Information and Technology Services
Annual Report
2019 - 2020

Luther College

Vision

The following principles help us to consider the services that meet the mission of the college and how we go about deploying the resources that allow us to adapt to an environment of continual technological change. These principles also inform our decision making and help us to carefully allocate limited resources. As technology continues to evolve, our focus on, and approach to, a particular principle might vary from year to year.

1) Improves Teaching and Learning Outcomes for Faculty and Students

With each discussion of a new service, process improvement, or project we need to think about how it enables and supports improved teaching and learning for faculty and students. Our success is a reflection of the successful transformational journey our students experience at Luther College. In our efforts we need to consider how we contribute to student retention, improved graduation rates and students' transition to their first "next step" after they graduate. Besides providing basic essential services, we endeavor to bring our campus community innovative technologies such as the Digital Media Center which enables students to develop advanced forms of video communication and the Makerspace which helps students to visualize the world in new ways through virtual reality experiences and 3D object development. Ensuring that faculty have the appropriate technological classroom resources is essential to the success of these efforts and facilitates the creation and nurturing of learning communities. Teaching our campus community how to use the resources we make available is essential.

2) Provides students exposure to and hands-on experience with the technologies they will use both at the college and in their pursuit of lifelong learning

There continues to be a heightened level of concern about students' success in whatever post-college experience they may choose to pursue whether it be a job, a service program, graduate studies or other endeavor. Whatever that choice might be, we want to make sure we think about what will help make our graduates differentiated and successful in achieving their desired next step. We do this when we have facilitated teaching and learning through the technological tools we provide that will lead to additional skills and hands-on experiences that make a difference in their pursuit of those. We seek to make available the tools necessary for our faculty to provide learning experiences that our students can leverage to differentiate themselves and continue the journey of "lifelong learning." Within ITS we need to evaluate each new service, process improvement, or project with an eye towards how it increases the likelihood that students and parents will select Luther College. We strive to meet and exceed expectations in service levels of essential services and hope to have had a positive impact on graduates' success attributable to the efforts of ITS.

3) Provide reliable, effective, and efficient information technology infrastructure for Luther College

We are charged with providing essential information technology infrastructure which will support and enable the processes of delivering higher education at Luther College. An additional major factor in our planning and decisions is the fact that the student population is almost entirely residential and the services they expect in their living environment are often based on what they experienced in their home. There are many interdependencies

that require a concurrent focus on security, high reliability, ubiquitous availability, and excellent performance. The ability to provide 24/7/365 system accessibility is essential. New and alternative site-based or cloud-based architectures in networks, systems and services provide us choices but it also complicates decision-making. Staying ahead of aging and obsolete hardware and software is an ongoing effort. Additionally, business continuity and disaster recovery are critical elements that need to be embedded in our planning process.

4) Provide technical support to offices with the collection and transformation of 'data' into 'information' that leads to timely and effective decision-making.

The many data collection systems we operate in coordination with our internal constituencies and our external vendors generates a significant amount of potentially useful data. It is imperative that information is collected in a manner so that it can be transformed into useful information. We need to make sure the data the college collects is relevant, timely, accurate and complete. Key components to accessing that data and transforming it into information are the reporting tools those various systems provide. ITS must assist the college community with those reporting tools in a manner that allows them to extract information in meaningful ways. We need to be in the forefront of providing expertise to our constituencies in the selection, implementation and ongoing maintenance of those systems.

Our Mission

Information Technology Services supports the work and mission of the Luther College community by providing:

- **access** to appropriate communication and information resources,
- **expertise and training** in the effective and efficient use of information and technology, and
- **places** to explore and express ideas, ourselves, and our community.

Results and Accomplishments for Goals and Objectives for 2019-20

1. Improves teaching and learning outcomes for faculty and students

Transition Adobe ETLA installations from serialized licensing to named user licensing (faculty and staff workstations) and device licensing (lab/classroom/podium workstations).

Accomplished: Adobe Creative Cloud (CC) 2019 with the new shared device licensing was installed in labs, classrooms, and on podiums computers Fall 2019. In addition, Adobe CC 2019 was made available via KBOX self-service for faculty and staff with the new named user licensing.

Going Forward: Continue maintenance and support of Adobe CC.

Transition Luther faculty, staff, and students from LyndaCampus to LinkedIn Learning.

Accomplished: Luther's LyndaCampus software was upgraded to LinkedIn Learning August 2019. When signing in to linkedin-learning.luther.edu, each Luther faculty, staff, and student has the option to connect their LinkedIn account, if they so desire. LinkedIn Learning has the same great content as LyndaCampus, and it provides a more personalized experience.

Going Forward: Continue subscribing to LinkedIn Learning.

2. Provides differentiation for prospective students and parents

Our comprehensive ROAD new student checklist provides clear visibility to all of the steps, placement testing, and forms needed prior to orientation and advising to register for classes.

3. Improves prospect of differentiation for graduates on their next steps (service, jobs, vocations, graduate school, etc.)

Continue to transfer responsibilities to Technology Help Desk student workers, especially student managers.

Accomplished: Student managers revised training documents. Student managers each led a team dedicated to specific tasks like training, teambuilding, social media, etc. Teams functioned largely autonomously and determined their own goals and methods. We participated in ePortfolio work study reflections to help students understand what they've learned, take responsibility for their learning, and apply that learning to their work and lives.

Going Forward: We expect to use at least some of the team structures going forward and to evolve our work study reflections process.

4. Improves relationships to alumni/ae, friends of the college

ITS assisted the Alumni and Development group to research, evaluate, contact references, and meet with stakeholders to propose the purchase of Slate Advance to support and enhance communications, correspondence, event management, donor giving forms, giving day, prospect management, phonathon, and wealth screening. Slate Advance would enhance and replace many of the software products in use today into a comprehensive solution. We are awaiting cabinet review and approval to proceed with the purchase and planning for implementation.

5. Infrastructure

Upgrade and/or install technology in various classrooms and meeting spaces on campus which may include: Dahl Centennial Union (Admissions conference room, Nansen, Nobel, Peace, Hammarskjold), Regents Center (dance studio), and Baker Village Commons.

Accomplished: New technology was installed in Peace Dining Room, Hammarskjold, Nansen, and Baker Village Commons the first week in March. For information on using these spaces and other spaces on campus, visit Classroom Presentation Equipment Guides. Technology was also installed in the RC Dance Studio and an Admissions conference room.

Going Forward: Continue upgrading classroom projection with larger projectors and larger TV monitors.

Finish upgrading Luther-owned Windows workstations to Windows 10 prior to the EOL for Windows 7 in January 2020.

Accomplished: All Luther-owned Windows workstations that are on the network were upgraded to Windows 10 prior to the January 2020 EOL for Windows 7.

Going Forward: Continue to remain current on supported operating systems by developing a more automated process.

Software solution research and acquisitions in progress.

Accomplished: Assisted in software research, contract review, and facilitated a security assessment for the following:

Alcea Software Intern Placement Tracking for Social Work department was evaluated and selected and Social Work will be starting implementation in 2021.

Handshake replaced Symplicity Career in the Career Center in the summer of 2020.

Going Forward: SideArm sports went live in November of 2020, supporting the Athletics website, events calendar, and sporting event team statistics from the ARC athletic conference.

Communications and Marketing and ITS selected WordPress to support our CMS. A request for proposal for assistance in migrating content from REASON to WorkPress went out in December with a January 11th, 2021 due date.

Alumni and Development and ITS proposed the purchase of Slate Advance to support and enhance communications in Alumni and Development as well as functionality in our REASON content managemnet season including online forms, payment processing, crowdfunding (for Giving Day), alumni directory, alumni volunteer portal, and social media coordination. Slate Advance would enhance and replace many of the software products in use today into a comprehensive solution. We are awaiting cabinet review and approval to proceed with the purchase and implementation planning.

DigArc Course Management software was evaluated and is the preferred choice of the solutions that were explored, but no solution has been purchased. The Academic Planning Committee is using Google Docs for collaboration and version tracking with a workflow to move documents to shared folders as changes are reviewed and approved. No solution has been purchased. Richard Bernatz and Erin Flater are key to making this workflow work.

IndiCo bookshop point of sale and inventory system is being monitored for product development and adoption by other institutions.

Content upgrade to version 7.23 and Financial Aid and Human Resources implementation.

Accomplished: The Content upgrade to 7.2.3 is complete and two additional 'combo' licenses were purchased to support additional users. Additional workflows were created for Student Accounts and Payroll.

Going Forward: ITS is working with Financial Aid to scan and index student financial aid documents and develop workflow for the processes in the Financial Aid office.

The Human Resource staff have not had the time or capacity to work with ITS on workflows to support their processes.

Content version 7.3 and Experience (web client) 3 are available to schedule for upgrading in 2021.

Upgrade to Microsoft SQL Server 2017 database.

Accomplished: Systems with Microsoft SQL Server database were migrated to the current version and tested.

Going Forward: No changes are anticipated in the near future.

Improve information security risk posture, disaster recovery time and improve fault tolerance of our server and network infrastructure.

- Move systems to multi-factor authentication to further protect the security of critical college information.
- Move Colleague infrastructure off of physical serves and onto virtual machines.
- Upgrade our Storage Area Network (SAN) to accommodate the need for additional virtual servers. Have a second SAN in a different location that houses a live replicated copy of all data on the primary SAN.
- Expand our VMWare system with physical servers in a different location. These servers will be able to run our virtual servers if the primary servers or storage are unavailable.
- Rearchitect the core of our server network, firewalls, and campus network so that their service is not dependant on a single building.
- Implement the Dell/EMC Integrated Data Protection appliance to replace our existing Data Domain and EMC Networker backup infrastructure. Routine day to day backups will be done disk to disk, and longer term backups will be copied to cloud storage.

Accomplished:

- Vendors of multi-factor authentication solutions were evaluated and it was decided to go with Microsoft's Azure Single Sign-on product. Initial meetings with a consulting firm took place in November 2019. Planning and prioritization started in April 2020 with the project being broken up into multiple phases. Migration of phase one services will begin in June 2020.
- The colleague infrastructure moved to virtual machines in November 2019.
- The new SAN was installed during the summer of 2019 and a redundant SAN was installed in a secondary site on campus. The information in the redundant SAN is copied from the primary SAN on a regular basis.
- Two new core network routers configured in VRF mode have been installed. VRF allow's two physical routers to logically work as a single router, but we're able to achieve additional fault tolerance by locating the two pieces of equipment in different buildings. Work has begun to move connections for all of our buildings to this new core infrastructure.
- We implemented the Dell/EMC Integrated Data Protection 4400/Avamar Backup Appliance in June 2019. It is housed in an off-site location. We also implemented Cloud Backups with the Dell/EMC IDPA 4400/Avamar Backup with Microsoft Azure Cloud Storage for our Monthly and Yearly Backups.
- Citrix Software was installed February 2020 on a new VMware Farm with new virtual machines having the current version of Microsoft Windows Server 2019 installed with the updated version of Citrix Software.

Going Forward:

- Complete phase one of the multi-factor authentication migration.
- Live SAN replication will be implemented in a future project.
- The VMware physical expansion is currently on hold and will be done in the future.
- Finish moving all buildings to the new network core.

Evaluate options and replace our digital PBX with a Voice over IP (VOIP) system. This project will likely also need to include updating some network switches to models that provide power over ethernet where existing switches

don't provide that capability.

Accomplished: Development of an RFP is in progress, with release to vendors due in Spring 2021 and due to be presented to the Board of Regents in May 2021.

Going Forward: If approved by the Board of Regents, system implementation would occur during the Late Summer and Fall of 2021.

Upgrade of Micros point-of-sale and campus card Odyssey system in Dining Services.

Accomplished: This project was completed summer of 2019.

Going Forward: Two proxy card readers were purchased to provide touchless card access at the Dining Services entries.

Rewrite portions of webpages with the luther.edu/helpdesk and luther.edu/its branches.

Accomplished: From the /helpdesk branch alone, we removed or consolidated ninety-seven pages and wrote or modified 168 more.

Going Forward: We will continue this work.

ITS Team Reports

During the 2019 - 20 academic year, the Information Technology Services (ITS) team included:

- Dennis Blake (Telephone and Network Technician - Contracted)
- Dustin Cote (Programmer Analyst and Database Administrator)
- Eric Ellingsen (Program Support Coordinator)
- Robert Erickson (Classroom and Meeting Space Technology Lead)
- Adam Forsyth (Director of Network and Systems)
- Mark Franz (Executive Director of Information Technology Services)
- Faust Gertz (Programmer Analyst)
- Diane Gossman (Director of User Services)
- Marcia Gullickson (Director of Software Development)
- Matthew Hammen (Workstation Support Systems Administrator)
- Matt Hughes (Workstation Support Communications Administrator)
- Dave Huinker (Systems Administrator)
- Ahmed Muaz (Multimedia and Makerspace Lead)
- Jesse Mulert (Technology Help Desk Co-Lead)
- Jean Ryan (Programmer Analyst and Database Administrator)
- Lane Schwarz (Technical Support Analyst)
- Peter Sharp (Programmer and Information Security Analyst, Left Aug '20)
- Aaron Shouse (Multimedia Strategic Fellow)
- Larry Sikkink (Workstation Support Lead)
- Paul Vanney (Programmer Analyst)
- Chris Stuckman (Systems Administrator)
- Erin Zidlicky (Technology Help Desk Co-Lead)

Software Development

The software development team expanded the use of Content in several offices and developed the process to transfer digital-born documents from Slate Admissions to Content for the Registrar and other offices who reference admissions materials.

Work to allow Norse Hub to fully replace my.luther with additional functionality was developed and self-service features were configured, customized, and tested. New features and functionality are available for students, faculty supporting advising and student planning, employee time and leave entry, time approval, and finance query for budget managers provide a new and often improved user experience. Expanding use of Student Agreements and recording Paid Time Off provided solutions to long-standing goals for the Finance and Administrative offices. There are some customizations that still need to be developed in self-service.

Our team is continually upgrading software and databases to current, more secure versions to improve security and support of current and supported databases and operating systems. Our team continues to build new interfaces or expand data exchanged between systems, add remote and secure access, and provide data for analysis and reporting to support the administrative and academic departments at Luther.

Classrooms and Meeting Spaces Audio-Visual Support

Designed and installed the Peace Dining technology project that incorporated dual screens with laser projection, new microphones and new speakers.

Designed and installed the Baker Village technology project which utilized a podium rack system and a 100 inch TV with multiple new wall speakers.

Designed and installed the Nansen meeting space technology project which utilized a podium rack system with a 75 inch TV and video conferencing equipment.

Installed video conferencing technology in Nobel for use by college administrative staff.

Installed video conferencing technology in the Admissions conference room for better engagement with potential students. Installed new display technology in the Counseling Group Room in Larsen.

In collaboration with Chemistry, developed an active classroom in Valders 367 that resulted in dual projection.

Expanded the college's digital signage to the offices of TRIO.

Moving ahead with the installation of large flat panel TV monitors in classrooms and meeting spaces when appropriate.

Digital Media Center

The Digital Media Center is located on the lower floor of Preus Library. Luther faculty, staff, and students are welcome to use the multimedia lab and multimedia studio. The lab is available for use whenever the library is open; the studio is available

by appointment. The Digital Media Center is staffed from 7:30 a.m. to 9 p.m. Monday through Friday, and 1:00 p.m. to 5:00 p.m. Saturdays and Sundays during the academic year.

The multimedia lab consists of an open learning space with iMacs for editing digital & analog media projects. The multimedia lab is also home to the support desk, from which student workers provide support for those working in the space, and respond to campus-wide requests. The multimedia studio is ideal for creating projects that include video, audio, and photography.

The Digital Media Center is the service point for multimedia requests. Requests may be entered online, emailed, phoned in, or submitted in-person. The multimedia team supports the Luther community's questions when using the multimedia lab and multimedia studio, requests for media conversion from one format to another, video creation and editing requests, issues related to technology in classrooms and meeting spaces, video conferencing requests, recordings of lectures, and video streaming of high-profile academic-related events on campus such as Giving Day and Commencement.

During the 2019-2020 academic year our top three ticket categories were video conferencing services, DMC lab and studio use, and classroom checks and repairs, and event support. Out of 23 ticket request user satisfaction surveys filled out, 22 received 5/5 and one received 4/5.

Due to COVID-19 changes, Multimedia has had a focus on supporting remote learning. Part of this involves organizing the distribution of media hardware across campus. We installed and maintained temporary webcams in classrooms that professors utilize to record lectures and improve the quality of video conferencing. We have also provided members of the campus community with microphones and headsets in order to support conferencing.

We worked closely with CELT to support the transition to remote learning beginning March 2020. This involved providing support for lecture recordings and participation in video conferencing. We created a series of documentation that provided instructions for recording lectures and screen capturing using software such as QuickTime. We also supported the campus-wide implementation of Zoom video conferencing. This involved providing training to individuals and groups on how to best use conferencing platforms like Zoom for their remote learning and organizational purposes.

Some major events supported by Multimedia during the 2019-2020 academic year include the Giving Day Set Up & Stream as well as planning and preparation for the virtual ROAD events held in June and July 2020. Another significant event was the opening of the One Button Studio for the public in 2019-2020

Workshops conducted during the 2019-2020 academic year for organizations/classes as a group include:

- ENVS 485: Digital Media Center staff conducted a podcast production workshop using Adobe Audition for students in ENVS 485
- SPAN 335: Digital Media Center staff conducted podcast production workshop using Adobe Audition for students in SPAN 335
- COMS-258: Tuesday/Thursday Regular Class Fall 2019
- COMS-358: Tuesday/Thursday Regular Class Spring 2020
- ANTH 101: Audio recording and editing workshop for Anthropology 101
- SW 201: Social Work students conducted interview recordings using the One Button Studio
- Drop-In Video Editing Workshop: The Digital Media Center offered two different drop-in video editing workshops that were open for the Luther College community including staff, faculty, and students.

Makerspace

The Luther College Makerspace is a place where students, faculty, and staff can gather to create, invent, tinker, explore, and discover using a variety of tools, technologies, and materials. We bring together a cross-disciplinary community of students, faculty, and staff who all share a passion for creation and collaboration.

The Makerspace is equipped with Prusa 3D printers, 3D scanners, Carbide Nomad Pro CNC, Dremel Digilab Laser Cutter, HTC Vive VR headset, Oculus Rift VR headset, Cricut Vinyl & Stencil Cutter, Brother LS 590 sewing machine, Microprocessors & Sensors, and Soldering Iron station.

Due to COVID procedures the Makerspace has been closed to the public since March 2020 and our regular outreach programs and workshops were not held in Spring 2020.

Workshops and projects conducted during the 2019-2020 academic year at the Makerspace:

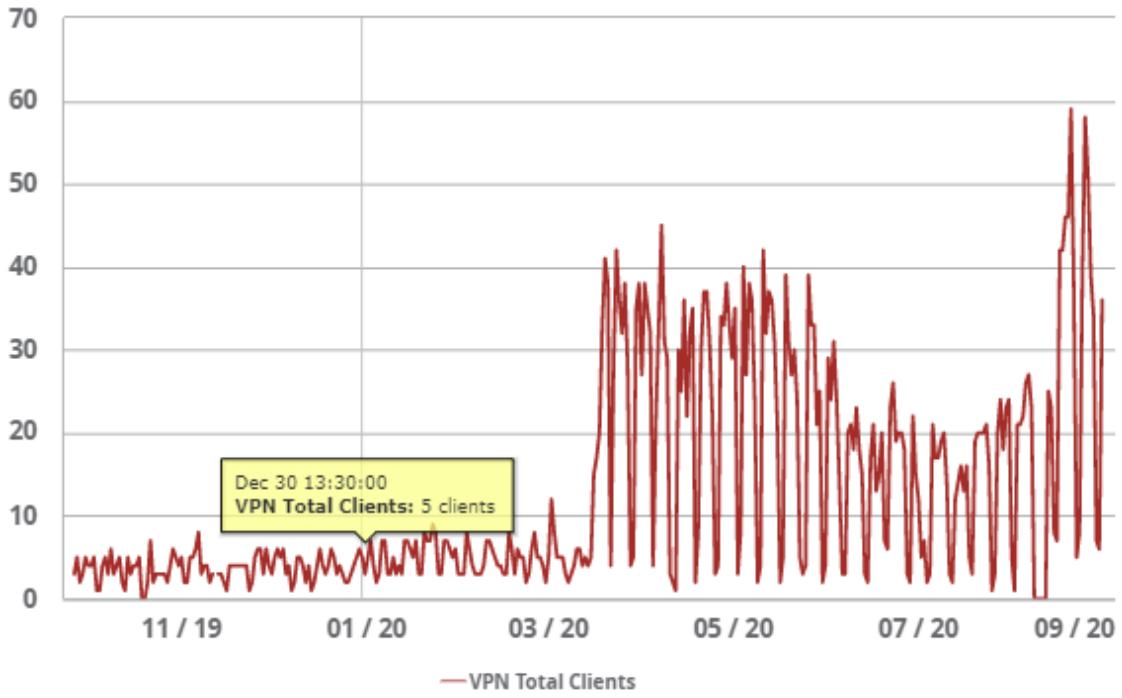
- Science 240 - Pathophysiology: Science 240 students used the Luther College Makerspace to explore the human body and diseases in Virtual Reality ("You" VR app by Sharecare). Students had the opportunity to spend 15-20 minutes exploring various body systems over the course of 3 evenings Fall 2019.
- PHYS 238 Engineering Mechanics - Statics: Students learned CAD design and 3D printed bridges as part of their assignment.
- MGT 366 Creativity and Innovation: Students in Management 366 visited the Makerspace to learn about resources and rapid prototyping tools.
- Makerspace Open House: Makerspace held an open house in December 2019, to provide information to the Luther Community regarding services offered in the space.
- ART 209 2D Studio I: Students in 2D studio used the Makerspace to expand their printmaking capabilities. Students used the laser cutter to create print making matrixes.
- Chem 365 - Chemistry Labs: In the Spring of 2020, Chemistry students 3D modeled some of their own laboratory equipment and 3D printed their models in the Luther College Makerspace.

Network & Systems

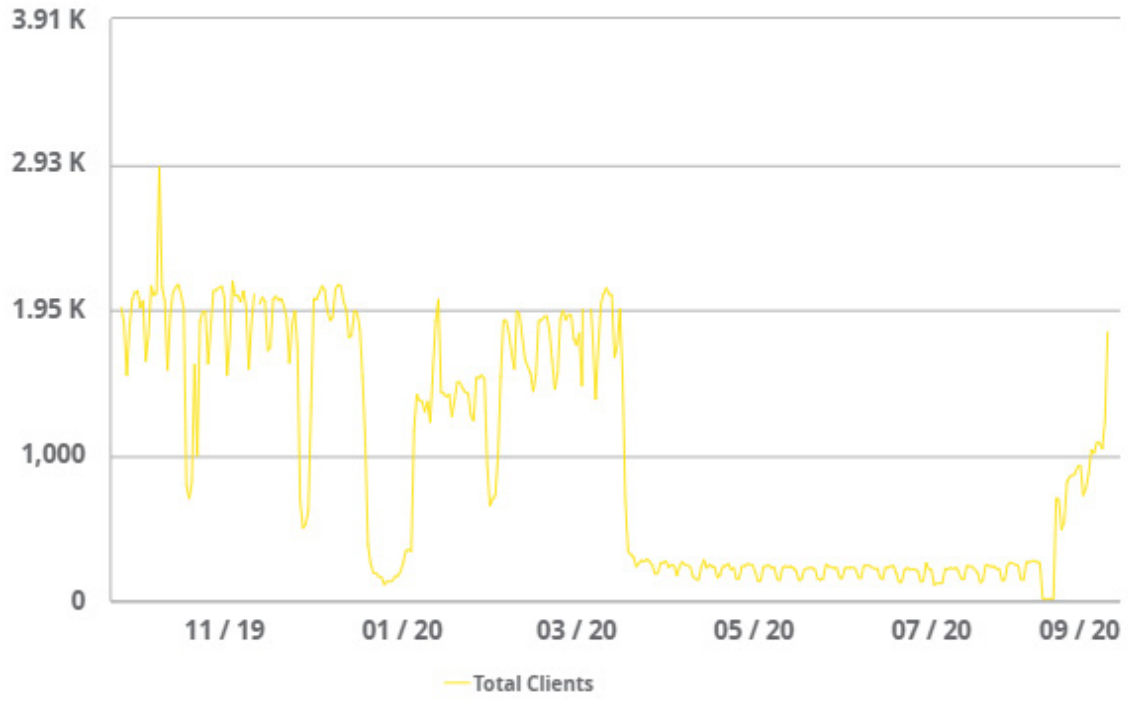
Wireless Network Stats

The switch from learning and working being done primarily on campus to being done primarily remotely doesn't reduce the usage of our network. It merely shifts the demand causing some services to get more use and others to get less use.

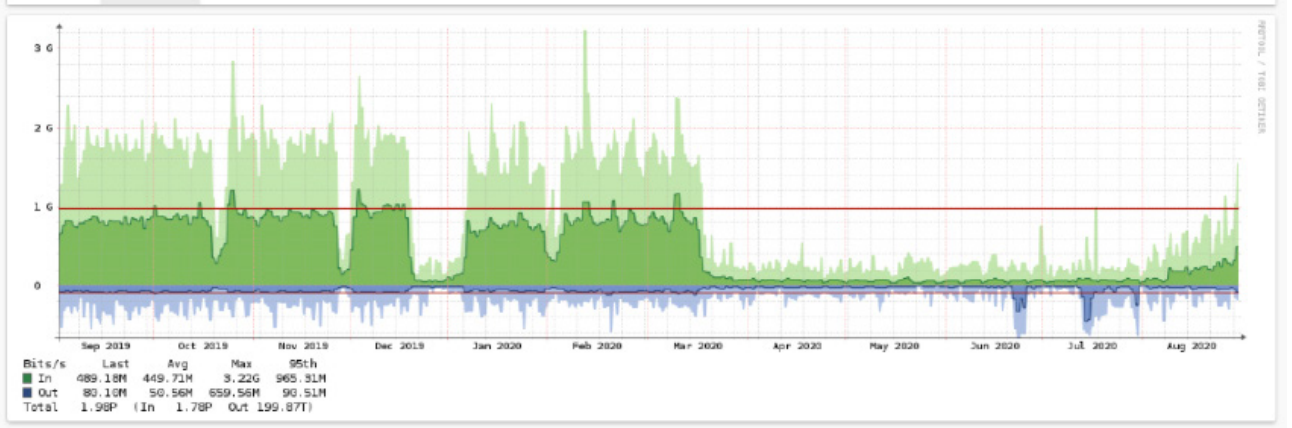
The following chart shows the number of simultaneous clients using our ViaVPN system from 9/1/2019 to 8/31/2020. The large increase of staff working from home is evident in the increased vpn usage.



Unsurprisingly, the chart of connections to our campus wireless networks show an inverse pattern of normal usage during the school year, and much lower usage as we moved to a majority of work from home, and remote learning.



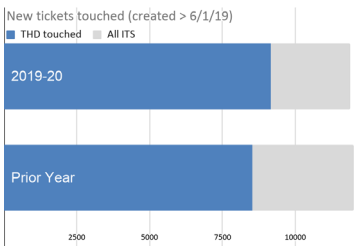
Our usage of Internet bandwidth also decreased as we moved to a majority of work from home, and remote learning.



Technology Help Desk

The Technology Help Desk is where the Luther community and visitors most commonly start seeking help from ITS. Every day, the Technology Help Desk student technicians and professional staff accept issues ranging from basic device use to in-depth training, from bug report to system outage.

Between June 1 2019 and May 31 2020, the Technology Help Desk team touched 9,382 of the 16,531 tickets touched by ITS as a whole (57%). ITS as a whole touched 5% more tickets than the year before and the Technology Help Desk touched 11% more tickets.

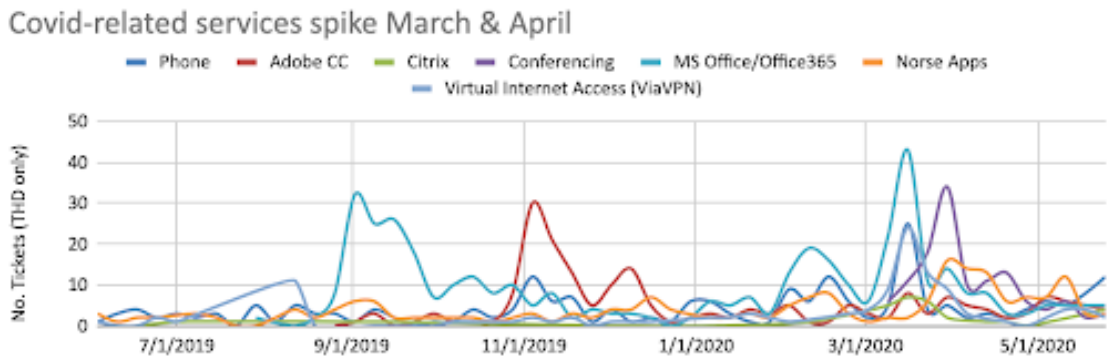


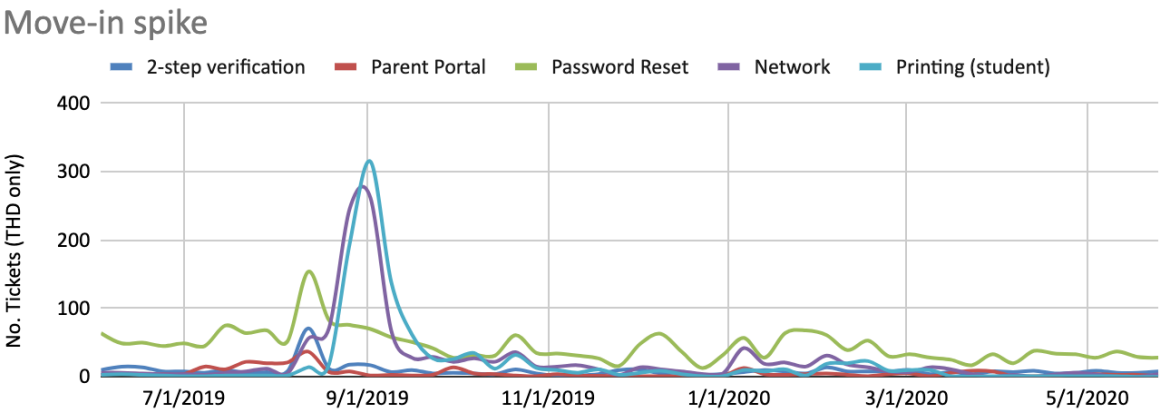
While overall touches is a good indicator of work performed, new tickets better represent the current demand for services. If we only consider new tickets (those created after June 1), then the Technology Help Desk touched 9160 of 11891 tickets (77%). Compared to the prior year, the Technology Help Desk touched 7% more new tickets.

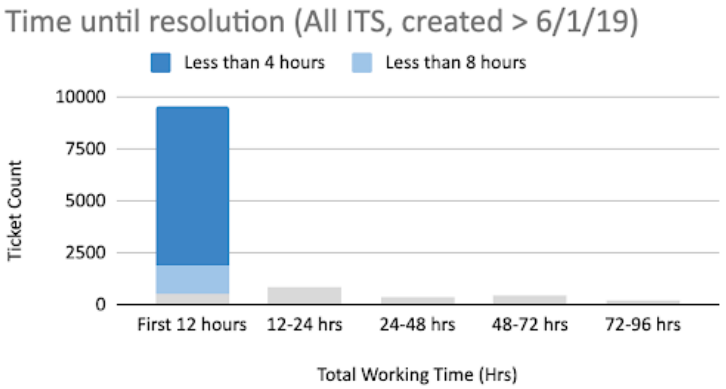
The largest theme in reporting this year is Covid-19, which greatly altered what services were in demand and how we delivered those services. Consider, for example that despite an overall 7% increase in tickets, our top four services (including network registration and printer installs) were collectively down more than 10%, indicating that demand shifted to less common services.

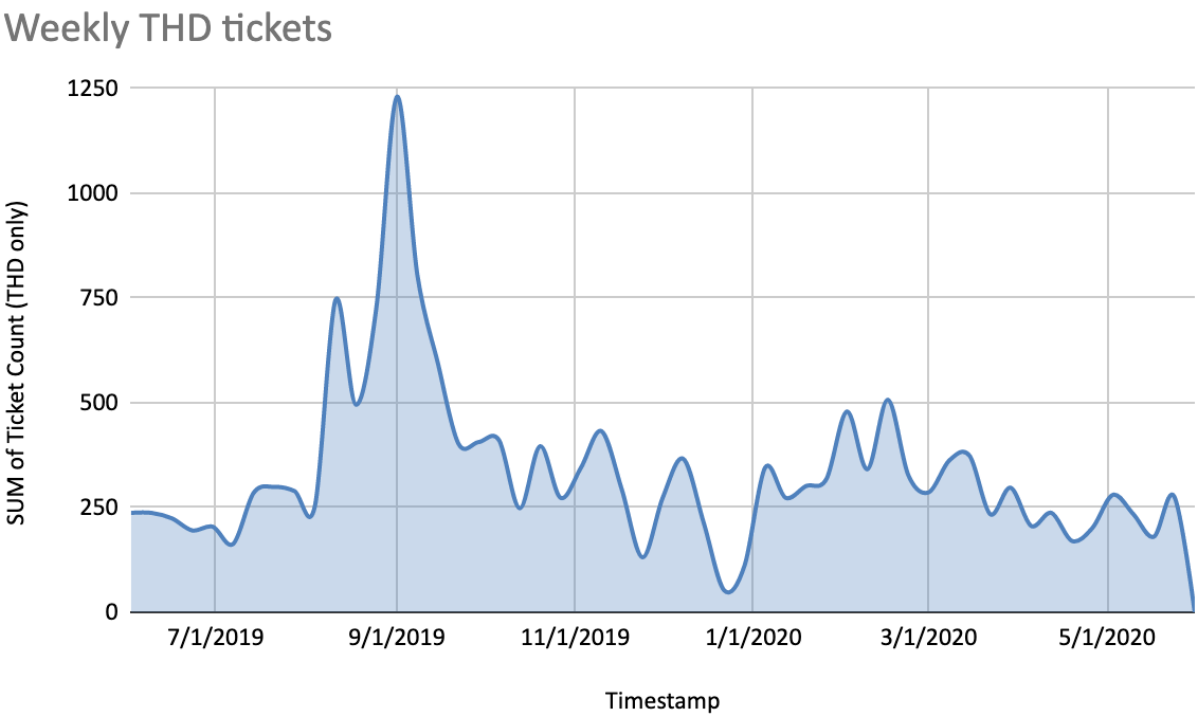
Service	# Tickets	% Change
Password reset	1669	8
Network-related	956	-24
Student printing	931	-13
Workstation support-related	495	-27
Microsoft Office	326	NA
2-step verification	277	-4
Printer/MFD	226	290
KATIE	225	-4
Parent Portal	207	44
Phone	201	97

Increased remote learning and remote working likely lowered demand for some physical services (Network and Workstation Support) and increased demand for others (Phone). Service needs related to Covid were varied, and most Covid-related support was software related and (e.g. VPN, Citrix, Zoom) didn't make our top ten.









Despite Covid, many other metrics were stable: 33% of new tickets were resolved on first contact, marginally higher than the year before. Our Average Satisfaction Rating was 4.9 out of 5, the same as the year prior. Our median resolution time is 1.5 hours and we close 68% of our tickets within 4 hours.

Some reporting variances might not reflect real world changes in services provided, but instead reflect changes to how we categorized services. For example, the 290% increase with respect to printer issues isn't because we suddenly had many more printers breakdown, it was because we attempted to clarify how printing issues were categorized. That said, most of our big services went essentially unchanged and that data is accurate, including counts for password resets, parent portals, 2-step, and KATIE.

Behind the scenes, the Technology Help Desk works with others in ITS to identify and plan for transitions in campus technology and the effects those changes may have on our users. Through individual and campus wide communications, the Technology Help Desk provides a link to the campus community and ITS. In addition to immediate service, the Technology Help Desk creates and maintains tutorials and self-support resources for the Luther community. Of the major initiatives the the Technology Help Desk team took part in, a few are worth highlighting:

- We finished the Norse Apps transition process for the class of 2019 and began work to transition the class of 2020. This was the culmination of a major effort over the last few years to limit Norse Apps to current students.
- We took over administrative responsibilities for Microsoft Office and the NESU/EXIT process.
- We adapted to constantly changing service needs during Covid, even as our own capacity to deliver service contracted dramatically. Prior to campus closure, we made our own physical space safer and prepared emergency plans. During closure, we downscaled our staff to managers only and worked remotely. Other employees were transitioning, too, and we supported a spike in call volume regarding work from home products like ViaVPN, Citrix, CallPilot, call forwarding, Zoom, Meet/Hangouts, and loaner workstations. During this time, software licensing/availability also changed rapidly and we saw a coinciding spike in demand for distance learning services like Office, SPSS, and Adobe.

The Technology Help Desk also provides an opportunity for professional growth among our student staff, many of whom aspire to careers in information technology, but also go on to other fields where technology plays a key role. We strove to improve the work study experience in a few ways:

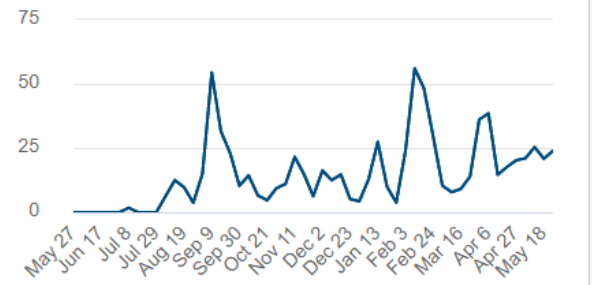
- We continued using the Work Study Reflection process, using a newly unified model from student work that used Google Site portfolios.
- We continued to empower our student managers by giving them the agency to determine their own objectives. Managers were involved largely to give accountability, encouragement, and guidance.
- We created sub-teams within the Technology Help Desk focused on a specific type of project-work. We have teams for: training, media production, team building, our wiki, the hardware room, and coding projects. Each team was led by a student manager, coordinated its own efforts, and determined its own objectives. Managers were involved largely to give guidance and support.

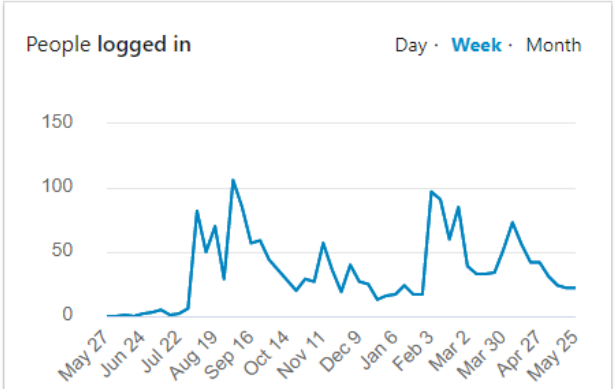
Training Summary

The following charts show the usage of LinkedIn Learning, web-based software training videos and resources, from June 1, 2019 to May 31, 2020. Faculty, staff, and students interested in using the software may login to linkedinlearning.luther.edu with their Luther credentials.

Engagement highlights (Jun 1, 2019 - May 31, 2020)

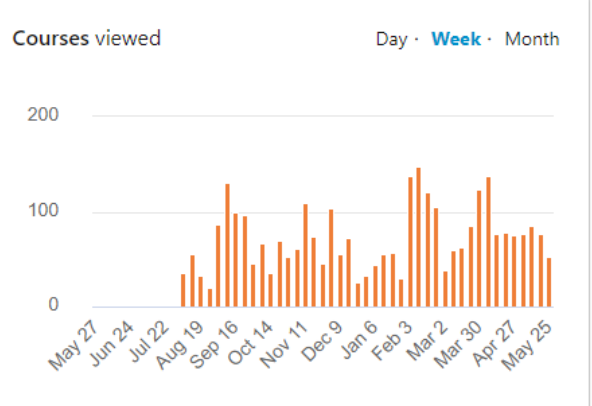
781	545	387	2h 1m
Hours viewed	People logged in	People viewed content	Avg. time per viewer

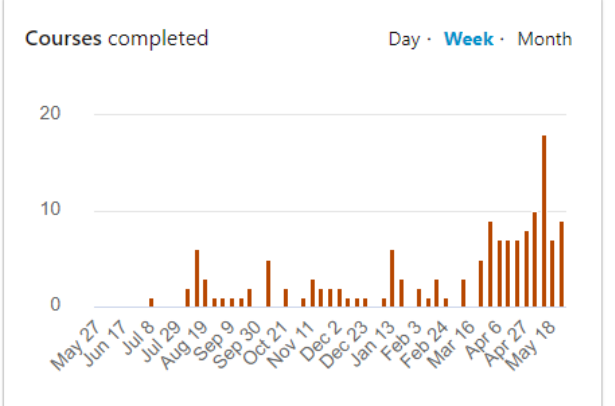


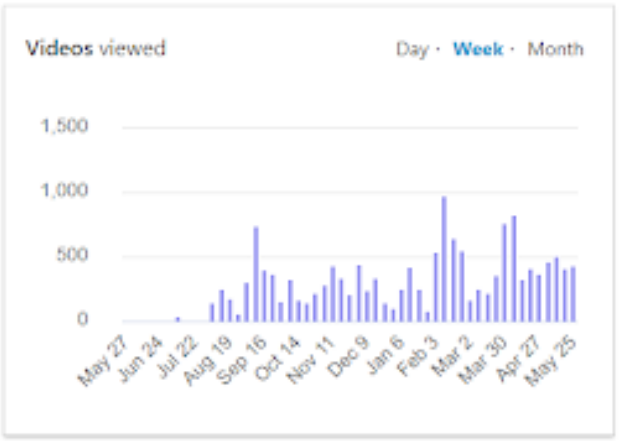


Learning content highlights (Jun 1, 2019 - May 31, 2020)

3,131	144	15,426	12,139	16	4
Courses viewed	Courses completed	Videos viewed	Videos completed	Custom content viewed	Custom content completed







Workstation Support - Classrooms and Labs

Mac Podiums on campus were replaced with Windows workstations for ease of updating and maintenance. Four podiums were replaced in Main and Jenson-Noble and just two Mac podiums remain (both in the CFA) and are expected to be replaced in early 2021.

Mac workstations were upgraded to macOS Mojave. No other significant changes were made to Mac labs on campus.

New Windows workstations were installed in the Preus Library Main Lab, Olin 301, and Valders 244. The computers previously in these spaces were then used to upgrade various other computer classrooms, labs, and podiums on campus.

Workstation Support - Faculty

Workstation Support finished the process of Supercharging, adding extra memory and Solid State Drives (SSD) to workstations in lieu of purchasing new machines. In addition, we have been encouraging employees to switch from Macs to Windows where possible. This is due in part to Apple's changing strategies and an increase in prices. It is also part of the College's cost saving measures. During the summer of 2019, workstations were upgraded for faculty in the Divisions of History and Social Sciences, as we continue our move to a staggered replacement cycle with 1/4th of the Luther faculty receiving refreshed workstations each summer. These Windows employees now have Windows 10 and Office 2019. All other faculty Windows workstations needed a Feature Update installed before an October expiration date.

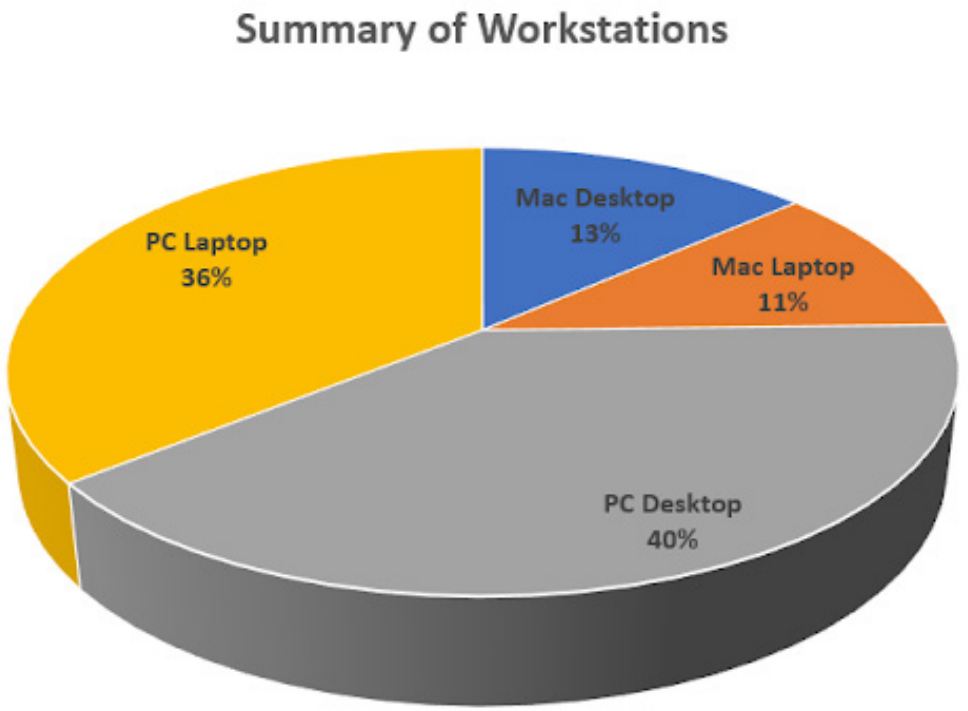
Mac workstations were upgraded to macOS Mojave and Catalina (early 2020). ITS began implementing the Mosyle Mobile Device Management (MDM) product as a potential solution for managing Macs in the future. Further testing is needed but initial results are promising.

Workstation Support - Staff

Beginning with the 2010-11 academic year, staff computer upgrades are now on a staggered 3-year cycle. The departments are divided into thirds, and every year one third of all staff computers are refreshed. This new cycle is manageable for most needs and maximizes our hardware investments. The process of Supercharging, adding extra memory and Solid State Drives (SSD) to workstations in lieu of purchasing new machines is now complete, and therefore, some departments skipped their usual hardware upgrade cycle and just had the Windows Feature Update installed. New windows employees now have Windows 10 and Office 2019.

Mac workstations were upgraded to macOS Mojave and Catalina (early 2020). ITS began implementing the Mosyle Mobile Device Management (MDM) product as a potential solution for managing Macs in the future. Further testing is needed but initial results are promising.

Workstations on Campus



Count of Asset Id	Column Labels				
Row Labels	Mac Desktop	Mac Laptop	PC Desktop	PC Laptop	Grand Total
Acad	38	95	53	124	310
Admin	71	73	185	271	600
ITS	5	2	1	1	9
Kiosk	28		1		29
Lab	67	9	310	163	549
Podium	5		53	1	59
Research	4		36	17	57
Grand Total	**218**	**179**	**639**	**577**	**1613**

Information Technology Services
Preus Library
700 College Drive
Decorah, IA 52101
Tel: 563-387-1000
E: helpdesk@luther.edu