Notes from LMIS meeting 9/20/2016
The meeting was called to order at 8:31

Present:
James Bernhard (chair), Jeremy Cucco, D. Wade Hands, Zaixin Hong, Martin Jackson (Associate Dean), Lauren Nicandri, Patrick O'Neil, Andrew McPherran, Hilary Robbeloth (representing Jane Carlin, Librarian), Linda Williams, and Lisa Wood

Announcements:
Martin Jackson announced that the Assistant Dean for Operations and Technology would be starting 10/1/2016, after which time they should be serving as Dean's representative on this committee.

Chair Bernhard deferred review of the minutes until our next meeting, at which time we will examine those from the final meeting in spring 2016, as well as those taken at our initial committee meetings on 9/8 and 9/20.

New Business:
The focus of today's meeting was a presentation by Jeremy Cucco (Associate VP for Technology Services) on the "State of Union" address regarding Technology on the Puget Sound campus.

Cucco presented an outline of topics for his talk, encouraging open discussion and questions. We covered the following three areas during this session, with several remaining for upcoming LMIS meetings (see below).

1. **Infrastructure**
    a. **WAN upgrade**
    b. **Core upgrade**
    c. **Wireless upgrade**
        i. **Previous**
        ii. **Ongoing**

2. **Desk**
    a. **Ending support contractor relationship**
    b. **Seeking better alternative**
    c. **Removing printing**

3. **Printing**
    a. **High source of frustration for students**
    b. **Print Green still to be in effect**
    c. **Printing to migrate off of desk and allow for local printing**
    d. **Exploring card release printing**

Meeting Notes for Topics 1, 2, & 3:

1. **Infrastructure (upgrades):**

   Technology services recently completed an upgrade for our Wide Area Network, Core Router, and Wireless System, a project that resulted in a 20X increase in speed of the University's network. He noted that this was completed without a noticeable disruption in services, reflecting a central goal of Tech Services to have upgrades occur without the awareness of campus tech consumers. The upgrades achieved a 7-10 year increased longevity of our Network system, reflecting the goal of making of smart, efficient, and economical choices with regard to system maintenance and expansion. Cucco also noted that students typically complete much of the work undertaken to maintain and upgrade services. Tech Services employs approximately 56 well-trained student workers, a cohort they rely upon for a wide range of tasks.

   Difficulties with Wireless System**:**

   Cucco explained that there are challenges in providing consistent and ubiquitous wireless service, something that students find frustrating. He described problems with the older academic brick buildings on campus, most of which contain infrastructure that blocks Wi-Fi signaling. In addition, he clarified that most of the on-campus houses are grounded in such a way that Internet signals are blocked (Faraday Cage Effect). He noted that we have approximately 700 small devices (wireless access points) placed around campus to service student needs. Even so, there are still places where wireless signals are weak or non-existent, one of the complaints that comes to tech services frequently from students. Along with the additional access point devices, Tech Services has recently raised the wireless bandwidth from 5 to 50 megabits per second, resulting in a faster and more responsive system.

   Topics 2 & 3. V-Desk & Printing:

   Another area of difficulty and multiple complaints from students is the problem of V-Desk, especially with regard to printing. The number of steps to access software or to print a document via V-Desk is excessive by most standards. Tech is planning to investigate a change to the underlying software infrastructure V-Desk (Citrix XenApp) with a more modern solution (VMware Horizon Suite) that will provide an improved user environment, with a desktop view feature that provides visual navigation of software options as well as printing sites. Ultimately, the goal is to have a system that provides a more unified remote desktop experience, and permits students to

send documents from their own (or University) computers to any available printer on campus (e.g. those housed in dorms, labs, designated classrooms, the student center, or the library, to name a few).

Devices Recommended for Use on Campus:

Committee members asked about varied devices and platforms that are likely to work on campus as the network expands and Horizon comes on board. Several committee members asked questions about varied platforms and devices (e.g. iPhones vs. Android devices, chrome book vs. other tablets). Cucco discussed the problem of connecting iPhones to the University's network system due to restrictions by Apple, the unlikely possibility of using chrome book with V-Desk technology, and the problem of using apps such as Microsoft Office 365 as a university-wide software product, given the need for the Office of University Relations to maintain its current system of contacting students post graduation (software incompatibility). The possibility of becoming a "Google School" was also mentioned in discussion as a possible consideration over the long run. To head off problems of incompatibility of student owned technology and computer systems, Tech Services plans to produce a "University Technology Standards" document in the near future. This document will provide clarity about what technology purchases (computers, phones, tablets etc.) are likely to be most compatible with existing and future computing, printing, and communication systems on campus.

Student Network Shares and Print Green Page Allocations:

The committee then turned to a discussion of how students use network storage space, as well as the 750-page allocation they receive each year for printing documents on campus. Nicandri reported that student printing has decreased over time, and that student use of the server to store documents is highly variable. Nicandri also indicated that the 750-page allocation appears to be more than adequate for most students. Committee members agreed, given their own educational experiences, (where no printing costs were covered by their schools). One faculty member identified the use of online submission of written work as a pattern that may have reduced students' need to print, while others indicated that use of paper copies continued to be an important option for pedagogical reasons.

During further discussion Cucco noted that costs for printing course readings (especially at the copy center), are typically lower than costs for textbook or pre-printed course readers. This point addressed the need to clarify expectations regarding costs of printed course readings by students (part of textbook costs). On this topic, another committee member emphasized the frequent use of course readers in their department, a factor that could create a false impression about the lower need for, and use of, printed materials by

students. Another faculty member added that they did not see the Print Green page limits to be an issue with regard to students obtaining assigned reading materials given the frequent use of textbooks as predominant reading materials in his courses. As this discussion of pedagogical issues related to the increased use of online readings continued, a faculty member opined that the 750-page limit may cause students to avoid printing documents in order to avoid overage costs, noting that this practice could potentially limit the effectiveness of student preparation for class, and possibly facilitate misuse of sources while writing papers (with desktop articles positioned on the computer screen alongside the student's own paper as they are writing).

There appeared to be variability among departments, individual faculty, as well as students with regard to attitudes and practices related to printing. The committee chair suggested the impacts of technology use on academic goals and processes (illustrated in part by this discussion) might be an important topic for further discussion in committee this year. He suggested that we continue our discussion of remaining topics on the SoU list over the next few weeks.

These are the remaining topics from the Technology SoU:

1. **ERP**
    a. **Cascade officially end of life**
    b. **on sustainment just to move remaining systems off**
    c. **very few systems remain**
2. **Analytics**
    d. **original system may be ill suited**
    e. **POC performed on Tableau**
    f. **working with IR**
    g. **seeking additional assistance from industry partner**
3. **Service desk**
    h. **Still providing outstanding service**
    i. **exploring new standards for laptops and desktops**
4. **Multimedia**
    j. **electronic classroom upgrades - analysis underway**
    k. **major enhancements to the school of music**
    l. **exploring new digital signage options**
5. **Emergency Preparedness**
6. **Educational Technology**
7. **Cloud Computing**

The meeting was adjourned at 9:20 a.m.

Respectfully submitted,
Lisa Fortlouis Wood