



CAMPUS TECHNOLOGY SERVICES

2015- 2016 ANNUAL REPORT

TABLE *of* CONTENTS

3	Message from the CTO
4	Goal 1 - Students, faculty and staff thrive by seamlessly integrating technology into their teaching, learning and scholarly activities
6	Goal 2 - Our community is efficient and creates value with our technological resources
7	Goal 3 - Service excellence provides efficient support through robust, green and secure infrastructure and processes
8	Goal 4 - Effective IT planning and governance ensure campus priorities are achieved
9	Conclusion
10	Appendix A - TIP Grants
11	Appendix B - Goal Alignment

MESSAGE

from the

CTO

Technology is a vital component in the support of learning, teaching and scholarly activities. To ensure SUNY Oswego is properly positioned to deliver the services the College requires to thrive, CTS introduced a strategic plan in December 2015. The plan, ***The Digital Campus – Technology for an Enhanced Tomorrow***, is one of CTS's many accomplishments over the past academic year.

In 2015, over 200 community members presented feedback on the state of the campus's technology and provided input on where information technology and Campus Technology Services needed to move to assist SUNY Oswego to fulfill its mission. First and foremost, the plan is intended to tightly align with the strategic priorities outlined in the College's ***Tomorrow– Greater Impact and Success*** plan.

When asked to define the Strategic Digital Campus, our community's vision indicated it would offer:

- seamless anytime, anywhere access
- systems that are intuitive to use
- a highly skilled workforce that utilizes technology
- easy, secure access to data to support decision making and initiatives
- technology that is utilized in new and innovative ways
- access to the services essential to thrive and succeed

The plan is intended to cover the period of 2015–18 and has guided our activities in academic computing, infrastructure, support for scholarly activities, improvements in CTS and governance since its introduction. While the plan has a series of specific goals, nimbleness and agility are also built in to support the ever changing state of higher education, technology and the dynamic needs of our current and future students.

Much has been accomplished in the past year in support of ***The Digital Campus***. Among the highlights you will read in the pages ahead are expansion of the College's academic and residential wireless network; the introduction of Blackboard as the campus's new Learning Management System; a series of changes to administrative systems to enhance the campus's effectiveness and efficiency including a new Event Management System (EMS); an electronic workflow for change of major; and a beta version of Banner XE registration. Additionally, the IT Steering committee was formed and

started to help create a governance process that has representation from all levels of campus. Goals of the committee are to align, balance and prioritize initiatives, and align technical strategies with campus strategic goals.

While the document lists many successes for Campus Technology Services, it is important to note that all of the projects and accomplishments achieved are done with campus partners; and only useful if they assist the people utilizing the technology to be successful. Value in these projects is received when it makes the College more efficient and enables student success, graduation, and an environment for our students to thrive in.



SEAN MORIARTY
CTO

STATE UNIVERSITY OF NEW YORK AT OSWEGO

GOAL 1

STUDENTS, FACULTY AND STAFF SUCCEED BY SEAMLESSLY INTEGRATING TECHNOLOGY INTO THEIR TEACHING, LEARNING AND SCHOLARLY ACTIVITIES

OBJECTIVE 1 – PROVIDE A DIGITALLY RICH ECOSYSTEM THAT ENCOURAGES ACCESS TO TECHNOLOGY

OBJECTIVE 2 – POSITION FACULTY AND STUDENTS FOR SUCCESS BY ADDRESSING ACCESS AND AFFORDABILITY OF TEACHING AND LEARNING RESOURCES

Over the last year, CTS has worked with faculty, students and support staff to help integrate technology into their teaching and learning activities. Our goal is to assist the campus in successfully implementing technology through training and provide students and instructors with the tools they need to ensure successful academic tenure, moving from acceptance to graduation in a timely manner. Some of the projects that have been implemented to support this objective include:

- In a joint project with Extended Learning, the campus migrated from Angel to Blackboard in Fall 2015. This move required transferring over 1,000 sections per semester from one system to the other and extensive training for faculty. The system has brought new possibilities to the classroom.
- Improved classroom technology to support enhanced teaching. Upgrades were made in nine classrooms in Rich Hall, and 12 classrooms in Mahar Hall.
- Improvements were made to the IGLUs in Penfield and the Syracuse Metro Center.
- Extensive support to campus construction projects was made.
 - In Fall 2015, the campus re-opened a totally revamped Waterbury residence hall, which had double the wireless access point density compared to previous residence buildings. This new standard density of wireless is being implemented in all of the residence halls. During Summer 2016, improvements were made to Moreland, Johnson and Riggs.
 - Tyler Hall was opened in Fall 2016. Phase I was completed with new technology being added throughout the area being reconstructed.
- CTS streamlined the Faculty Computer Replacement program to ensure faculty receives new equipment on a regular basis. CTS replaced 80 computers and reduced the age of the

oldest machine faculty have down to 4.5 years old. VAPs who have been at the College over three years now receive a new machine on the same timeline as tenured faculty.

- Support for mobile technology in the classroom was implemented by supporting Apple TVs for select faculty who wanted to pilot use of the devices in the classroom.

A major issue that faculty and students are dealing with is the escalating cost of education. A number of projects were intended to examine ways the College can assist in putting new technology in the hands of our learning community at affordable prices. Projects include:

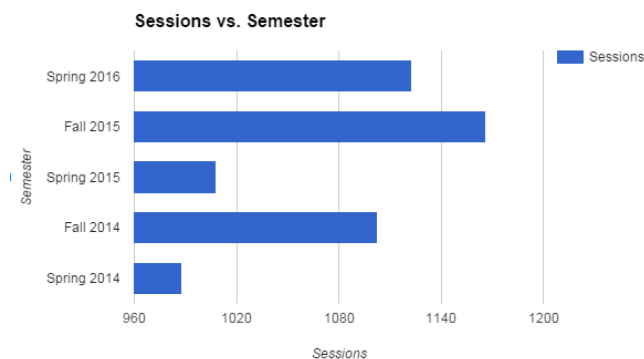
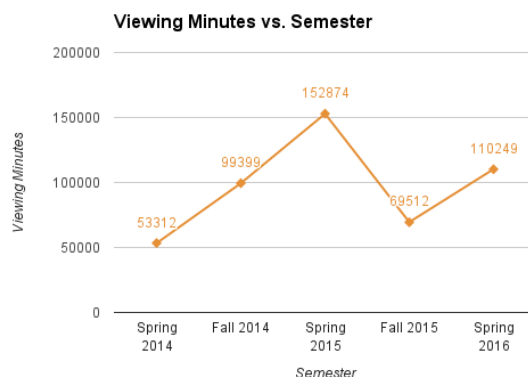
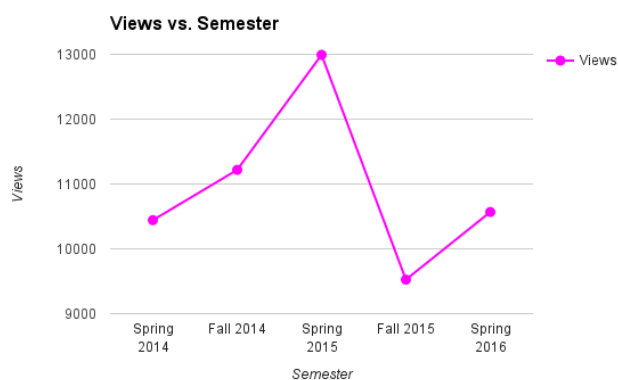
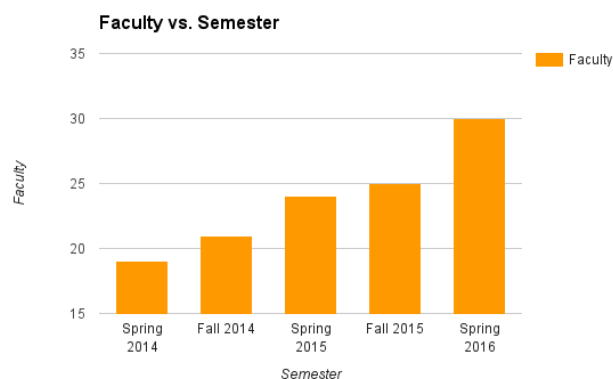
- eTexts - The goals of the Spring 2016 eText pilot included:
 - Lower the cost of education.
 - Provide access to text on day one of classes.
 - Support new learning methods.
 - Engage students in new ways with digital content.
 - Realize ease of use, convenience and portability.

Results:

- Generally positive feedback from students and faculty.
- 69% of students preferred eText vs 16% preferring traditional text (25% neutral).
- Laptops was the most widely used technology (95%).
- Two Google Chromebook Pilots - One was in conjunction with School of Education's Curriculum and Instruction department, enabling C&I to utilize the technology in their program so students were prepared to work with chrome books in the school system. The second was within CTS, replacing kiosk PCs with chrome books at significant savings. The chrome books have worked out very well for this purpose.
- Adobe licensing - In 2015-16 faculty and staff SUNY owned Macs and PCs were eligible for Adobe CC. It was also available in all general access labs and select departmental labs. Oswego was one of the few SUNY schools to offer this to our faculty, staff and students. This provided faculty with the ability to offer industry leading applications to students and prepare our graduates with the knowledge they need to hit the ground running in today's workplace.

- Panopto (see statistics in Figure 1)
 - Usage of the Panopto video management and recording system on campus has taken a major uptake over the past semester. 30 faculty members used the system, the largest amount of people ever for a semester. This equals a 17% increase from last semester. In general, the number of people using Panopto has increased each semester. We have had a total of 68 people use Panopto since it was put into service.
 - Views increased from the Fall 2015 to the Spring 2016 semester. Sessions recorded decreased slightly over the same time period, but have been fairly consistent over the past three years. Viewing minutes and session minutes have been directly correlating until the Spring 2016 semester.
- TIP grants (Appendix A)
 - The 2015-16 Technology Initiative Project (TIP) grant awards were ratified at the Friday, December 11, Campus Technology Advisory Board meeting. Seven requests totaling \$145,000 were received and all requests received some portion of funding. A total of \$60,000 was awarded.
 - 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, however equipment replacement and expansion of existing equipment requests will also be considered.

FIGURE 1 - PANOPTO STATISTICS



GOAL 2

OUR COMMUNITY IS SERVICE ORIENTATED, EFFICIENT AND CREATES VALUE WITH OUR TECHNICAL RESOURCES

OBJECTIVE 1 – SUPPORT STUDENT SUCCESS BY LEVERAGING TECHNOLOGY TO ENABLE DATA-DRIVEN DECISION-MAKING

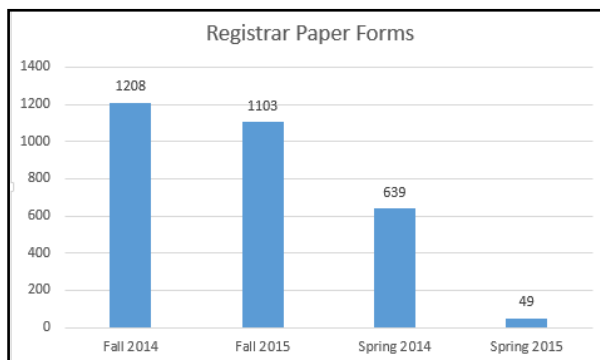
OBJECTIVE 2 – SUPPORT NEW DIGITAL BUSINESS MODELS BY ENSURING SYSTEMS AND PROCESSES ARE AGILE

OBJECTIVE 3 – ENSURE CORE ADMINISTRATIVE SYSTEMS ENABLE ENHANCED SERVICE TO OUR COMMUNITIES

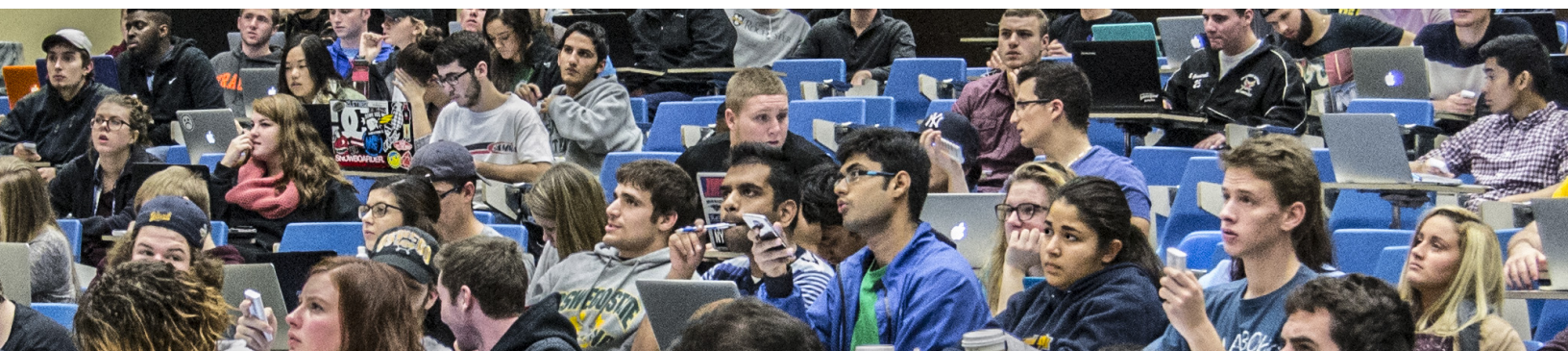
A number of projects that CTS and our partners have pursued over the last year have enhanced efficiency in our administrative systems and processes. The more efficient we can deliver services, the more time faculty, staff, students and administration have to focus on teaching, scholarship and work. Here are some of the major projects in this area:

- A new workflow was implemented to support the change of major process for the Registrar's Office. Paper form usage dropped each semester - 1,208 Fall 2014; 1,103 Spring 2015; 639 Fall 2015; 49 Spring 2016. (Figure 2)

FIGURE 2 - REGISTRAR STATISTICS



- Enhancements were made to Starfish and other administrative systems to support the Academic Withdrawal policy.
- In conjunction with the Registrar's Office, a beta version of Banner XE registration was installed and made available to students. The interface assists students with registration by making conflicts in the schedule easier to notice. Additionally it works hand-in-hand with Degree Works while creating plans for the students. Due to the pilot's success, the XE interface will be pushed out more widely in the 2016-17 academic year.
- In a project implemented by Marketing and Communication and CTS, a new web service has been implemented. The Oswego.edu website has a new design for visitors, a new interface for individuals who input content into the system and a new back end hosted off campus for CTS. The project was largely done by the staff of Marketing and Communications, and intended to not only update the web site, but also put into place processes that support ongoing improvements of the website.
 - From a technical viewpoint, moving the website off campus has provided more flexibility for the web team and improved reliability; and reduced the risk for the campus should an emergency ever arise.
- Acquired a new Event Management System, called EMS. This was a large, multi-department implementation. Key stakeholders were Campus Life and the Registrar's Office, but also included other areas such as Athletics, Auxiliary Services and the Library. The system has added new functionality for planning and enabling end users to do more self-service.
- Assisted Experiential Learning with implementing a new application titled CSO to track the work done in their office.
- Assisted Dean of Students office with implementing a new conduct application named Maxient.



GOAL 3

SERVICE EXCELLENCE PROVIDES EFFICIENT SUPPORT THROUGH ROBUST, GREEN AND SECURE INFRASTRUCTURE AND USER-FRIENDLY PROCESSES

OBJECTIVE 1 – PROVIDE A ROBUST INFRASTRUCTURE THAT DELIVERS ANYTIME, ANYWHERE SERVICE

OBJECTIVE 2 – BALANCE OPENNESS, AGILITY AND SECURITY

OBJECTIVE 3 – PROVIDE USER-FRIENDLY, EFFICIENT PROCESSES WITH SKILLED STAFF TO DELIVER SERVICE EXCELLENCE

Our vision of the Digital Campus is one with robust, green infrastructure and support staff who are experts in their craft. CTS has taken on a series of projects that support that vision of our campus. They include:

- The campus network and wireless project has been a three year plan to improve the quality of the network infrastructure on campus. In Spring 2013, there were approximately 300 Wireless Access Points (WAPs) in the academic areas on campus. By June 2015, the number was up to 833. By the time school started in Fall 2016, there were 1,349, an increase of 450% over three years and 62% in the last year.
- In 2015-16, the following buildings received wireless improvements: Marano Campus Center, Penfield Library, Laker Hall, Building 20, Pathfinder and the Metro Center.
- A number of improvements to the wireless service have been made in the residence halls. In June 2015, there were 976 wireless access points in the residence halls. Over the last year improvements were made in the reconstruction of Waterbury Hall and in Hart, Lonis, Makin and Funnelle.
- A commitment in the last year was made for a \$1M expansion of wireless in residence halls across the campus over the next three years. This year's improvements were in

Johnson, Moreland and Riggs. By the time school started in September 2016 there were 1311 wireless access points, an increase of 34% in the last year.

- The campus worked to manage their Internet bandwidth in a responsible manner. Changes included:
 - A new appliance was purchased which helped to cache streaming content including Netflix and other streaming content. By caching this content, the amount of Internet bandwidth was reduced.
 - The campus also expanded Internet access by 50% in 2015-16, which provided students in residence and classrooms a much richer experience. The campus is implementing another 40% increase in 2016-17.
- CTS is in the middle of a data center renewal. The main data center in Culkin Hall is being reduced in size by ~40%. The reduction in size will mean far less energy is required to cool and power the equipment. The project started early in 2016 and is scheduled for completion by August 2017.
- CTS is virtualizing the majority of their servers. We will use far fewer physical servers, which will reduce the amount of energy that the campus will use.
- Security remains a top priority for CTS. Projects implemented around security include:
 - Mandatory Banner password changes were implemented to secure locally stored Student Information System data.
 - New Identity Management policies were implemented around non-returning students to eliminate unused accounts
 - New renewal process for alumni accounts was implemented to eliminate unused accounts.
 - A new safety mobile app was implemented for Fall 2016 titled Oswego Guardian (<https://www.oswego.edu/police/oswego-guardian>). It provides students with the ability to set a safety timer, manage and message guardians and enable communication with campus safety officials.



GOAL 4

EFFECTIVE IT PLANNING AND GOVERNANCE ENSURE CAMPUS PRIORITIES ARE ACHIEVED

OBJECTIVE 1 - DEVELOP IT FUNDING MODELS THAT SUSTAIN CORE SERVICE, SUPPORT INNOVATION, AND FACILITATE GROWTH

OBJECTIVE 2 - IMPLEMENT AN IT GOVERNANCE MODEL THAT OVERSEES THE IMPLEMENTATION OF THE STRATEGIC PLAN AND ASSURES ALIGNMENT WITH STRATEGIC GOALS

When the original vision statement for the Digital Campus was created, the following words were used:

A digitally enhanced campus has a clear roadmap, deliverables, project plans, and assessment criteria to achieve its goals. Decisions are timely and value is produced from all investments.

The completion of the strategic plan was a major step for the campus in moving towards that clear roadmap. An extensive planning process that included focus interviews with over 200 people led to the creation of ***The Digital Campus – Technology for an Enhanced Tomorrow***. It is intended to be a campus Information Technology strategic plan which moves Oswego towards the vision that the community has voiced. The plan is intended to tightly align with the strategic priorities outlined in the College's ***Tomorrow - Greater Impact and Success*** plan.

The document outlines the major focus for projects for Information

Technology on campus for the years 2015-2018. Agility and responsiveness are intentionally built into the plan, but responsibility for helping to find that balance will fall to the IT Steering Committee. The Committee has representatives from all parts of the campus, including President's Council, Deans Council, Business Council, Campus Technology Advisory Board, Information Technology Council, Banner Users Group and CTS. The Committee is designed to manage the portfolio of University Technology investments. It is responsible to ensure technology decisions have strategic fit, are properly assessed for value, and represent a balanced investment across the University.

IT Steering Committee:

Adrienne McCormick, Dean, Liberal Arts and Sciences
Jerret Lemay, Registrar, Office of the Registrar
Jill Pippin, Dean, Extended Learning
Kelly Roe (co-chair), Associate Professor, Art
Kristi Eck, Chief of Staff, President's Office
Marcia Burrell (chair ITC), Chair, Curriculum & Instruction
Mark Hardy (chair CTAB), Chair, Technology Education
Michael Pisa, Associate Director, Campus Technology Services
Nicole Decker, Associate Director, Campus Technology Services
Sean Moriarty (co-chair), Chief Technology Officer, Campus Technology Services



CONCLUSION

The 2015-16 annual report is a synopsis of the major initiatives completed by CTS in the past year in support of our journey towards **The Digital Campus**. The key component to reaching our goals is the work of the people in CTS. Our commitment to service excellence should be apparent to individuals we partner with and serve. CTS staff are always developing and enhancing their skills, recognizing that as technology and higher education evolve, we need to adapt.

CTS is particularly proud of Katharine Dutton, who was awarded the 2016 Chancellors Award for Excellence in Professional Services. A 20-year employee of SUNY Oswego's Campus Technology Services, Dutton recently managed a change in the college's learning management system from Angel to Blackboard Learn, a nine-month transition involving training more than 500 faculty and migrating more than 900 courses.

This is the fourth time in seven years that a CTS staff member has won this award. Andy Michaelis won last year (2015), Nicole Decker won in 2013 and Bob Hageny won in 2009. The four of them are indicative of the outstanding staff that we have in CTS.

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

- Nicole Decker – SUNY Technology Conference (STC) Planning Committee
- Katharine Dutton – SUNY Center for Online Teaching Excellence, Open SUNY LMS Administrators
- Daniel Laird – SUNY Computing Officers Association (COA), Chair
- Sean Moriarty – SUNY Council of CIOs (CCIO), Vice-Chair
- Christopher Palian – SUNY COA, Webmaster
- Michael Pisa – SICAS Board Chair, ITEC Board member

CTS Staff also contributed to higher education at large by giving the following presentations:

- David Kahn, Nicole Decker - "Cost-Effective Software Solutions for Students" @ SUNY CIT, SUNY Potsdam
- David Kahn - "The complete recipe for managing iOS and MacOS", SUNY Wizards Conference, SUNY Wizards Conference, Syracuse NY.
- David Kahn - "Virtual Apps & Citrix", SUNY Wizards Conference, SUNY Wizards Conference, Syracuse NY.
- David Kahn, Christopher Palian - "The complete recipe for managing your Apple environment v2.0". Mac Admins, Penn State.
- David Kahn, Nick Sperduti - "I Want My Windows Apps: Everyone can benefit from application virtualization." Mac Admins, Penn State.
- Sadig Gulaghayev and Matt Brooks - "Windows 10 Assessment: Customizing and Implementing W10 in your school" Labman 2016 Conference, Xavier University.
- Sadig Gulaghayev, Michael Schifano and Matt Brooks - "Burn it Down & Build it Back Up - Moving to Landesk v9.6" Labman 2016 Conference, Xavier University.
- Matt Brooks - "Discussion Panel: System Imaging" Labman 2016 Conference, Xavier University.
- Sean Moriarty - "What Can CFOs and CIOs do to help one another?" Panel presentation at Joint SUBOA & CCIO meeting, February 4, 2016.
- Sean Moriarty with Kelly Roe, **The Digital Campus**, Educational Insights, January 2016, 34-35
- Michael Pisa - "Making the Payments - Ensuring PCI Compliance" Panel presentation at SUNY Tech Conference, June 16, 2016.
- Andy Michaelis - "BDM for Advisors", SICAS Summit
- Gregory Fuller - "Cisco ISE for Higher Education", Cisco Higher Ed Exchange, Syracuse University.
- Katharine Dutton – "Bb Learn Institutional Hierarchy - Starting the Conversation." SUNY CIT 2016, SUNY Potsdam.



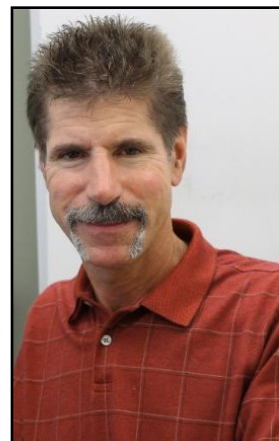
Katharine Dutton



Andy Michaelis



Nicole Decker



Bob Hageny

Requestor	Dept.	Amount	Description
Chris Hebblethwaite, Sharona Ginsberg & Marilyn Ochoa	Penfield Library	\$4,168	This grant supports technology that will be utilized in creating a "makerservice" on campus. The library is planning a series of maker space events with the equipment funded by the grant. The library states that the maker movement is an approach to learning creative skills that emphasizes collaboration, craftsmanship, and a hands-on DIY spirit. The movement is tied closely to current trends in Education, such as the exploration of participatory, active, and connected learning methods.
Leigh Wilson	English & Creative Writing	\$7,695	The Center for Creativity and Digital Media (aka The Creativity Lab) is receiving funds to purchase 10 iPad Air 2s for use by collaborative, multidisciplinary groups of students nominated from across all disciplines to be showcased in Digital Oz, a new web site featuring our best students' work. The iPads will also be employed by students who wish to create multi-media presentations for conferences and symposiums, with a particular goal of enabling a first multidisciplinary cohort of digital presenters for the SUNY Undergraduate Research Conference at SUNY Cobleskill in April 2016.
David Kahn & Raihan Khan	School of Business	\$2,700	This grant funds software and hardware upgrade to one of the most heavily used labs on campus, Rich 322. The software will implement new technologies and ways to interact for students and professors to interact while maintaining a secure lab environment for testing. The School of Business uses the lab for all students to work on assignments, hold workshops, and for faculty to conduct classes that require specific business related software.
Cynthia Clabough	Art	\$4,573	This grant supports the expansion of the use of mobile devices in the visual arts. Currently studio classes that focus on designing for mobile technology (apps and web sites) has expanded from one to four discipline areas as the technology fully engrains itself into the spectrum of communication technologies. This grant improves access, expanding use in the classroom as well as allowing students to have access outside the classroom.
Jessica M. Harris & Sandra Bargaineer	Health Promotion & Wellness	\$4,627	This grant funds eight iPads for the department of Health Promotion and Wellness. The new iPads will allow faculty to integrate technology into courses and projects such as evidence-based health promotion planning, National Institute of Health Ethics training and an Innovations project are examples of projects for Spring 2016.
Amanda Fenlon	Curriculum & Instruction	\$8,946	This grant funds assistive technology tools to prepare teacher candidates in MSED Special Ed and Childhood programs. With the equipment, candidates will learn how to integrate technology support, specialized learning and access for students with disabilities. Tools will be used by teacher candidates to learn about software and hardware applications for teaching learners with a wide range of disabilities. Partner schools will provide software and hardware for learners served by the graduate candidates.
Mark Hardy	Technology Department	\$27,295	This grant funds computer replacements for the Park 101 CAD and Engineering Graphics Lab which are used in technology courses related to advanced manufacturing and technology education. Students and faculty use the space for course instruction, open labs, research, and service activities for the campus and community

IT Strategic Plan Goals

Tomorrow Plan Impacts

Academic Affairs Goals

	Impact 1 Students & Graduates	Impact 2 Education Ecosystem	Impact 3 Communities & Partnerships	Impact 4 Institution	Impact 5 Grand Challenges	Goal 1 Enrich academic excellence	Goal 2 Support personal growth	Goal 3 Provide educational opportunity	Goal 4 Promote social responsibility	Goal 5 Demonstrate accountability
Students, faculty and staff thrive by seamlessly integrating technology into their teaching, learning and scholarly activities.										
1.1 Provide a digitally rich ecosystem that encourages access to technology		✓	✓		✓	✓			✓	
1.2 Position faculty and students for success by addressing access and affordability of teaching and learning resources	✓	✓						✓		
Our community is service oriented, efficient and creates value with our technical resources										
2.1 Support student success by leveraging technology to enable data-driven decision-making	✓			✓				✓	✓	
2.2 Support new digital business models by ensuring systems and processes are agile				✓			✓	✓		✓
2.3 Ensure core administrative systems enable enhanced service to our communities	✓		✓	✓				✓	✓	
Service excellence provides efficient support through robust, green and secure infrastructure and user-friendly processes										
3.1 Provide a robust infrastructure that delivers anytime, anywhere service	✓	✓	✓	✓	✓				✓	
3.2 Balance openness, agility and security		✓	✓	✓					✓	
3.3 Provide user-friendly, efficient processes with skilled staff to deliver service excellence	✓			✓			✓	✓		
Effective IT planning and governance ensure campus priorities are achieved										
4.1 Develop IT funding models that sustain core service, support innovation, and facilitate growth	✓	✓		✓			✓			✓
4.2 Implement an IT governance model that oversees the implementation of the strategic plan and assures alignment with strategic goals	✓	✓		✓			✓			✓