

Systems and Digital Technology

Departmental Report

July 1, 2019 – June 30, 2020



University of South Florida St. Petersburg
Compiled by Berrie Watson

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Department Overview

The USF St. Petersburg Library Systems & Technology department is the primary provider in supporting library technology through multiple service endpoints. Departmental service offerings include the Student Technology Center (STC), a technology-enhanced student collaboration space, the library web presence, computing and networking technology for the library building's over 200 network device footprint, as well as first tier support for library, web and other library management systems. The STC provides direct assistance to students onsite in a technologically enhanced student collaboration space that also offers technical support for student utilizing USF supplied software at USF St. Petersburg. These various offerings deliver critical computing services and resources to students, faculty, and staff and visiting members of the USF system.

Department staffing includes Berrie Watson, Department Head, with duties as system administrator, network manager, and web developer, joined by Mark Couch, Systems Analyst with duties as desktop support coordinator and administrator for student/public technology and OLITS computing support. The manager of the Student Technology Center, Summer Natali manages a student-based helpdesk, digital makerspace, STEM electronics area, video recording booth and a training/facilitated student learning room.

Significant Departmental Accomplishments

COVID-19 Related Reassignment of Technology Off-site for Staff & Faculty

The library unexpectedly closed as a result of the COVID-19 pandemic, and as a result there was an immediate need for technology to be made available to faculty and staff of the entirety of USF St. Petersburg for use offsite. The library, having a prepared stock of laptops for student checkout, quickly retooled to provide laptops for both staff and faculty librarians, as well as for the greater campus to use. Library Systems coordinated with Campus Computing to provide a checkout procedure, offsite tools for administration, and a paperwork procedure for tracking. Nearly all spare equipment of both Library Systems and OLITS were made ready for this event.

Laptop Loan Extension for COVID-19 for Students

The campus was required to close in March of 2020, leaving many students without technology to complete coursework and GIS labs without access for students. The solution was a dual-funded purchase of 100 laptops from Student Government and USF St. Petersburg budgets. The laptops were prepared exclusively by the USF St. Petersburg Library Systems group. In addition, the library's existing library laptops for checkout (20) were quickly made available to Faculty for use offsite during this time, a project that will extend faculty support through Fall 2020.

Support Tools Adoption for Offsite Support

When support needs changed to introduce more off-site locations with staff and librarians working offsite, Systems responded with the adoption of a remote assistance product, BOMGAR, 'share my pc' application to match the USF St. Petersburg IT group. Two staff have full access to the support tool implemented by USF Tampa, that allows Systems staff to remote control, restart, install, and otherwise manage offsite devices. Almost immediately, the product was put into service installing a new version of the USF VPN, required by many staff working remotely.

Student Technology Center

The STC participated in hosting all Spring and Summer Virtual orientations. In addition, the Center has created videos depicting all of the assistance the STC offers, including screen shots and narratives of how to access the online chat, where to find the link to our YouTube channel tutorials, and was present to answer any questions throughout the video in each of the sessions. The support helpdesk moved to an online format, through the Library's libh3lp system which allows students and the manager to answer questions during regular operating hours through the library shutdown. As part of the student assistant tasks during this time, they were assigned to specific projects and became well versed in Microsoft 365 and step-by-step instructions to easily send out to students or to answer questions through the online chat helpdesk.

The STC Manager Summer Natalie also participated in the Augmented / Virtual Reality Faculty Learning Committee (FLC). The FLC created a project involving using Virtual Reality to create empathy which resulted in submission of an IRB students could be tested using 2D and 3D technology and eye-tracking software while watching a video on homelessness, followed by a exit survey. In support of the IRB Summer completed a 16 module course and was certified as completing the CITI Program course Human Research-Social/ Behavioral Investigators and Key Personnel.

Computing Areas Redesigned with New Furnishings

First floor computing areas were augmented with new furniture items to remove part of the Information Commons "horseshoe" configuration and create more space with multiple 3-seat and 6-seat furniture, as well as armchair and plush seating in the STC for improved visibility and additional seating options.

Infrastructure Improvements

Wireless Access expansions include the Library Studio, as well as exterior library desk areas. The Library Studio also adopted an active learning system with multiple Airplay devices allowing students to share screens to the instructor and multiple group displays. Library Systems assisted with the setup and testing, and adjusting the network to enable connectivity. vSAN Update to VMWare vSphere suite for all library-based servers. 2020. (JAMF adoption)

Additional Accomplishments

- Video camera installed in the Archive vault, to improve security.
- Distance Learning fee items were purchased to enhance network capability, adopting a higher standard for power over ethernet (POE) devices. New VLAN and associated address spaces have been set aside for a migration of all classroom devices to be online for remote maintenance and monitoring, to improve uptimes.
- Apple virus protection was added to all laptops and staff machines. Additional management system, JAMF implemented to automate upgrades and to facilitate support, Mark Couch assumed responsibility for the setup and updates.
- Wagner collection incorporated a touch screen display for viewing of content, enabled by kiosk components.

Future Directions

vSAN Storage Backup Allocated and Older EMC Storage Array Devices Decommissioned

With the installation of the library's combined vSAN storage array and Dell 740 backup storage server, storage for the Library and OLITS increases in size and shares this important asset. The previous array, an aging EMC 3200e storage array, will be retired as a part of the process.

Implementation of Additional Technology

End of year budget initiatives have afforded the purchased new equipment for library laptop replacement. Combined with computing allocated for all study rooms within the library, the Fall semester 2020 will see limited seating assignments within the library, and that time will be used to update group study rooms for future use, when library usage limits warrant usage.

Library Seating Management through LibCal from SpringShare

In the next year, SpringShare's seating reservation system will be implemented to add additional options for students to safely reserve additional library study spaces online, which will we presented into 'zones' and assist the library in keeping adequate caps on physical space usage.

Services to OLITS

The Systems department has supported a major hardware refresh project for Instructional Designers and Classroom support staff comprised of 14 new machines. Additional storage in a new storage technology, VMWare's virtual Storage Area Network (vSAN), replaced an older OLITS-specific storage appliance unifying the library and OLITS storage onto a single storage platform with *significant* increases in available space.

Significant Staff Organizational Memberships

Berrie Watson:

Library Service:

Library Leadership Team, Member

Library Web Committee, Chair

Professional Service:

VMWare Users Group, Active Fee Paying Member

VMWorld Conference and Training Event, Attendee (virtual conference)

Mark Couch:

Professional Development:

USF St. Petersburg Student, majoring in Information Systems Management

Expected graduation: 2020

Summer Natali:

Library Service:

Faculty Learning Community, Immersive Technology Augmented Reality/VR

Professional Service:

Various STEM-Related Events, Attendee

Systems Statistics

	19-20	18-19	17-18	Overall Change
Number of Open Use Computers	104	104	104	0+%
Laptops for Student Checkout	100***	20	20	+500%
Number of Staff PCs & Laptops	93	87	78	+19%
Number of DL, OLITS Laptops	15**	28	23	-34%
Number of Wireless Coverage Points	26	23	20	+30%
Number of Library Servers	21	22	20	+5%
Number of Distance Learning Servers	1	1	1	0%
Amount of Server Storage	62TB	20TB	20TB	+210%
Amount of Backup Storage	32TB	25TB	25TB	+28%

** previous in-house laptops replaced with new units to be used within the OLITS areas

*** SG and USF St. Petersburg funded the purchase, library configured and maintained the units for student checkout through Access Services.

STC Statistics

The Student Technology Center (STC) provides the most available in-person technology assistance available at USFSP with the widest hours of operation. The STC completed its second full year of activity in Summer 2019, and was visited over 2,000 times for the areas of support it provides to students through the Summer 2019 semester. Over 25 workshops, The statistics below include the primary categories of assistance:

Technology Category	2019 –2020*	2018-2019	2017- 2018
Digital Makerspace & MyStudio Booth	213	99	23
Helpdesk/Tech Support (includes wireless and software/hardware support)	816	853	317
Events, Training room & Study Space Use	37	132	261
Printing	1026	1,034	89
Total Requests	2,093	2,118	690

* Statistics end in March of 2020 due to the COVID-19 outbreak and subsequent library closure.