

ANNUAL REPORT

2014-15

Campus Technology Services



Supporting the Digitally Enhanced Campus

Technology is a vital component to the support of learning, teaching, research and administration at SUNY Oswego. A balance of innovative and transformative technology along with effective and efficient implementation, support and use of technology are key enablers to assisting the College achieve its mission and strategic goals. At a time when Oswego is focusing on improving student outcomes, expanding the campus with exciting capital projects, broadening its reach in the region with a branch campus in Syracuse and increasing its virtual presence with new online offerings within Open SUNY – Campus Technology Services (CTS) has executed projects that have either directly or indirectly supported these and a wide range of other College projects.

In order to guide the use of technology on campus, CTS produced its first technology strategic plan in May 2012. The plan along with the priorities of the College, SUNY and the Academic Affairs unit has guided the activities of CTS over the past year. The lifetime of the original plan is coming to a close in 2015, and is being renewed this year with a widely consultative strategic planning process across the College. The goal is to ensure technology implementation on campus is aligned with the priorities of the campus, as established in Oswego’s “Tomorrow – Greater Impact and Success” plan. The technology strategic plan is scheduled for completion by the end of the calendar year.



CTS can be proud of a number of achievements that have been made either in support, or with, a wide variety of stakeholders over the 2014-15 academic year. Highlights include the move from Angel to Blackboard Learn, the expansion of wireless in academic areas, implementation of a pilot iPad program in the School of Ed, continued emphasis on utilizing mobile platforms to engage student in the classroom and to handle administrative tasks, and the introduction of Adobe Creative Cloud for the campus.

This document lists CTS achievements in the broader context of supporting the College’s strategic initiatives. It is important to note success of the projects always needs to be measured in terms of students graduating, succeeding and ensuring we create an environment for our students to thrive in light of our College’s mission.

Sean Moriarty
Chief Technology Officer

A handwritten signature in black ink that reads "Sean Moriarty". The signature is written in a cursive, flowing style.

VITALITY

Focus on new and innovative programs, student recruitment, retention and support services, faculty recruitment and development, Metro Center and Extended Learning programs, and other ways your unit contributed to the vitality of the College.

MOVING TO A NEW LMS

2014-15 marked the final year that Oswego will use Angel as the Learning Management System (LMS). Because of Blackboard's end-of-life announcement for Angel, the LMS is being changed to Blackboard Learn. A team of staff from Extended Learning, CTS and Penfield Library has spent the year preparing to move to Learn.

- The first cohort of faculty used Blackboard Learn in the spring semester. There were approximately 50 faculty teaching 130 courses with 3400 students in a mixture of fully online, hybrid and face-to-face offerings. This pilot was a success.
- All courses will be moved to Learn by the start of the fall '15 semester. The fall migration is the start of a yearlong task, as staff will be assisting faculty to prepare their Learn presence for winter and spring courses throughout the year.
- In the fall '14 semester, Google classroom was introduced to faculty as a lightweight LMS option. Google Hangouts has been added to the Google offerings in the spring and has been utilized in a few courses.



ENHANCING THE CAMPUS

Over the past year, CTS has worked with a variety of stakeholders to ensure the campus' new buildings are digitally enhanced to provide students access to services they require including wireless and technically advanced classrooms.

- Hewitt Union was renovated to support the teaching and learning that will take place in the building as Tyler Hall is renovated. All classrooms, networks and wireless infrastructure were upgraded to the current campus standards. Faculty and students that work, teach and learn in that

space have access to the same level of technology as students in other areas of campus. Students, faculty and staff moved into the building in August 2014 and will remain until Tyler Hall is complete in winter 2016.

- The Metro Center was renovated and expanded with new spaces on the main and 3rd floor. Included in the expansion was technology for a new classroom and conference spaces and a Videoconference system. The network has also been expanded and a new Integrated Group Learning Unit (IGLU) system will be installed in the original space over the summer.

INFRASTRUCTURE UPGRADES

- Eduroam was implemented in January 2015. Eduroam allows individuals from institutions who support this service to connect to our wireless system seamlessly when they arrive on campus. It also allows our academic community to connect to the wireless at institutions that support Eduroam, such as Syracuse, Albany, Cornell, RIT, Binghamton and thousands of institutions in 74 countries and territories worldwide.
- In June 2014 the campus network has been upgraded at the core to allow for higher Internet connectivity. After implementing this change Internet connectivity was increased by 25%.
- Campus Internet bandwidth has increased by over 60% for the campus. The upgrades include hardware upgrades by for the campus and our vendors that will provide agility in upgrading our services in the future. Additional increases will be implemented for the upcoming academic year.



- Over the past year the campus wireless network has been expanded by close to 500 WAPs. Focus has been placed on improving the academic experience to reach our teaching and learning goals. The following buildings have received new wireless access points (WAPs)

Lanigan	54
Poucher	46
Swetman EAST	50
Other MCC locations	10
Mahar	110
Rich	40
Hewitt	60
Building 20	4
Culkin	20

The project has moved along at a high speed and is about 6 months ahead of schedule.

RESIDENCE SUPPORT

- A new plan was developed and financed to improve Resnet access for students for Fall '14. New services included multiple concurrent logins for students and access to additional logins at a low cost. The Resnet fee was increased to subsidize these costs, the first increase in eleven (11) years.
- Additional wireless access points were provided in Hart, Moreland, Lonis and Mackin to fill wireless coverage gaps for Fall '14.
- A renovation in Waterbury allows for the expansion of wireless in that building. It will be built to the new standard of one wireless access point in every other room when it opens in fall '15.

ASSISTING STUDENT SUCCESS - MOVING FROM ACCEPTANCE TO DEGREE COMPLETION

Much of the work completed in Campus Technology Services is done to support the administration of the college. Ensuring smooth administrative processes removes barriers and frustration from students as they progress towards graduation. Listed below are some administrative projects in support of that goal:

- A business case was created and accepted to replace the Event Management System. The current system, R25, is at end of life, starting project to examine options. A campus wide committee endorsed moving to DEA's product EMS. A project to install the new system will commence in July with a go-live scheduled for January 2016
- *Starfish* was enhanced to assist student retention activities at the College.
- *The Workflow project* is nearing completion to move the change of major process from a paper process to digital. This will lay the groundwork for future workflow projects in the future.
- The *transfer guide* was updated to outline current course equivalencies between SUNY Oswego and selected NYS community colleges and four-year colleges.
- *The Graduate Admission* process has been revamped to provide a streamlined process. The first year that this has been in production has been a success and online processing of transcripts was recently added to reduce the time to move from application to decision.
- *The collection of student parent records* was revamped and implemented for the first time during Orientation in the summer of 2014 in an attempt to provide more accurate information for Alumni & Development.
- *Access to the Shineman building* has been programmed into the College's card entry system and went live in Fall 2014. The process has been



streamlined to allow administrative units to provide access information for their students in a digital format.

- Work on a *Banner XE Grade entry system* is completed to allow faculty to enter their grades into the Banner system in a more streamlined fashion, saving them time. The system was run as a pilot in 2014-15 and will be in production in 2015-16.

ENHANCING THE MOBILE APP

The College mobile app was improved for Fall 2014 to provide more engagement for students and assist them to navigate the path from college entry to degree completion.

- A Labs Status icon was added so students will know where PCs are available for them to work on.
- The mobile app added a new component designed to work hand-in-hand with Degree Works. The new functionality made the app more engaging and useful for students to keep them aware of:
 - advisor information
 - important registration dates and information
 - progress to graduation
 - academic history

Student use and satisfaction have been high. Usage of the app over the last year is up 175% from last year.

Student satisfaction with the mobile app has been high. Usage of the mobile app is up 175% from a year ago.

INTRODUCTION OF CAMPUS SAFETY APP

Oswego Guardian Safety App has replaced Rave Guardian. The roll out of the apps began in May 2013 and was featured in campus orientation sessions throughout the summer. Features include a Panic Button, Tip Texting and Personal Guardian. Close to 500 people are using the app after one year, a large increase from the usage of the old system.

TECHNICAL SECURITY

Constant diligence around the security of our systems to ensure data is secure is an important consideration when systems are implemented.

- A new VPN system was rolled out in January. The new Virtual Private Network (VPN) application available to all faculty and staff. The VPN allows a secure connection to the SUNY Oswego network to access resources that normally you would be unable to reach while off campus.
- CTS restructured in November '14 and created a half-time Security Officer position. Governance around security was renewed and an Information Security Council has been created to support moving vital security policy and procedures forward and work on improving security awareness.

IMPROVING THE WEB

The campus made the decision to move from its current Content Management System, Ingeniux, to a cloud based provider, Aquia. The new content systems is a Drupal based Platform as a Service offering and provides the campus with many



new possibilities, some of which have already been used in the development of web pages for StartUp NY, the Tomorrow plan website and the campus's new website for the Syracuse campus.

During the summer '15 semester and into the fall, the entire Oswego website will be moved to the new platform. Besides the changes in technology, emphasis will be placed on updating content and processes for maintaining the Oswego web presence.

SERVICE DESK IMPROVEMENTS

CTS continues to implement improvements to the Service Desk. The Helpdesk has implemented self-service. The CTS self-service application is an online help desk that can be used to report technical-related issues and check the status of existing ones; browse the service catalog and "order" requests for services; search the knowledgebase for answers to SUNY Oswego technical questions.

CTS and HR are collaborating to implement an electronic onboarding process. This will assist HR by eliminating a series of forms and streamline several processes currently being used. This project is scheduled to go into pilot in June.

INTELLECTUAL RIGOR

Focus on curricular improvements, active learning experiences, assessment activities that resulted in high-impact practices, expanded scholarly and creative opportunities for faculty and students, and enhanced teaching, learning, and research environments through technology, equipment and facilities.

TEN TIP GRANTS WERE AWARDED FROM SIXTEEN APPLICATIONS

TIP grants are intended to support innovative use of technology in the classroom and in labs. A list of the grants awarded is contained in Appendix A. The largest grants awarded include:

- *Adobe Creative Cloud* - The grant provides a one year subscription to Adobe Creative Cloud (CC) Enterprise for the entire Oswego campus. The proposal allows students Adobe CC campus use, while faculty and staff will have campus and home use. Implementing and exposing our students to Adobe CC positions them well as they move into the professional world, where Adobe CC is readily being adopted and is the industry standard. Oswego will be one of the first SUNY schools to implement Adobe CC with the grant. The group submitting the proposal was from a variety of disciplines and act as representatives of a wider group of Adobe users. School of Communication, Media and the Arts, School of Education, College of Liberal Arts and Sciences, School of Business and Penfield Library (*Kelly Roe, Cara Thompson, Rebecca Mushtare, Mark Springston, Joshua Adams, Natalie Sturr*)
- *iPads in Anthropology* - This project evaluates the use of iPads in the classroom and laboratory settings as well as field data collection. At least



seven different Anthropology courses utilize the tablets as an aid for interactive learning related to human skeletons, non-human primates, archaeology, and ethnographies. Anthropology - (*Kathleen Blake, Doug Pippin*)

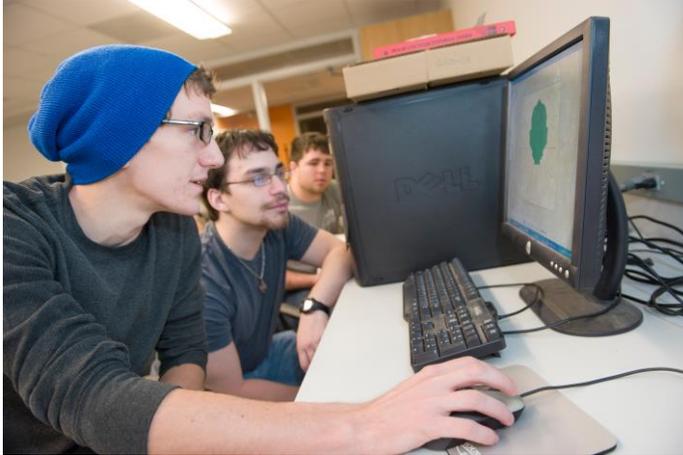
- *Broadcast Journalism software* - This grant replaces the current broadcast journalism script writing software, which was installed 8 years ago and is at end of life with the current industry standard. Communication Studies (*Patrick Mochler, Michael Riecke*)
- *Electronic Music* - The grant provides funding for a software programming language used "to make your own music. The software will assist to 1) introduce a course in advanced electronic music; 2) bridge curriculum between music, communication studies, media, art, graphic design, theater and computer science through project-based learning and curriculum collaboration; and 3) provide software for a student based Emerging Technologies Ensemble. - Music (*Paul Leary*)

MOBILITY IN THE CLASSROOM PILOT

A project was jointly sponsored by the Provost's office, CELT, CTS and the School of Education. iPads were provided to the School of Education Tech Ed freshman cohort and C&I 3rd year cohort. Each student was provided with one iPad 32 GB Air. Three faculty members in Tech Ed and three in C&I were also given iPads. The group were investigating the use of iPads in the classroom to answer questions such as –

- How has the program impacted teaching? Faculty/student interaction? How has the program impacted learning? Does the iPad impact student engagement?
- A follow-up pilot study is moving forward in C&I with students being provided 27 Google chrome books. The project will study the impact how faculty and students are meeting their teaching and learning objectives with the use of a chrome book.

IMPROVING THE CLASSROOM EXPERIENCE WITH ENHANCED TECHNOLOGY



Over the last academic year 15 classrooms were upgraded. Mahar Hall will have 14 classrooms upgraded in Summer 2015. Computer labs were upgraded in Mahar 210, the Penfield 24-hour room, the iMacs in Penfield general access lab and the Phoenix lab.

24 HOUR LAB IN PENFIELD LIBRARY

CTS and Penfield Library collaborated to extend the hours of the Penfield computing lab to 24-hours during the final week of class and exams. Usage was high during the fall and winter semesters when this was available.

ENGAGEMENT

Focus on individual and collective contributions your unit has made to the common good through partnerships to the broader society. Identify new curricula and co-curricular programs, teaching strategies, approaches to civic engagement, and partnerships or projects with others in the region and state that help to enhance the quality of life in our area.

CABLE TV RFP

Following the SUNY Chancellor's charge to collaborate with sister campuses and seek to combine services; CTS participated in the writing and evaluation of an RFP for a new CATV system in collaboration with Oneonta and Cortland. The contract has been awarded and the new system was turned on June 1, 2015.

DIGITAL ASSET MANAGEMENT PILOT

A pilot Digital Asset Management [DAM] system project has been completed this year with Extended Learning and Penfield Library. The pilot has been deemed a success and the campus will move forward implementing Ensemble at ITEC.



WORLD AWARENESS

Focus on multicultural and global learning and research abroad, recruitment and partnerships with international students and scholars, and activities related to expanding understanding of diversity within the country and world we live in.

COIL SUPPORT

Lecture capture was used in COIL classes, providing students on two continents access to course materials on an anytime, anywhere basis.



SOLUTIONS

Focus on teaching, research, or activities in your area that increase understanding of the challenging problems of our time. Describe any new initiatives or practices that have improved the efficiency or effectiveness of our learning environments or served to improve the broader society through work carried out in your unit.

COMPREHENSIVE NETWORK RENEWAL PLAN

A comprehensive network renewal plan has been developed to support the

expansion of wireless on the campus. The past year was the second year of a three-year plan and over 500 WAPs were installed. The campus will feel the benefits received from the plan in two ways. First, areas with no wireless will now have it. Second, the campus will increase the capacity of the classrooms to accommodate



student access of multi-media content on their mobile devices and/or laptops. Improving the wireless and the Internet capabilities behind it will facilitate more technology use in the classroom.

STAFF ATTENDING CONFERENCES

Staff are active at conferences sharing the solutions that have been created at Oswego State. Eight presentations have been given at conferences including SUNY Wizard, SUNY CIT and SUNY Tech Conference and MacAdmin conference.

OTHER KEY PROJECTS

There are other projects that CTS implements that offer indirect support to the mission of the University.

CTS REORGANIZATION

In November 2014, CTS reorganized with the goal to ensure that CTS continues to offer the high quality services that the campus needs and has come to expect. The reorganization was meant to address:

- Appropriate succession planning to ensure continuous service delivery
- Streamline accountability for services
- Bring common tasks together inside a single team
- Put a renewed focus on Security and infrastructure
- Augment the CTS skill set for our challenges in the coming year

CONCLUSION

The above synopsis of the projects that were completed in CTS outlines the major initiatives as related to the Technology Strategic Plan. Central to these achievements is the hard work of the dedicated staff in CTS. The commitment to service is recognized by all staff in CTS and the students who work at the Helpdesk, in the Audio/Visual department and all areas of the department. People are the key to the service provided by CTS. CTS staff are widely recognized for their commitment to service and achievement.

CTS is particularly proud of Andy Michaelis who was awarded the 2015 Chancellors Award for Excellence in Professional Services.

Several staff contribute to the SUNY system by working on the Executive boards of the following SUNY Associations:

- Computing Officers Association (COA) –Daniel Laird
- Telecommunications Officers Association (TOA) - Tyrone Johnson-Neuland
- SUNY Technology Conference Organizing Committee – Nicole Decker
- ITEC – Michael Pisa
- SICAS – Michael Pisa (chair)
- CCIO Executive Committee – Sean Moriarty

2015-16 promises to be another busy year to further implement technology to enable the College to reach its' strategic goals. Major projects that will be pursued include:

- Projects in Support of the Capital Plan including:
 - Prepare Tyler Hall for students, faculty and staff moving back into the building, followed by moving them in.
 - Support of construction projects at Tyler and Waterbury Halls.

- Year two of the three-year wireless improvement project. Highlights will include installing wireless into Penfield Library, the Campus Center and Laker and Lee Hall. Administrative areas will follow the completion of academic areas.
- Enhanced network and wireless services available to students in Waterbury, Hart and Funnell residences.
- Enhanced support for Student Retention through the implementation of Starfish, an applications that assists in student support for at-risk students.
- Implementation of a new Event Management System
- Implementation of new administrative efficiencies such as electronic workflow and Banner XE registration.

Appendix A

TIP GRANT AWARDS

The 2014-15 Technology Initiative Project (TIP) grant awards were ratified at the Friday, December 12 Campus Technology Advisory board meeting. Ten requests of sixteen received were selected for some level of funding. A total of \$75,000 is available to be awarded and the selection committee received fifteen requests totaling \$173,000.

TIP grants are an annual funding provided by the Campus to fund academic initiatives that relate to instruction, student usage, improving student usage, and/or improving student learning through the use of technology. Priority is given to new and innovative or trial initiatives, which can possibly later expand on campus, although equipment replacement and expansion of existing equipment requests are also considered.

Requestors: Carol Willard, Marcia Burrell, Curriculum and Instruction

Amount funded: \$825

Description: The grant supports C&I's clinical practice in the teacher preparation programs and provides ongoing, supportive supervision for teacher candidates in the field. In this project, a virtual coach will remotely observe a teacher's lesson while offering feedback, heard only by the student candidate through an earpiece that the teacher candidate wears. Hardware is required for both the remote teacher and the coach.

Requestors: Eric Olson, Marcia Burrell, Curriculum and Instruction

Amount funded: \$1,525

Description: This grant funds a pilot project developing technology to assist in the teacher development process. This project will examine the use of unobtrusive and easy to use technologies to capture video of students showing the moment of learning and facilitating teleconference interactions with supervising teachers and candidates in the field.

Requestor: Paul Leary, Music

Amount funded: \$2,400

Description: The grant provides funding for a software programming language used “to make your own music, sound, video, and multimedia applications. You arrange boxes on a canvas and connect them together to create, experiment and play. The software will assist to 1) introduce a course in advanced electronic music; 2) bridge curriculum between music, communication studies, media, art, graphic design, theater and computer science through project-based learning and curriculum collaboration; and 3) provide software for a student based Emerging Technologies Ensemble.

Requestors: Kathleen Blake, Doug Pippin, Anthropology

Amount funded: \$9,000

Description: This project evaluates the use of iPads in the classroom and laboratory settings as well as field data collection. At least seven different Anthropology courses will utilize the tablets as an aid for interactive learning related to human skeletons, non-human primates, archaeology, and ethnographies. Also, a variety of apps have been written for the iPad for 3-D visualization and other enhanced learning objectives as well as data collection in the lab. Additionally the iPads will be a tool for field study on projects such as mapping and studying settlement patterns in Archaeology or photography for Forensic or Cultural Anthropology Projects

Requestors: Kelly Roe, Cara Thompson, Rebecca Mushtare, Mark Springston, Joshua Adams, Natalie Sturr, Art, Tech Ed, English and Creative Writing, Penfield Library

Amount funded: \$34,000

Description: The grant will provide a one year subscription to Adobe Creative Cloud Enterprise for the entire Oswego campus. The group submitting the proposal are from a variety of disciplines and act as representatives of a wider group of Adobe users. The proposal will allow students Adobe Creative Cloud campus use, while faculty and staff will have campus and home use. Implementing and exposing our students to Adobe CC will position them well as they move into the professional world, where Adobe CC is readily being adopted and is the industry standard. Oswego will be among one of the first SUNY schools to implement Adobe CC with the grant. Plans for assessment include tracking usage of faculty, staff and students to ensure value is achieved from the purchase.

Requestors: Patrick Mochler, Michael Riecke, Communication Studies

Amount funded: \$13,750

Description: This grant replaces the current broadcast journalism script writing software, which was installed 8 years ago and is at end of life with the current industry standard. Installing the application in our broadcast classrooms will ensure Oswego students have experience with the latest software as they prepare for careers in television news and news-style production careers. The solution includes a hardware and software component. The software is web based and includes access to all forms of social media including Twitter, Facebook and Instagram, allowing student work to be instantly published.

Requestor: Steve Skubis, Atmospheric and Geological Sciences

Amount funded: \$2,000

Description: This project will provide new hardware and computing methods to run the Weather Research Forecast application. Higher computing power is required to provide the ability to perform numerical model simulations of atmospheric weather systems on a finer scale than currently exists.

Requestor: Jeff Bradbury, Communication Studies

Amount funded: \$3,000

Description: This project will provide students with professional sound effects and royalty free music for use in their projects. Students in audio, video, cinema, and music courses to search, audition and download files from a vast library of high quality sound effects and music tracks.

Requestor: Steve Yang, HPW

Amount funded: \$1,500

Description: This project is an extension of Health Promotion and Wellness (HPW) curricular emphasis of using smartphones, laptops, technology and social networking tools to highlight and promote health and wellness stories related to the SUNY Oswego campus population. Students will create short video and audio broadcasts (vodcasts and podcasts) of the latest news within the department as well as the current field of HPW. Media created will be published online through HPW social networks such as YouTube, Facebook, Instagram and Twitter accounts.

Requestors: Roger Taylor, Christopher Harris, Psychology, Computer Science

Amount funded: \$7,250

Description: This multidisciplinary project examines how wearable technology, specifically “smart watches”, can be used in the classroom and in research. Specific

examples in this project will be 1) it will be utilized in undergraduate and graduate courses and independent studies; and 2) examine research linking student activities with their health and academic performance.