Engineering Labs/Classrooms Project Summary

Background

Pre-Plan Draft Outcomes (Nov 17, 2017 Email From: Trotter)

Your team Project is Project #3 and this is the current description of that project along with the first cut at the outcomes/results we hope to see come from the team:

Classroom Labs in Engineering Complex

1) Conduct an audit of computing labs in Engineering and of UIT labs in buildings where there is an engineering presence.
2) The audit shall include: number of machines, age of machines, hours of operations of the labs, utilization of the labs, staffing of the labs, software installed on the labs, utilization of software packages in the labs, overview of how software is administered in each lab.
3) Create an updated student lab survey instrument and administer to all computing labs across campus before the end of the Fall 2017 semester.
4) Deliver a set of recommended changes in computing lab usage in engineering buildings.

Accepted Project Plan “High-Level Tasks”

1. Conduct an audit of existing equipment, software, staffing and administration in UIT and COE computing labs located in the COE complex
2. Create and disseminate a student lab survey to students using UIT and COE computing labs
3. Summarize results of the survey
4. Deliver a set of short and long-term recommended changes for computing labs located in the COE complex

Groundwork (high-level tasks 1)

Discovery

- Conducted audit for 28 student computing labs located in COE complex
  - Audit includes:
    - Hours open for student use
    - Primary use/users
    - # of classes in Spring 2018
    - Staffing
    - # of endpoints
    - Client type
    - Primary support
    - Access by keypad
Student Survey (high-level task 2-3)

Survey Creation
- Reviewed survey questions and results from 2016
- Developed and reviewed survey questions (attached)

Survey Dissemination
- Deployed survey in Qualtrix mid-March through April 5, 2018
- Survey available on desktop on all GSL labs across campus and engineering labs in COE complex
- Survey completed by 167 students

Survey Results
- Summary of survey results compiled through Qualtrix and manual summary of individual comments is attached.
  - Success: Good information and insight from students
  - Challenge: Data is not specific to individual rooms unless mentioned in comments by students. Per the charge to the team, the survey was deployed in all GSL labs across campus as well as computer labs supported by COE. As a result, the comments do not necessarily reflect use in the Engineering complex only. Comments that specify rooms are included in the manual summary (attached).

Recommendations and Next Steps (high-level task 4)

Short Term

1. Use newly combined license for Lab Stats to collect specific use data (daily/hourly logins, software use, etc.) for Fall semester 2018. Consider additional student survey to collect information on specific rooms if deemed necessary. Maybe consider a human spot check to see if rooms are being used by faculty as they are scheduled. (i.e. often booked just to insure a space but aren’t always used as scheduled)

2. Moved scheduling of GSL labs to Registrar responsibility to support consistent scheduling and room availability. (This transition is now completed.) COE staff are currently confirming accuracy of information in Ad Astra (size of room, number of seats, etc.) for non-GSL labs in the NACOE complex to maximize appropriate scheduling.
3. Include all computing labs in the Classroom Committee room inventory. Colin and Ernie will engage with the Classroom Committee to get an inventory of physical condition of labs involved in this project and make sure they are included in the standard campus facilities maintenance and upgrade schedule. (Information from the TOT survey has already been used to inform the facilities upgrade to a computing lab in Cobleigh Hall.)

4. GSL leadership is reviewing staffing needs for Roberts 109, 110, 111 and will identify changes for Fall 2018. Questions regarding building access with Cat Cards need to be addressed to help inform staffing decisions and lab accessibility after hours.

5. GSL will confirm what software is needed by faculty using GLS labs for Fall 2018 and implement new system for faculty requests for software in specific rooms that they are using.

6. Establish coordination with Gallatin College for seamless access to software when students use these labs for weekend and after-hours access.

7. Install Polymath in GSL for Fall 2018. The size should be manageable for the current image.

Longer Term – Ongoing exploration:

8. In theory it would be good to have any software application used in NACOE, also installed in GSL for greater access, if the licensing allows. For some applications the licensing should be reviewed for options to allow greater access. Other applications could be useful with broader availability beyond NACOE, but unless successfully using App Volumes, these applications would push the VDI image beyond current size, which already had issues composing this last year. (see item #9)

9. VDI – continue to engage with VDI team discussions regarding need and potential intent to identify a nimble solution for directing software to specific rooms where it is required for instruction, rather than maintaining the current practice of maintain a single image for everything everywhere. This is an ongoing discussion and we will need to wait for Compunet analysis and recommendations. UIT GSL and NACOE embedded IT should work together closely to determine a coordinated approach to deployment and location of required software.

10. Continue discussions with NACOE and UIT regarding requirements for staff support in labs in the NACOE complex.

11. Incorporate student survey comments, as appropriate, in new construction and ongoing computing lab maintenance.

Identified Challenges (high-level task 1-4)

1) There was not a common tool deployed to enable the collection of use stats across all computing labs (both GSL and engineering) in the engineering complex. This has now been
remedied and stats should be collected and reviewed throughout Fall semester 2018. This common usage data should help inform the software and volume of use in each space.

2) The software deployed by GSL labs has not been reviewed for currency. It is not clear if all of it is still required by faculty and/or utilized by students. GSL is addressing the software request process and determining if any software can be removed or should be added.

3) VDI has created unique challenges for student computing labs. Lab managers need to be in close communication with the VDI team regarding any modifications to the VDI infrastructure. The VDI team needs to address the infrastructure needs that would support the inclusion of all software, including software deployed in NACOE labs, in all open and instructional computing labs.

4) Goals of the student survey were very broad. While the survey provides useful information, it does not provide some desired detail. The survey was made available on all GSL machines across campus as defined in the charge. If there is a desire for additional student feedback related to the NACOE complex, specific goals and lab locations should be clearly defined prior to conducting another survey.

5) It appears that in some cases faculty may schedule computing labs that are not always used on a consistent basis as scheduled. Recommendation #2 (above) should begin to address this issue so that instructional computing lab rooms are not going unused for blocks of time.