Instructional Technology Advisory Committee July 2017 Quarterly Report

Highlights

- Currently on the Springfield campus there are a total of 339 technology-enhanced classrooms, with 17 more coming online this Fall and 16 more Fall 2018

The following projects were completed in FY 2017

- Carrington Auditorium 0208 (funded by Office of the Provost)
  - Upgraded to digital standard
- Craig Hall 0203 & 0206 (funded by SCUF)
  - Upgraded to digital standard
- Strong Hall 0001, 0002, 0003, & 0004 (funded by SCUF)
  - Upgraded to digital standard
- Pinegar Arena 0105 (funded by Office of the Provost)
  - New classroom install
- Bond Learning Center Ballroom (funded by College of Agriculture)
  - Upgraded audio/visual system to address ongoing issues and improve functionality based on actual use of the space
- Bond Learning Center 0111 & 0116 (funded by Office of the Provost) – remains to be scheduled
  - Upgraded to digital standard

The following projects are scheduled for completion in FY 2018

- Glass Hall renovation and addition (funded by College of Business)
  - Selective updates in Glass 0101, 0102, and 0108
  - Installation of 5 new classroom spaces
  - Executive Board Room
- Ellis Hall (funded by the Office of the Provost)
  - Installation of classroom technology in 6 classrooms
  - Design and install technology for the Ellis Recital Hall
- Taylor Health and Wellness
  - Design and install technology for new multi-purpose room and conference room
  - Installation of digital signage within the new building
- Hill Hall
  - Design and install new technology for classroom spaces
  - Updated technology for Hill 0001 and 0002

- Digital upgrades throughout campus as current SCUF funding supports

Classroom 2017-2018 software image

- The new 2017-2018 standard classroom software image is being finalized and tested
    - Will be ready early August
- ITAC will deploy the software image via System Center Configuration Manager (SCCM) to all classroom computers after summer semester
    - SCCM will allow ITAC to better manage the classroom computers and keep them updated and secure
    - Distributed IT staff will still need to check the computers they are responsible for to verify display settings and install any college specific software

Classroom high-density wireless project

- The ITAC committee looked at multiple criteria to evaluate wireless usage and coverage for academic buildings that have the older model Juniper wireless access points
- **Student Impact**
    - The method the ITAC committee used to evaluate this criteria was to look at non-unique students enrolled in each building as well as total credit hour production
    - The below table shows the Summer 2016, Fall 2016 and Spring 2017 semesters class data for credit hour production

Building	Sections	Enrollment non-unique	Total Credit Hour Production	Current Juniper APs	Total APs required for high density coverage
Temple	686	17,619	43,289	36	64
Siceluff	578	9,759	29,370	16	36
Craig	485	10,194	25,988	16	35
Carrington	26	5,535	17,992	36	40
Karls	223	4,864	13,593	17	24
McQueary	170	4,413	12,856	14	19
Kemper	227	4,535	11,200	20	26
Brick City 1	147	1,877	5,165	37	40
McDonald	219	3,706	4,554	14	19
Kings Street	120	2,310	2,847	11	21
Wehr	144	1,179	1,039	3	10
Art Annex	32	408	1,024	4	7

- **Network utilization data**
    - The ITAC committee found that all buildings had times where the access points were overloaded and heavily used; the majority of this density was in large lecture halls and public spaces
        - Large lecture halls have special needs, e.g. Temple 0001, 0002, 0003 and Carrington 0208 so might need different technologies to achieve adequate high-density coverage

- The data in the table below was gathered by Networking and Telecommunications by monitoring wireless data the last two weeks of the Spring 2017 semester, the numbers would be substantially higher if data was gathered for a longer period
  - Juniper wireless access points start to see degradation of service and reliability issues after about 25 concurrent connections
  - The table below shows how many times an access points had over 25 concurrent connections

Building	Occurrences of over 25 concurrent connections
Temple	851
Carrington	446
Siceluff	329
Craig	300
Karls	153
Kemper	125
McQueary	114
Brick City 1	79
McDonald	44
Kings Street	41
Wehr	40
Art Annex	0

- **Innovation**
  - Innovation was a metric that was hard to accurately define and gauge, as all departments and classes could not be easily surveyed
  - There is evidence and reports of areas that are using technology in unique ways. As well as other areas, that require mobile devices. However without university wide data this information was not thoroughly evaluated

- **Student, faculty and staff complaints**
  - Complaints could not be substantially quantified; there have been complaints from all the buildings listed
  - The volume of complaints seems to be higher from the buildings with large lecture halls and those areas heavily using mobile devices