Overview

Fiscal Year 2016 brought successful additions to the Student Technology Fee (STF) program. The new funding distribution allocated 15% of the budget to the Academic Affairs Division. This new model allowed departments to request specialized equipment and technology in addition to their foundation equipment requests. The success is due to a joint effort between the Academic Committee for Technology (ACT), the ACT review subcommittee, and the CCLT team.

The fall 2016 semester saw CCLT staff, along with others from Client Services, attend department faculty meetings to review resources and services available. We will continue to strive to find alternative ways to share information with faculty to ensure they are able to provide Towson students with the best learning experience.

With just over 400 classrooms and computer labs on campus, and more than 100 active learning spaces, meeting rooms, and conference rooms, the CCLT team continues to provide for the renewal, maintenance, and support of our technology. This includes planning, scheduling and overseeing both new construction and renewal activities on the main campus as well as at satellite locations.

The CCLT coordinators work closely with the local technology staff within Towson’s six colleges to make certain there is no interruption to instruction. In the next fiscal year, Office of Technology Services is piloting the Student Employee Technology Corps. Members of Client Services will train student employees in participating departments across campus on first level troubleshooting in all aspects of technology, including classroom technology and available resources. We are hopeful this new program will increase available support for all Towson faculty.
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Finances
The STF budget was $3,722,266 for FY16; a decrease of 2% from FY15. The decrease is due to fees collected from summer enrollment that were applied to the FY17 budget.

Almost 80% of the funds used were for projects and computer replacements. Roughly 15% was for maintenance, repairs, contracts, and software. The software supported includes campus-wide licenses for the Adobe Creative Cloud, LanSchool, Panopto, and SPSS. We are anticipating adding more campus-wide licenses in FY17.

A total of 242 projects were managed in FY16. Projects included upgrades for current rooms, the addition of new classrooms, and computer replacements. New this fiscal year, the program was expanded and included requests for specialized equipment. The requests are now categorized by how the technology is used on campus. The new categories are Foundation, Extended, Curriculized, and Studio. See Appendix A – pyramid chart for definitions and examples. We received 185 foundation requests and 57 requests categorized as extended or curriculized. We did not receive any requests classified as Studio, which are very high end, specialty equipment.

Just 10% of project requests were not approved by the ACT subcommittee because they fell outside the scope of the current program. Over 13% of the budget, or $493,411.69, was spent on projects that qualified under the new funding distribution. A complete list of all projects is available upon request.
*Sum of Approved and Not Approved is based on estimated cost of project at time of review. Sum of Actual Total Cost is the final cost of all the projects.
The following chart shows the expeditures per college per year since the inception of the STF program in FY11.

Of the FY16 budget, 17% ($617,368) was expended to sustain the three-year replacement cycle for computers in classrooms and computer labs – in accordance with the STF mission. The computers that are decommissioned are transferred to the EduCycle program for redistribution on campus to fulfill unmet needs or donated to local partner school districts. Additional information about this program is available on the EduCycle website, www.towson.edu/educycle.

The STF program covers 3,407 computers spread throughout the Colleges on both the main campus and the Northeastern Maryland campus. While the local technology coordinators within the colleges generally provide immediate support for these computers, the CCLT Team provides support with renewal, set-up, and imaging during the decommissioning process.
Total Computer Count in STF as of June 30, 2016

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHP</td>
<td>493</td>
<td>14%</td>
</tr>
<tr>
<td>HONR</td>
<td>12</td>
<td>0%</td>
</tr>
<tr>
<td>FSM</td>
<td>983</td>
<td>29%</td>
</tr>
<tr>
<td>COE</td>
<td>445</td>
<td>13%</td>
</tr>
<tr>
<td>SA</td>
<td>31</td>
<td>1%</td>
</tr>
<tr>
<td>CBE</td>
<td>268</td>
<td>8%</td>
</tr>
<tr>
<td>COFAC</td>
<td>503</td>
<td>15%</td>
</tr>
<tr>
<td>CLA</td>
<td>374</td>
<td>11%</td>
</tr>
<tr>
<td>LIBRARY</td>
<td>112</td>
<td>3%</td>
</tr>
<tr>
<td>TUNE</td>
<td>141</td>
<td>4%</td>
</tr>
<tr>
<td>GRAD</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>AAC</td>
<td>43</td>
<td>1%</td>
</tr>
</tbody>
</table>

March 28, 2017
Service, Repairs, Maintenance, and Support

A reserve is set aside at the start of the fiscal year of $1,200 per room for repairs and maintenance. For FY16, the starting reserve was $456,000. This was determined by the 380 academic rooms on the main campus and the Northeast Maryland campus. This year, contracts and licenses had a separate budget line, which was $378,000; estimated using expenditures from FY15. Repairs, maintenance, contracts, and licenses expenses totaled $548,305, an increase of just over 3.5% from FY15.

Projects take up most of the budget, and much of the CCLT team’s time, but service and support are critical to the successful use of classroom technology by our faculty. The CCLT team spent time updating the Virtual Tour, a database of equipment and resources for every classroom, active learning space, conference room, and meeting room on the main campus and the Northeastern Maryland campus. Along with the online resources available through the CCLT web site and Virtual Tour, staff provided group and individual training for faculty to ensure they are comfortable with the equipment available in their classroom.

Additional service work includes:

- Conducting repair visits
- Coordinating work with contractors
- Performing room inspections
- Conducting quality assurance checks following installations and repairs
- Assisting with deployment of new computers on request
- Coordinating contractors for preventative maintenance of projectors

Providing first-level telephone support for all classrooms and computer-equipped teaching labs continued in FY16, available over 73 hours per week. The CCLT staff provided daily coverage, with evening and Saturday hours covered by Student Computing Services (SCS) staff. Most issues are resolved over the phone; for those calls that are not resolved by phone, CCLT staff members work with local college/departmental staff to ensure issues are handled in a timely manner. As part of this effort, CCLT and OTS provides technical support and assists with critical communications during emergency system outages or known college wide issues.

The total number of support incidents recorded in our TechHelp tracking system for FY16 was 1,353, a decrease of 10% from FY15. The incidents are reported by calling 4TECH or by using TechHelp. We continuously review the reported issues to look for trends and to identify areas for training opportunities. The top ten reported issues are listed below. The number one issue reported was the same as last year, but the total number of calls for that issue was down by 18%. We had one new issue on the list this year,
“Projection: image is dim or distorted”. All the other issues were on the list last year, but had fewer incidents and also change position.

<table>
<thead>
<tr>
<th>FY16 Top 10 Classroom Support Categories - By College</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Business and Economics</td>
</tr>
<tr>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Projection: Projector won't display anything</td>
</tr>
<tr>
<td>Crestron: Touch Panel won't respond</td>
</tr>
<tr>
<td>Crestron: other issue</td>
</tr>
<tr>
<td>Wrong Number: redirected call</td>
</tr>
<tr>
<td>Monitor or SMART Podium</td>
</tr>
<tr>
<td>Sound: no sound from system</td>
</tr>
<tr>
<td>Instructor Computer: unlisted issue</td>
</tr>
<tr>
<td>Student Computer: all issues</td>
</tr>
<tr>
<td>Projection: image is dim or discolored</td>
</tr>
<tr>
<td>Instructor Computer: receiving error message</td>
</tr>
<tr>
<td><strong>Total Per College</strong></td>
</tr>
</tbody>
</table>
Communications and Collaboration

OTS hosted stakeholder meetings and activities for faculty and college technology staff including:

- Tour of interactive room at the provost’s conference
- Evaluation of interactive monitors and displays
- 360 degree filming and camera evaluation
- Regular, bi-monthly meetings, which will continue into FY17
- Workshops offered: Lab Management Tools & Tips, Jamf JSS Console & Imaging, Symantec Ghost 3.0, and Jamf iOS management

Towson was instrumental in forming the Maryland Instructional Technology Professionals (MITP) group in FY15. The inaugural meeting was hosted by Towson July 2015, with over 25 attendees representing 17 institutions, both public and private, including four elementary and secondary school systems. Montgomery College hosted the second meeting at their Germantown Campus. OTS CCLT staff and technology staff from three other Towson departments attended. The group is planning to have four meetings in FY17 and works to continue to increase participation by other Maryland Universities and Colleges. Towson’s continued involvement in this professional group will further our ability to anticipate trends and demands in the academic audiovisual environment. For more details, please visit https://sites.google.com/site/marylanditp/.

CCLT staff assisted many other departments with their technology and presentation needs. Two of the projects were firsts for the campus:

- Worked with Events and Conference Services, Facilities, and Administration to upgrade the audiovisual system and conduct a pilot to integrate the lighting, shades, and HVAC control in the Minnegan room.
- Assisted with managing the installation of the first videowalls installed on campus in the common areas of the two new dorms, Carroll and Marshall Halls, which opened in time for the start of the fall 2016 semester.

Minnegan Room – Unitas Stadium

Marshall Hall Video Wall
Planning and Forecasting
One of the primary objectives of the CCLT group is to ensure the sustainability of the university’s significant instructional technology investment. All audiovisual system core components have been assigned estimated lifecycles, ranging from 3 to 10 years. When components reach the end of their estimated lifecycle, the renewal process is initiated in accordance with the STF mission. Moving forward, STF funding will be critical in maintaining the foundational technology base with relevant, useful, and fully functional equipment. During FY16, the CCLT team began collecting device usage reports on the classroom equipment in several buildings. This data on the use of technology will empower the CCLT team to make more informed decisions about system design, device purchasing, and overall spending of STF funds.

Additionally, the CCLT team generated an equipment valuation report for the existing technology base on campus. This report draws the cost basis for each piece of equipment listed as present in the Virtual Tour database entry for the space. Gathering and confirming data started in FY16 and will continue in FY17, with assistance from on-site technicians. Starting in FY17, queries can be generated for the entire campus, room type, college, building, or even individual pieces of equipment.

Emerging Technology, Research, and Development
For the fifth year, the CCLT team helped plan and facilitate the interactive room for the Provost’s January Conference 2016; this year’s theme was “Re-envisioning the Core for Student Success”. Highlights of the interactive room included:

- Teaching with Panopto demonstrations
- Virtual Reality with Google Cardboard
- EduCycle program expansion
- New classroom technologies, including interactive monitors and software

The CCLT team also presented at the TUSC 2016 conference, Moving Forward: Partnerships for Success, with OTS – Information Security. The presentation included using WebEx and Skype for Business, collaboration, document sharing and storage, confidential data, and phishing.

The Road Ahead
The future of instructional technology in classrooms and computer labs at Towson University is bright. The stable funding stream afforded through STF funds will sustain the existing infrastructure base while simultaneously providing opportunities to innovate by exploring new technologies. Towson University is a national leader in the way we have organized and developed our resources.

In the ongoing development of resources for faculty use, CCLT was part of a team developing the Help Resources Online (HeRO) app to install on the instructor computer in classrooms. The app allows all
resources available to faculty to be in one place and easily found. The pilot will begin at the start of FY17, with app development continuing as feedback is gathered. This aligns with our goal of empowering faculty as competent, proficient, dynamic users of technology in their teaching.

Technology trends and developments are continuously followed to determine design changes in our classroom technology. Moving into FY17, the CCLT team will start planning for the gradual retirement of legacy technologies. These plans will provide migration pathways and support, and will involve academic leadership and college/department support staff to ensure a smooth transition.

**Key People Involved with Classroom and Computer Lab Technologies**

**ACT Subcommittee Members**
Sam Houston, Resources Director, Department of Computer & Information Sciences
Jane Neapolitan, Assistant Provost for Academic Innovation, Office of Academic Innovation
Marcie Weinstein, Associate Dean, College of Health Professions
David Wizer, Professor, Department of Educational Technology and Literacy

**College and Department Staff instrumental in the success and support of CCLT and the STF program:**
Andy Allen, College of Education
Veronica Boulware, College of Health Professions
Richard Brown, FCSM, Math
Tom Cascella, COFAC, Theater
Arthur Dana, Library IT
Mark Edmonston, FCSM, Physics, Astronomy and Geosciences
Richard Ellsberry, COFAC, Mass Communication
Jeremy Farkas, College of Business
Eric Gadsby, Library IT
William Helman, Library IT
Travis Holden, COFAC, Electronic Media and Film
Sam Houston, FCSM, Computer & Information Sciences
Theresa Jenkins, College of Liberal Arts
Kay Kazinski, College of Health Professions
Duane Smith, College of Education
John Spivey, COFAC, Music
Richard Thomas, COFAC, Art
Richard Webster, FCSM, Computer & Information Sciences
Rebecca Wolf, COFAC, Dance

**Valued Partners (Vendors)**
Lee Hartman & Sons Inc.
Visual Sound Inc.
Classroom and Computer Lab Technology Support Coordinators

Funded through Student Technology Fees:
- Paul Brown, CBE, CLA, Honors
- Peter Morin, FCSM, CHP
- Michael Scribner, COFAC, COE

Funded through OTS:
- Charles Blount, Towson University Northeastern Maryland (multiple duties)
- Nathaniel Leonard, Towson University Northeastern Maryland (multiple duties)

Other OTS staff with Primary Classroom and Computer Lab Technologies Duties:
- Cindy Davis, Manager, Classroom Technology and Planning
- James Hardin, Field Support Specialist focusing solely on CCLT
- Brian Raley, Manager, Client Services & Project Engineering
- Jack Stark, Manager, Lab and Mac Support Teams; Administrator, Campus Technology Coalition

Other OTS Staff Supporting the CCLT Service:
- Jeffrey Schmidt, Associate Vice President and Chief Information Officer
- Michael Bachman, Director, Client Services
- Julie Leary, Manager, Distributed Support Services
- Lissa O’Donnell, Financial Program Administrator, Office of Technology Services
- Kate Scanlan, Manager, Client Services Precincts and Projects
- Carol Watts, Manager, Client Services Support Services

Appendix A

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
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</table>
| Studio | High-end, high-cost, specialty technology, and venues.  
Examples: Simulation models, digital microscopes, observation labs and recording devices, specialty control devices; concert or performance venues in which students physically use the equipment; radio and TV production; advanced distance learning suites. |
| Curriculized | Course-specific technology needed for instruction to support a specific academic class, program, major, etc. Students must physically interact with the technology, which is typically not as general purpose as Extended or Foundation.  
Examples: Specialty monitors with high-precision drawing capability; unique printers, possibly higher-end 3D and subtractive manufacturing devices; ceiling mounted document camera, ultra-high (4K) display or projection. |
| Extended | Proven general-purpose technologies in which deployment is done in a deliberate, phased, or limited manner or is evolving in adoption but not yet considered foundational.  
Examples: Mid-range video conferencing/two-way interactive distance learning installations; lecture capture systems; multiple screens or flat-panel displays; interactive solutions (MondoPad, SMART and Promethean boards, interactive projectors); fixed wireless projection features. Students must either directly interact with the technology, or the technology is used by the instructor in a way to engage students or enhance the students classroom or lab experience. |
| Foundation | Proven, current-generation general-purpose audiovisual and projection systems and is core for all formal learning spaces.  
Standard Equipment includes: projector with screen or flat panel; in-ceiling speakers; wall plate for auxiliary audiovisual input connections; podium with computer and monitor (touch or standard); document camera; Crestron TSW-750 LCD touch panel audiovisual system controller; HDMI and legacy jacks or cables to connect portable devices such as iPads, VCRs, etc.; Cable Cubby with connections for portable devices; dual-image multi-window processor to show two different audiovisual sources side-by-side on the projector or monitor. |

March 28, 2017