocating improvement funds.

SUSTAINABILITY



Seattle Central strives to responsibly repurpose and recycle equipment. Surplus items are donated to a community agency. Good computers from student labs are passed on to faculty and staff for use with the Citrix system. Student computers are remotely/automatically shut down each night and when not needed on weekends. Hardware and software standards are in place, to minimize costs and promote efficiency. Implementation of metering software on the student network reduced student printing waste by over 70%. A comprehensive replacement plan is in place for student computers, though current funding is inadequate to maintain that plan. IT Services carefully calculated Total Cost of Ownership (TCO) for the various types of student and employee computers in use. A method must be found to provide the required ongoing TCO resources including hardware, software, infrastructure, and support staff.

Sustainability

Assure energy efficient systems, responsible disposal of surplus, and financial sustainability.

Priorities

- ✓ Energy savings.
- ✓ Cost savings.
- ✓ Adequate funding to sustain operations.

Strengths and Accomplishments

- “Managed Print Services” provide information and cost reductions.
- PCounter monitors student printing and reduces costs.
- Automatic shutdowns save energy on student systems.
- Surplus to Interconnection assists the community and the college.
- IT has good data on Total Cost of Ownership.
- A student computer replacement schedule is in place.
- Server and desktop virtualization are used effectively.

Challenges and Opportunities

- Employees ask for more printers than the recommended allotment.
- Funding is inadequate to meet the replacement schedule.
- There are no funds for infrastructure maintenance or upgrades.
- Departments do not have funds to support needed additions.
- Grants often require institutionalization, with no ongoing funds.

IT Services plans to

- Contribute surplus items to community agencies.
- Consolidate and virtualize computing equipment to realize energy savings and reduce costs.
- Formalize a sustainability plan including infrastructure, classroom technology, annual replacement needs and ongoing costs.
- Utilize our managed printer agreements.

The college community can support these plans by

- Collaborating with IT Services on funding requests.
- Planning for ongoing costs when purchasing IT systems.
- Alerting helpdesk of surplus equipment.
- Sharing printers and MFDs.

IT SERVICES STAFF



Seattle Central IT Services staff supports all Seattle Central locations and SVI. Staff includes a director, an administrative assistant, two exempt network and infrastructure managers, IT specialists and IT Technicians. There are teams for: the student Computer Center, systems management, the TLC and training center, EForms and databases, and helpdesk. Salaries are funded through a combination of student fees, state allocations, International student monies, and departmental resources. Staff members are located on the BE 3rd floor and onsite at Pacific Tower and SVI. Staffing ratios are below those of most two year colleges of our size. Each staff member supports more users and more systems than what is recommended.

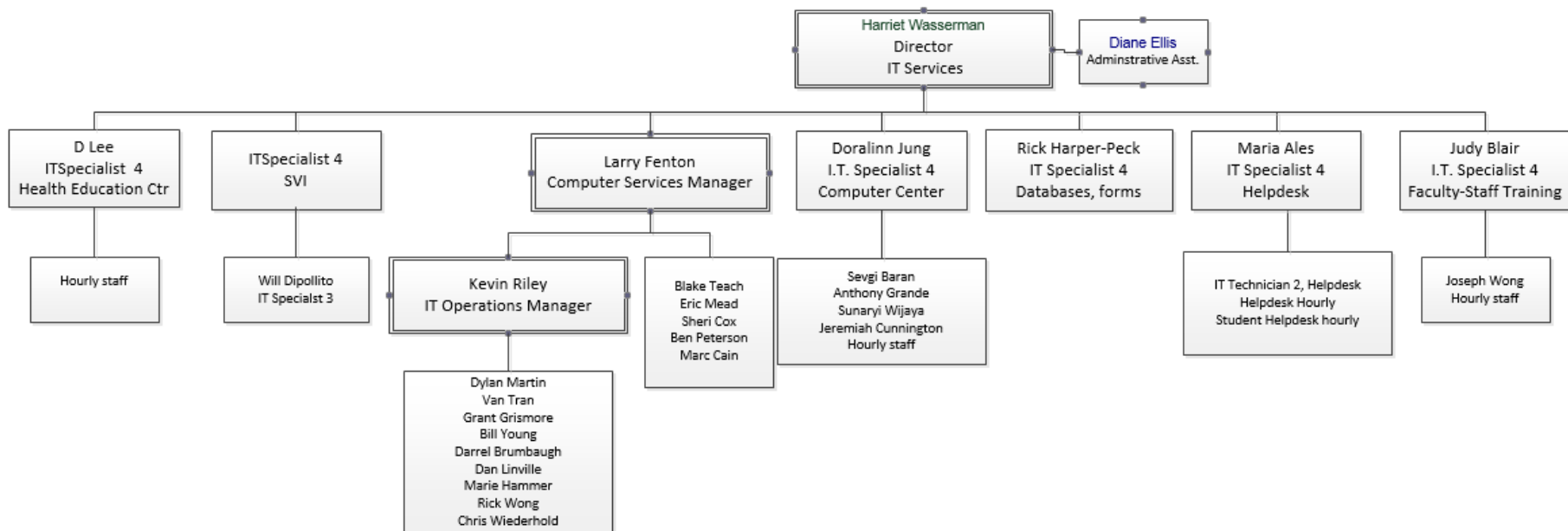
IT Services Staff

Ensure that IT support personnel are adequate in number, approachable, knowledgeable, and understand college operations.

Priorities

- ✓ Adequate IT Staffing levels.
- ✓ Excellent technical and human skills.
- ✓ Backup for all IT personnel (depth of 2).
- ✓ Appropriate staff for specialized departmental needs.

IT SERVICES STAFF



Strengths and Accomplishments

- Faculty, staff and students praise the skill and attitude of IT staff.
- Staff members are eager to learn and welcome change.
- International funds allowed addition of one staff member in 2015.

Challenges and Opportunities

- State salaries are low and demand for IT skills is high.
- Funding is inadequate to provide enough staff members.
- Providing backup at all positions requires extensive training.
- There are no dedicated funds for IT staff training.
- Staff budget cuts made in 2008 have not been fully restored.
- Computers are added without corresponding staff increases.

IT Services plans to

- Attract, develop and retain outstanding staff.
- Provide technical training for IT professionals.
- Provide designated staff for divisions/departments when financially possible.
- Utilize local, departmental and fee funds to increase staffing.
- Encourage completion of the statewide IT reclassification project.

The college community can support these plans by

- Responding to surveys regarding staff effectiveness.
- Communicating the need for any specialized skills.



As part of the Seattle Colleges district, Seattle Central participates in many district-wide projects. The Email system, migration to O365 (including access to One Drive and SharePoint) and a districtwide Enterprise Active Directory are among current projects. Each of the Seattle Colleges has a role in a new initiative to coordinate networks, security, enterprise projects and customer service. As the state system moves toward implementing PeopleSoft in place of the ancient HP administrative systems, CTCLink will require a huge amount of work and coordination. Within Seattle Central, college-wide initiatives often impact IT Services. Grant funding often requires “institutionalization” of projects started under the grants. Nearly every capital/facilities project has some IT components.

College-wide and District Initiatives

Cooperate and collaborate college and district wide for efficiency and for consistency with institutional vision and mission.

Priorities

- ✓ Enterprise Active Directory.
- ✓ Eforms.
- ✓ CTC Link.
- ✓ District pillars: (networks, customer service, IT security, enterprise projects).
- ✓ College capital projects.
- ✓ Grants.

Strengths and Accomplishments

- Districtwide projects combine resources, saving funds.
- Districtwide coordination districtwide promotes efficiency.
- The CTCLink project is statewide and will greatly improve administrative systems.

Challenges and Opportunities

- The Seattle Colleges vary in size and focus.
- Standards don't always fit all.
- Grants are obtained without IT Services input or awareness.
- Institutionalizing grant projects is expensive.
- Central staff are drawn away from Central projects to work on district initiatives.

IT Services plans to

- Collaborate with Capital Projects department to ensure that facilities and remodels are IT-ready.
- Participate actively in district wide projects.
- Assist all areas in CTC Link implementation.
- Track new grants, new programs, and contracts to assure appropriate technology and adequate ongoing support.

The college community can support these plans by

- Informing IT Services of grants, contracts, capital projects which impact IT services or resources.
- Working toward equity among the Seattle Colleges on districtwide projects.

SUMMARY OF PRIORITIES AND ACTIONS

LEARNING AND TEACHING

STRATEGIC INITIATIVES	PRIORITIES	IT SERVICES ACTIONS	COLLEGE WIDE ACTIONS
<p>Learning and Teaching Support students and faculty in effective use of technology for learning and teaching.</p>	<ul style="list-style-type: none"> ✓ Classroom technology ✓ Computer labs ✓ Accessibility ✓ Innovation 	<ul style="list-style-type: none"> • Seek funds to equip classrooms with current technology, allowing flexibility to address current and future needs and varied teaching approaches. • Schedule updates so as to provide faculty with time to test student net software changes, each quarter. • Collaborate and assist faculty in researching and implementing curriculum-driven technology to enhance student experiences. • Assure accessibility in labs and classroom across all college campuses: furniture, software, hardware. • Work with E-learning to assure captioning of instructional videos. • Meet with instructional staff and faculty to assure IT resources are aligned with instructional goals. 	<ul style="list-style-type: none"> • Informing IT of upcoming technology needs. • Identifying funds to align IT resources with instructional goals. • Providing adequate electricity and cooling for labs and classrooms. • Including IT Services in classroom and program planning.

STUDENT SERVICES

STRATEGIC INITIATIVES	PRIORITIES	IT SERVICES ACTIONS	COLLEGE WIDE ACTIONS
<p>Student Services <i>Ensure students, regardless of physical and/or economic barriers, have access to IT Services and equipment that are user centered and facilitate completion of educational and career goals.</i></p>	<ul style="list-style-type: none"> ✓ Advising tools (portal/dashboard) ✓ Tablets/Chromebooks for student use in advising, registration and financial aid ✓ Tracking student use of systems and services ✓ Document scanning and storage 	<ul style="list-style-type: none"> • Work with Student Services and district to implement needed tools. • Assure software and hardware are accessible to all. • Provide special setups to meet accessibility requirements. • Investigate all possible ways to improve HP usability and dependability. • Investigate replacement for Hershey system. • Support display screens for campus communication. • Ensure student information security. 	<ul style="list-style-type: none"> • Including IT Services in planning. • Providing feedback to IT.

CUSTOMER SERVICE

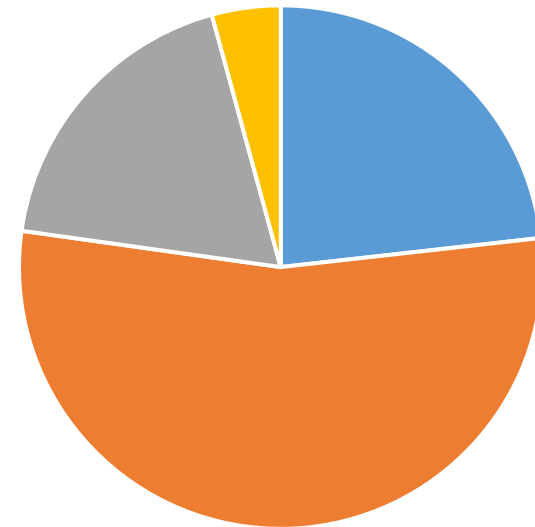
STRATEGIC INITIATIVES	PRIORITIES	IT SERVICES ACTIONS	COLLEGE WIDE ACTIONS
<p>Customer Service</p> <p><i>Provide consistent, responsive, best-in-class IT services and support.</i></p>	<ul style="list-style-type: none"> ✓ Help Desk operations ✓ Self-help options ✓ Training for faculty and staff ✓ TLC lab 	<ul style="list-style-type: none"> • Increase help options by expanding self help tools and providing online support options. • Collaborate with stakeholders in research, acquisition and installation of new equipment. • Add staff to assure quick helpdesk response. • Create videos explaining classroom IT systems. • Survey employees and students annually. • Provide small group and individual training opportunities using a variety of modes. 	<ul style="list-style-type: none"> • Submitting requests and questions to the helpdesk (NEED) immediately. • Participating in IT training opportunities.

FACULTY AND STAFF COMPUTING

STRATEGIC INITIATIVES	PRIORITIES	IT SERVICES ACTIONS	COLLEGE WIDE ACTIONS
<p>Faculty and Staff Computing</p> <p><i>Assure that faculty and staff have awareness of, access to, and support for current and emerging technologies.</i></p> <p><i>Promote cost-effective and streamlined administrative services</i></p>	<ul style="list-style-type: none"> ✓ Office computing resources ✓ File sharing ✓ Citrix system dependability and functionality ✓ Options for collaboration ✓ EForms ✓ Conference room systems 	<ul style="list-style-type: none"> • Maintain sufficient Citrix licenses. • Install most software in Citrix. • Implement a robust file sharing system. • Provide SQL support, replacing outdated Access databases. • Assure offsite backup for Citrix files. • Respond quickly to essential local desktop software requests. • Create and support EForms. • Update conference room systems. 	<ul style="list-style-type: none"> • Storing files in the Citrix system, rather than on local drives. • Submitting software and hardware requests in a timely manner.



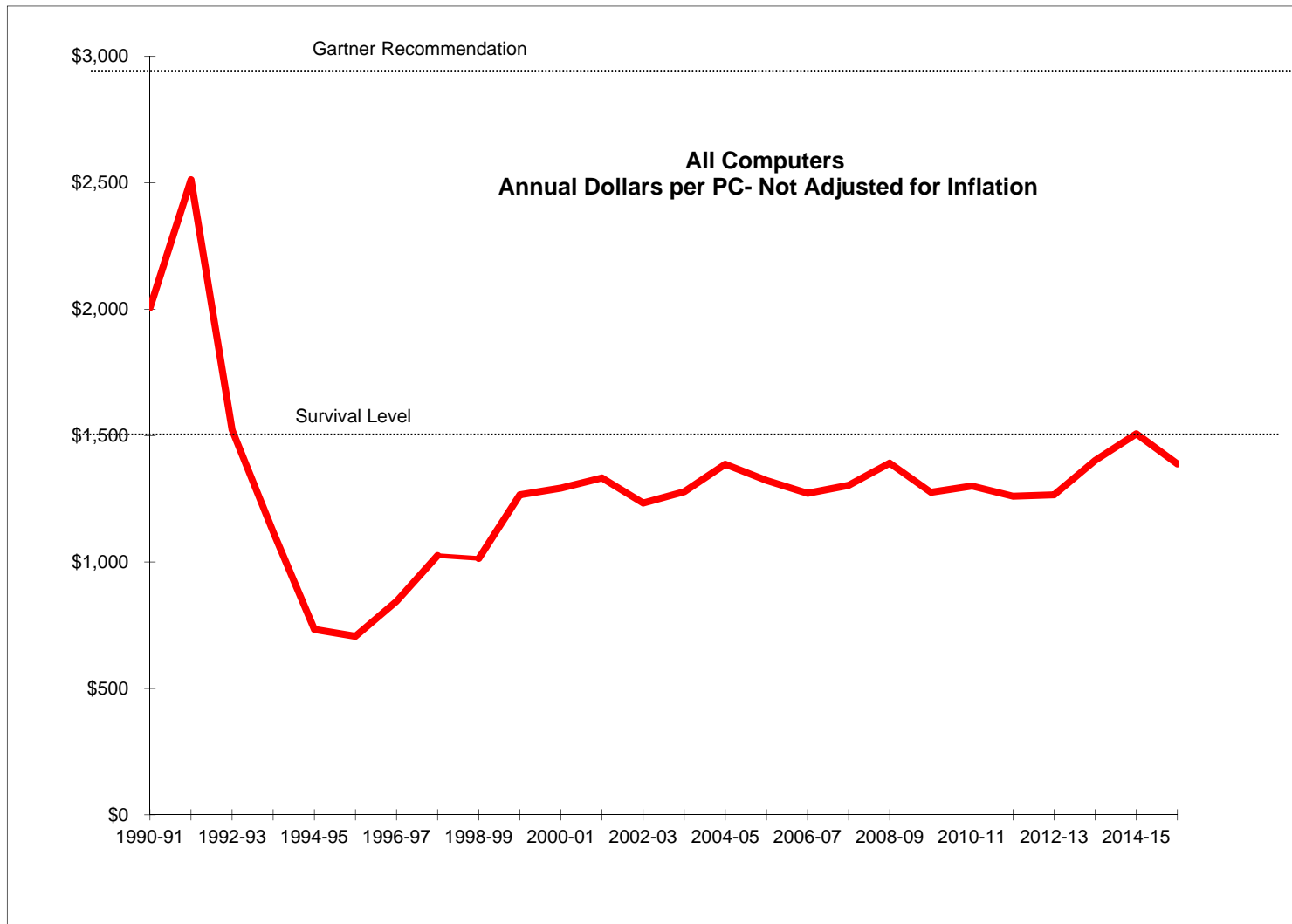
Instructional Computers, 2014-15



■ State IT Funds ■ Student Fees ■ Other depts ■ One time

Information technology at Seattle Central is funded from IT Services operating budgets, student fees including Computer Lab (CL) and Universal Technology (UT) funds and departmental budgets. About \$142,800 each year is dedicated to instructional computing equipment purchases, allocated by a committee of the IT Council. Student fees provide an ever-increasing share of the costs, as state funds diminish. Currently over 50% of all student computing costs are funded from lab fees. Declining enrollment will result in a decrease in fee funds for 2015-16.

Funding has not kept up with growth in the number of computers on campus or with the added computers in new facilities such as Wood Technology, Pacific Tower and the new Seattle Maritime Academy. A one-time allocation of \$100,000 in 2014-15 funded improvements in 10 classrooms. S&A fees fund the Student Helpdesk, staffed by student employees, supervised by IT Services. Basic and Transitional Studies, and International Education divisions each fund one technician in the IT Services department.



TECHNOLOGY PLANNING AND BUDGETING



The IT Council updates our IT Strategic Plan annually. Tactical planning and budget management are done by the Information Technology Services division with input from all college units and departments. Recently, instructional deans and faculty have worked on plans to align IT resources with instructional objectives. Budget responsibilities include approving IT related requests for the college, preparing one-time requests, allocating student fees, tracking state and fee budgets, and planning for computer and infrastructure replacements.

The current replacement cycle for instructional computers is over four years, beyond recommended lifetimes for computers supporting our complex instructional software. Growth in number of computers, combined with a small decrease in fee revenues, is extending the replacement cycle beyond accepted limits. With a three year cycle, computers removed from student labs still had several years of life as Citrix systems for employees. With a four year cycle, there are not enough computers to serve faculty and staff. There are no dedicated funds for server or infrastructure improvements, which depend on one-time allocations.

Planning for the future will involve more use of cloud services, more bandwidth, and less dependence on campus data centers. Wi-Fi is well funded by the Universal Technology Fee. That fee is also providing funds for 10GB service to the student network, to be implemented by fall 2016.

TECHNOLOGY PLANNING AND BUDGETING

Instructional Computer Replacement Plan 2014-2019

Year Total	Fund year	Locations/Type	Counts	Costs	Notes	Year Total	Fund year	Locations/Type	Counts	Costs	Notes
	2014-15	IT instruction high cost		\$50,000	Fees		2016-17	SAM	167	\$201,152	
	2014-15	MIDI-SMA-ASL	38	\$39,530	UT fee special fund		2016-17	Rest of BTS	35	\$42,158	
	2014-15	Library	64	\$66,576	Funded		2016-17	SMA	8	\$9,636	
	2014-15	Macs: 3 rms +faculty	104	\$170,820	Fees inadequate		2016-17	Rest of Macs	50	\$0	Not enough funds
	2014-15	SAM laptops	43	\$47,300	not funded (not done)	\$450,045	2016-17	part of open lab	100	\$197,100	
\$326,926	2014-15	BTS (760s!)	94	\$92,637			2017-18	Demo classrooms	110	\$132,495	
	2015-16	Apparel/ 3156	75	\$100,000	Required or AD software.		2017-18	MIDI-ASL	30	\$36,135	
	2015-16	Chem laptops	24	\$10,000	Switched to Chromebooks		2017-18	part of open lab	70	\$84,315	
	2015-16	BTS labs	93	\$110,996	Some done spring 2016	\$351,495	2017-18	Macs (from 16-17)	50	\$98,550	
\$414,996	2015-16	Student Macs	100	\$180,000	Part done. Ran out of funds.		2018-19	Library	69	\$83,111	Part funded ongoing
							2018-19	IT instruction share		\$50,000	Special Models
							2018-19	Mac cycle starts again	91	\$149,468	
						\$472,890	2018-19	Comp.Ctr Rooms	158	\$190,311	
						Note: 2019-20 will require 100 additional replacements, for Pacific Tower					

EQUIPMENT STANDARDS



Consistency of equipment and software is necessary for efficient and dependable operations. The helpdesk (NEED) will direct faculty and staff to appropriate sources for specifying and ordering IT related equipment. Only college owned equipment and software can be connected to our devices and our networks. All district purchasing rules and standards must be observed.

Infrastructure

- The college router is a Juniper M120.
- Backbone switches are Juniper. Models depend on the use.
- Edge switches for the student network are Cisco 3850. For the admin network, edge switches are Cisco 3750.
- Data Facility setups and wiring standards are spelled out in a FITT (Facilities, IT and Telecommunications) standards book, available on request from IT Services.

Wi-Fi

- The Wi-Fi system uses an Aruba controller and distributed Aruba 8011-AC access points.
- Access points will be added where connectivity is inadequate, on request to NEED.
- College SSIDs may not be used on any other systems. No Wi-Fi system can “bridge” to the wired networks.

Desktop Equipment

- A number of Dell models are on student desktops. Current purchases are from the Dell Optitex 7440 line. All-in-ones are preferred, though some programs have special requirements for separate computers and monitors in dedicated rooms.
- Current model for faculty and staff is the Dell Optitex 7010, provided from the IT Services supply.
- Standard classroom setups include a Dell all-in-one computer with DVD drive, a ceiling mounted projector or large flat screen, an Elmo or Hovercam, and connections for laptops. Most still include connections for VGA laptops, though HDMI is the standard.
- Creative Academy faculty and students have iMacs. Models vary from year to year. There are not funds to support Macs in other areas.

EQUIPMENT STANDARDS

Laptops and Tablets

- Dell Latitude is the laptop standard. At the time of this document, model numbers are changing. IT Services will arrange quotes on the current model. Microsoft Surface Pro tablet/laptop devices are also supported. For specialized uses, where support is available, other Dell or Lenovo models may be specified. Some Creative Academy faculty have MacBooks. Faculty may sign up to be administrators on their laptops, taking total responsibility for updates and patches.
- iPads and Chrome devices may be purchased and are supported by the users or their departments. Such purchases do require IT Services signoff, but are generally approved.

Printing

- The college operates under a “Managed Print” program from QBSI/Xerox. A QBSI technician is on campus two days a week. All Xerox and HP toner must be ordered on the QBSI contract. Toner is included in per-page costs.
- College standard for MFD (printer/scanner/copier) is Xerox. Model depends on volume and needs (color, fax, etc.). NEED can arrange a consultation. These devices are generally leased from QBSI by district Purchasing. Per-page costs are lower on these devices than on printers.
- Printers, color or black, are HP. Models are selected for needed volume and functions. They must be networked, must use our available software drivers, and must print duplex (two sided).
- Student printing in the open lab, library, and some SAM labs is billed at 10 cents per color copy and 2 cents per black copy, through the PCounter system.
- Faculty and staff HP printing costs are charged back to departments quarterly.

Software

- Student software is all managed from file servers. The standard suite of software is compiled from faculty requests. Requests to add applications or update versions should be made to NEED prior to the start of each quarter. It is not possible to install software on any individual student computers. Since systems are imaged weekly, it is possible to make updates and changes during the quarters, on faculty request.
- Many textbooks now use special websites requiring license or logins. IT Services will test those for compatibility on request from faculty.
- Faculty and staff software is provided through the Citrix system. Standard software is not installed on any employee desktops, but some specialized software may be installed on request. Some specialized software is incompatible with Citrix. IT Services will help find alternatives.

Special thanks to faculty and staff who participated in campus interviews, Maria Ales for interviewing faculty and staff, Sevgi Baran, and Bethany Baker, Seattle Central Photographer, for providing images.

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**SEATTLE CENTRAL
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