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# Systems and Digital Technology Departmental Report : July 1, 2016 – June 30, 2017

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Nelson Poynter Memorial Library

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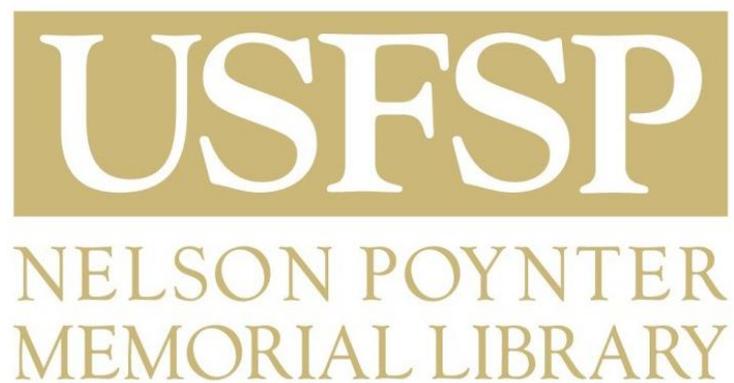
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# **Systems and Digital Technology Departmental Report**

July 1, 2016 – June 30, 2017

University of South Florida St. Petersburg

2017



## Statistical Snapshot:

	2016/17	2015/16	2013/14	2012/13	4 Yr. Change
Help Desk: Total Number of Requests		314	353	377	
Number of Open Use Computers		87	78	55	
Laptops for Checkout		20 (all new)	16	12	
Number of Staff Computers		59	51	42	
Number of Distance Learning Faculty & OLITS Laptops		37	14	11	
Network Connectivity Devices		22	19	10	
Number of Wireless Coverage Points		20	19	19	
Number of Library Servers		20	18	15	
Number of Distance Learning Servers		5	4	3	
Amount of Server Storage		18TB Array	7TB	2TB	
Amount of Backup Storage		13TB	4TB	2TB	

## Department Overview

Serving as the primary technology office of the USFSP Library, the Library Systems and Digital Technology supports open use computing through a variety technology-enhanced student collaboration spaces, the USFSP Digital Archive, lib.usfsp.edu web site, computing and networking for the library building's over 200 network device footprint, as well as a myriad of related components that work to provide library-based computing services and resources to students, faculty, and staff.

Staffing for the 2016/17 academic year remained stable with the department consisting of Berrie Watson, Department Head (A&P), Mark Couch, Systems Analyst (A&P), and Gediminas Pakalnis, Technology Helpdesk Support Assistant (OPS). In addition, the Department has employed FWS student technical support at the IT Help Desk, providing first employment experiences to students within the student-centered culture of the library.

## Significant Departmental Accomplishments

- **Library Instruction Classroom Equipment Refresh:** The library instruction classroom received a total equipment and furniture renovation as a joint project with the Library Space Committee who selected and ordered furniture, and Library Systems who implemented installations including power and network expansions, audiovisual and AV cabling and terminations to support the project. Additional network switch components supplied network connectivity at gigabit-to-the-desktop speed. Power was managed through the external vendor APG, with data and video cabling terminated in-house. Cooling was augmented through two new Spot-Cooler units in the datacenter; one of the two units were installed with a second unit awaiting an upgrade to Systems circuitry to supply needed 220V power. Backup power supplies were installed in corresponding server racks to supply network and servers with redundant power. A Distance Learning initiative to bring Proctorio student exam proctoring services to the library as the main on-campus support mechanism funded web cameras and software to 30 machines in the Library instruction classroom and Information Commons.
- **Information Commons (IC) Hardware Expansion:** Five additional units were placed on the North Atrium wall of the first floor, to be used with Proctorio exams. Additional units were placed in collaborative spaces on the first and third floor, leaving some intentionally empty study spaces with power for laptop use. Two computers were replaced at the library entrance, for non-students as “Web-Xpress” machines used for catalog access only. Twenty laptops were purchased and placed into circulation for Proctorio also, in conjunction with the desktops, purchased by DL Fee and set up by Mark Couch.
- **E-Portal Project Support:** The ePortal workgroup was set to produce through original programming an online support services portal responsible for all aspects of online learning support that is not classroom based. Casey Frechette spearheaded the effort with Sharon Austin as a supportive programmer. As a result, the library shifted roles for web administration, software development, and content review among Systems and department assigned managers to allow Sharon Austin to provide full time programming support. The effort is funded through Online Learning, with systems administration and physical server support supplied by Systems. Head of Systems has also absorbed the webmaster role for the library web site to allow focus on the new portal. A very small virtual infrastructure has been created as a sandbox for this project, housed in Systems and protected by an isolated Cisco firewall. This allows flexibility in creating “snapshots” of server progress, and protects work through active backups. Movement back to Systems architecture is expected soon, along with purchase of encryption certificates and a tuning period to determine resources needed to sustain the amount of use required.
- **Systems Infrastructure Hardware and Licensing: Full Replacement:** Infrastructure components were itemized and listed along with the assigned servers, in a Technology Fee proposal to refresh library and Information Commons (IC) hardware and software infrastructure. Library Systems justified funding through the creation of the Tech Fee proposal, designed the upgrade, selected and installed all components. Out of warranty Apple server and EMC Storage components were repurposed as server infrastructure backup targets. Library and tech fee funding replaced three Dell Servers and two storage

arrays. During this period desktop equipment refresh brought 10 new computers and 50 laptops to areas of the library and OLITS.

## Library Website Trends

### Monthly Unique Audience Visits to the Nelson Poynter Library Webpage ([lib.usfsp.edu](http://lib.usfsp.edu))

	Sessions	Unique User Visits	Prior Year Sessions/Visits	Visit Change
<b>July 2015</b>	6,405	3,988	6,105/3,364	18.8%
<b>August 2015</b>	5,461	3,665	5,798/3,458	5.9%
<b>September 2015</b>	9,305	5,890	10,055/6,411	-8.1%
<b>October 2015</b>	8,552	5,370	9,623/5,968	-10%
<b>November 2015</b>	8,520	5,189	8,807/5,311	-2.3%
<b>December 2015</b>	4,606	2,858	6,284/3,961	-27.8%
<b>January 2016</b>	6,204	3,912	8,354/5,361	-27%
<b>February 2016</b>	6,807	3,934	8,379/5,412	-27.3%
<b>March 2016</b>	7,142	4,564	8,568/5,413	-15.7%
<b>April 2016</b>	7,090	4,368	9,546/6,134	-28.8%
<b>May 2016</b>	5,156	3,149	6,420/4,056	-22.4%
<b>June 2016</b>	4,825	2,850	6,692/4,142	-31.2%

Unique visits to the web site as tracked by Google Analytics have been steadily declining over the last year, decreasing up one third from the prior year. Changes in the past year have included revamping the main page, adding forms, changing the layout of the main page, adding Ask-A-Librarian chat, removal of a Dean's Message, removal of FaceBook and blog dynamic feeds.

It should be noted that the library web pages tracked by Google Analytics do not comprehensively track the Nelson Poynter Memorial Library's online presence in its entirety, but are indicators for the [lib.usfsp.edu](http://lib.usfsp.edu) domain and show trends across sites. Library web pages that are not hosted at [lib.usfsp.edu](http://lib.usfsp.edu) are not counted in statistics and include the following areas:

1. LibGuides <http://guides.nelson.usf.edu/>
2. Modules [http://decade.it.usf.edu/stpete/lib\\_modules/](http://decade.it.usf.edu/stpete/lib_modules/)
3. Digital Archive <http://dspace.nelson.usf.edu/>

4. HelpDesk <http://usfspdl.org/>
5. USF Libraries Services
  - a. Ebsco <http://eds.b.ebscohost.com/eds/>
  - b. Metalib <http://metalib.fcla.edu/>
  - c. Catalog <http://usf.catalog.fcla.edu/sf.jsp>
  - d. eJournal links <http://sfx.fcla.edu/usf/>
  - e. ILL, Renewals <http://www.lib.usf.edu/>
6. Ask-a-Librarian <http://askalibrarian.org/>
7. myUSF <https://my.usf.edu/>
8. Library Blogs
  - a. Dean's Blog <http://poynterdean.wordpress.com/>
  - b. DL Blog <http://usfspdistancelearning.wordpress.com/>
  - c. Digital Collections Blog <http://usfspdigitalcollections.wordpress.com/>
9. Facebook <https://www.facebook.com/PoynterLibrary>
10. Google Scholar <http://scholar.google.com/>

Website projects during this period include updating all 'People' pages with the assistance and editing skills of Angela Hood; Revamp of the main page removing Facebook, blog feeds, four squares above the footer; adding an "Ask-A-Librarian" widget to the main page (September 2015); creation of online request forms for display request, POY218 Lab, Library Instruction Request, and a revamp of Library Space Reservation form among others.

### **IT Help Desk**

The IT Help Desk provides technical support to students and faculty in the library's information commons. To staff the IT help desk, two part-time OPS student workers were hired at the onset to work during the library's busiest hours. In Fall 2013, three part-time student workers were hired through Federal Work Study to serve at the Library's IT Help Desk with an additional OPS Support Assistant. The 2014-15 season was a test to function without FWS student assistants, as the area received funding for with only one and opted instead to depend on the Helpdesk Support Assistant (OPS position). The flexibility of students and the approachability of the desk were sorely missed, students will be reintroduced in the 2016-2017 academic year to provide greater visibility and ease scheduling.

### **Intra-Departmental Work Statistics**

In addition to the combined service desk statistics, the Library Systems department collects data on the number of help requests submitted through the online Technology Helpdesk tracking system. The three types of relevant tracking categories are:

**Library Staff Computing** – Tracks project work and requests from library employees, including OLITS, to the Systems department.

**Library Technology Helpdesk** – Tracks all work requests made via the IT Help Desk, generally for student-use activities. Students and OPS are the front line, with backup from Systems for more complex issues.

**Library Website related** – Tracks work requests pertaining to the library website lib.usfsp.edu.

The number of Library Staff Computing help requests has decreased by 17% over the past 3 years, reflecting an overall shift from individual helpdesk queries to more project related items. However, the number of Library Technology Helpdesk requests has increased 17% in the past 3 years, indicating higher student usage. Sample questions are given below to illustrate that the helpdesk is used more as a project management tool than a traditional helpdesk though both types of items exist. Primary method of contact is phone or verbal contact rather than helpdesk tickets, however the helpdesk continues to organize requests, follow-up communication and record critical resolution data to allow second tier support, consisting of Systems Administrator and Systems Support Analyst to document and analyze issues. It may be nearing a time when Systems staff enter all requests rather than prompting users to enter tickets for website and Staff related items.

<b>Tickets</b>	<b>2016/17</b>	<b>2015/16</b>	<b>2014/15</b>	<b>2013/14</b>	<b>3 yr. % Change</b>
Staff Computing & General		180	236	269	-33%
Library Technology Helpdesk		90	94	77	17%
Library Website related		44	23	31	42%
<b>Total</b>		<b>314</b>	<b>353</b>	<b>377</b>	<b>-17%</b>

In order to illustrate the nature of helpdesk statistics, samples from broad and specific tasks are listed below. These are actual ticket subjects to illustrate the range of time spent answering and responding to these help requests is not consistent ticket-to-ticket. Depending upon the complexity of the task, some tickets represent smaller help requests (such as updating a software program on a staff worker’s computer), while other tickets represent a large, labor-intensive project, such as the refresh of entire lab spaces or the addition of multiple computers.

**Laptop Usage Increase**

Student use laptop offerings have consistently increased over the past three years, with the additions scaling from 12 to 16 to 20 units during the last three years with a higher percentage of Apple (0% to 38% to 50%) than ever before.

In addition, Library Systems laptop offerings to the library staff have also increased, with has two laptops for Public Services, one for Technical Services, one for the Dean's Conference Room and one for general library employee use (totaling 5). USFSP faculty involved in online courses were provided a laptop to support their work. Seven such were units distributed by OLITS and Library Systems in the past year, and 30 laptops provided for faculty use in OLITS workshops. The Library Systems department is responsible for purchasing, configuring, and providing continued technical support for OLITS laptops.

## **Future Challenges:**

### Strategic USFSP Growth

Library Systems service offerings are well established and are not expected to change drastically in the next year. However, with the strategic growth of the campus, a significant future challenge is ensuring that the department continues to have the staffing and technological capacity to support the incremental expansion of these critical USFSP functions. Virtualization of desktop computing is essential to providing an expanding service with a static employee base. A VMWare product, *Mirage*, may provide this platform and interact seamlessly with other VMWare based server and storage mechanisms. This solution will be investigated.

An increase in students, courses will drive an increase in technology service mechanisms via the library. Balancing this increase along with important Systems projects will require the development of more critical and higher capacity local resources. Project resources and the need for additional staff, equipment, or organizational complexity should be considered in order to continue to provide consistently high service levels to support areas.

### Increase in Managerial Responsibilities

- Berrie Watson, Head of the department is increasingly responsible for documenting department activities such as writing hardware or software proposals, justifications for new services, project summaries, and departmental reports. These ever increasing documentation responsibilities are substantial additional processes that are quickly becoming vital to the library to perform in a highly organized and transparent USFSP environment.
- In collecting the data to complete departmental reports, the department needs standardized data to measure departmental services and activities. Surveys, daily counts and a more rigorous ticket system or alternative method to measuring job duties would clarify levels of activity throughout the academic year. In addition, a standard protocol and data collection system to document activities must be consistently utilized by all departmental staff members. Helpdesk software may not be detailed and

searchable enough to provide this going forward. We may consider filtering all request for service through email or phone, and allow Systems staff to create and manage tickets. Ticket rates are not true indicators of volume at this time.

### **Future Directions:**

#### Library Computing

- Printing – Currently the library’s IC print revenue is derived from one Ricoh ‘pay-for-print’ cash printer. The department is exploring moving the library’s student printing to the BullBucks campus standard as a replacement printing payment method, and retiring this printer that has no equipment maintenance contract. Students have consistently underutilized BullBucks payment options in favor of a free, albeit less advanced (no color prints, no double sided option) print service elsewhere. Retirement of the cash option and emphasis on free methods may mean reducing either number of printers or earmarking funding for this service.
- Windows 10 has been recently released for use at USF. This OS will be considered a mandatory upgrade destination for staff desktop use during the 2016-2017 year.
- Now an expected offering, the USFSP Library computer instruction room (POY218) will be made available for additional student computing during exam periods.

#### Library Systems Department Guidelines for Support Services

- A Systems and Digital Technology Department goal is to further define support services to the library, information commons and Online Learning and Instructional Technology Services. Specifically the extent of services provided should be described through guidelines and full documentation on the manner and extent and detail, as to establish standard operating procedures routine tasks and data collection. This set of standard procedures is particularly important as needs expand, to clarify support resource allocation as the USFSP student population and online course offerings continue to grow to the Vision 20/20 expectations.

## Addendum

### Appendix A

#### Helpdesk Ticket System Reports

July 1, 2013 – June 30, 2014

Full Name	General	Library Staff Computing	Technology Helpdesk	Web Site Related	Summary
	Tickets	Tickets	Tickets	Tickets	Tickets
Berrie Watson	8	92	24	31	155
Gediminas Pakalnis	14		42		56
Mark Couch	47	108	11		166
<b>totals</b>	<b>69</b>	<b>200</b>	<b>77</b>	<b>31</b>	<b>377</b>
				<b>TOTAL</b>	<b>377</b>

July 1, 2014 – June 30, 2015

Full Name	General	Staff Computing	Technology Helpdesk	Web Site Related	Summary
	Tickets	Tickets	Tickets	Tickets	Tickets
Berrie Watson	16	126	18	23	183
Gediminas Pakalnis	3		61		64
Mark Couch	13	78	15		106
<b>totals</b>	<b>32</b>	<b>204</b>	<b>94</b>	<b>23</b>	<b>353</b>
					<b>TOTAL 353</b>

July 1, 2015 – June 30, 2016

Full Name	General	Staff Computing	Technology Helpdesk	Web Site Related	Summary
	Tickets	Tickets	Tickets	Tickets	Tickets
Berrie Watson	14	94	7	44	159
Gediminas Pakalnis	2		77		79
Mark Couch	11	59	6		76
<b>totals</b>	<b>27</b>	<b>153</b>	<b>90</b>	<b>44</b>	<b>314</b>
					<b>TOTAL 314</b>