FY21 Annual Report

NKU Office of Information Technology
ABOUT OIT

Our Vision

To empower and serve the University community through accessible, collaborative, innovative, inclusive, and advanced technological solutions that provide an enriching academic experience to our students and to strengthen the ability to educate the public we serve.

Our Mission

The mission of the Office of Information Technology, in support of the strategic goals of the University, is to provide the highest-quality service and delivery through innovative and efficient technology for students, faculty, staff and the community. As an integral part of the University and as leaders in technology we will:

- Improve the learning experience for our students with effective technology solutions in both classroom and distance-learning settings.
- Embrace diversity, equity, and inclusion of our campus community.
- Provide information access for students, faculty and staff via quality technological services, tools and resources to support learning, decision-making and operational effectiveness.
- Assist and support university constituents and the metropolitan region with planning and guidance to achieve educational goals and objectives through technological solutions.

Provide excellent communication and infrastructure that encompass stability and security of university IT resources and information and deliver high-quality computing, printing and media services.

- Evaluate and implement emerging technologies to provide solutions, enhance processes and improve services for the university and community.
- Provide training and instruction for the university community in the use of tools, systems and software through a highly skilled technical staff and knowledgeable Service Center/Information Technology Solutions Center.
- Partner with technology based NKU initiatives in support of the Northern Kentucky/Greater Cincinnati community for regional educational and outreach services.

Governance and Collaboration

To support communication, decision making and prioritization, NKU has several key organizations that the Office of Information Technology works collaboratively with, including:

- IT Policy Council – This council is composed of members of the President’s executive team or their designee. They meet on a monthly basis to discuss/approve IT policies and projects affecting the campus community.
- IT Advisory Committee – This council is composed of faculty, staff and students. It is chaired by faculty on a rotating basis. To obtain information in support of the work of ITAC and its subcommittees, surveys are issued to faculty, staff and students.
• myNKU Advisory Workgroup – This council is composed of faculty and staff focused on initiatives related to student life cycle management, human resources, finance, and reporting components that make up the myNKU system. Appointees to the group provide input and feedback on new and enhanced functionality, and serve as liaisons between their respective areas and the myNKU teams.

• Accessibility Steering Committee – This committee is composed of faculty and staff focusing on initiatives to support Universal Design for Learning across all aspects of campus communication.

• Student Focus Groups – To get input and assistance on specific topics, student focus groups are formed. For instance, students were consulted and assisted with testing of the virtual desktop service that offers students remote access to the base computer lab software.

IT STUDENT SURVEY FY21
Based upon the COVID-19 pandemic, student survey questions were adapted to the new learning environment.

506 survey responses submitted

Which of the following have been a challenge for you since the transition to remote learning? (Select all that apply)

- Personal motivation/desire to complete coursework: 16.46%
- Personal preference for f-2-f learning: 16.25%
- Difficulty focusing or paying attention to remote instruction or activities: 15.10%
- Course lesson or activities that haven’t translated well to remote environment: 14.17%
- Unclear expectations re: course/assignment requirements: 12.60%
- Finding time to participate in synchronous classes: 8.85%
- Instructor availability/responsiveness: 5.94%
- Competing class meetings & schedules: 5.31%
- Other: 3.96%
- IT Support: 1.35%
Adequate digital replacements for f-2-f collaboration tools (ie: whiteboards)

My access to reliable internet service

My access to reliable communication software/tools (ie: Zoom, Teams)

My access to reliable software (ie: Adobe, stats)

My access to reliable hardware (ie: laptop, tablet)

Which of the following are working for you since the transition to remote learning? (Select all that apply)
Which of the following student support services have been challenging to access since the transition to remote learning? (Select all that apply)
KEY TRENDS IN HIGHER EDUCATION
OIT relies on technology information from industry leaders, such as Gartner and Educause, to predict trends as well as identify key issues we must overcome. The following is a list of technology trends and issues.

Top IT Issues, 2021: Post-Pandemic Futures

**Restore**: Institutional survival focused on restoring the institution’s pre-pandemic financial health.
2. *Online Learning*: Strengthening online and hybrid education.
4. *Affordability and Digital Equity*: Providing increased support for students’ technology needs and enabling technology availability.

**Evolve**: Incorporate the impact and lessons of the pandemic into university culture and vision.
6. *Student Success*: Advancing student support services to help students attain academic and career goals.
8. *Online Learning*: Progressing from emergency remote teaching to online learning.
10. *Financial Health*: Partnering to develop new funding sources.

**Transform**: Transform technology issues in the context of technology’s role and relationship with institutional priorities and ambitions.
11. *Institutional Culture*: Contributing to a culture of transformation.

FY21 ACCOMPLISHMENTS
MyNKU

The myNKU teams completed over 75 projects in FY 21. Projects of note are listed below.

**myNKU Finance**

**Payment Works Full Integration** – Vendor onboarding software with two-way integration into SAP.

**NKU Cares** – Payment recording for students to receive federal CARES funding.

**Parked Vendor Invoice** – Updated workflow to be mobile friendly.

**myNKU Human Resources**

**W-2 Wage Statement Forms** – Upgraded employee W-2 forms to show only the last 4 digits of the employee SSN.

**Confidential Documents Transmission** – Established/created a secure method for the Payroll and Human Resources Offices to obtain confidential documents from Employees.

**KERS Cessation** – Technical and configuration changes for the transition of employees in KERS State Retirement to either TIAA or grandfathered into KERS.

**ECM** – Completed the successful process for Staff and Faculty Annual Increases.

**New Employee Welcome Email** – Created an automated Welcome to Norse Nation email that is generated to the employee and department Manager and Time Administrator. The email provides the employee with information such as their employee number, their email address and the name of their Time Administrator. It also includes a message from President Vaidya.

**myNKU Reporting & Analytics**

**Spring 2021 and Fall 2021 Recruitment, Enrollment, and Retention Dashboards** – Created and enhanced Power BI dashboards to track enrollment and percent to goal.

**Fall 2021 Daily Enrollment Change File** – Created a VBA file to track daily enrollment changes for current year compared to one year ago. This included a daily add/drop student communication list that was used to increase enrollment.

**COVID Dashboards** – Created and enhanced Power BI dashboards to track COVID cases and vaccination statistics in the region and those self-reported at NKU.
**Dell Reporting and Analytics Strategy Engagement** – This was a 3-week engagement that included a week of stakeholder interviews, a week of assessment/design recommendations, and a final week of roadmap presentations, quick win use cases, and recommendations. We obtained direction to implement a large-scale overhaul of the current reporting data architecture to better support the University’s strategic vision.

**myNKU Student Life Cycle Management**

**Degree Audit Updates** – Implemented enhancements:
- New General Education Policy was implemented into Degree Audit.
- Reverse Check Filter activated to verify a person has the correct number of majors, focuses, and minors for their program.
- Degree Audit was created for Non-Degree Young Scholars.
- Degree Audit updated to allow Graduate level substitution workflow.
- Degree Audit updated to show GPA calculations and courses behind the calculations.

**Quick Permit Screen** – Allows for mass updates and removals of permits.

**Financial Aid** – Electronic uploads of documents for processing and imaging.

**Adirondack New Housing software** – Implemented and interfaced with SAP for housing assignments and housing charges posted to student accounts.

**Security**

**Data Center Access Review** – New call boxes and cameras have been installed at the data center access points to enforce this new policy. Access review has been completed, those who do not need access have been removed. Policy creation is queued.

**GLBA Compliance** – GLBA engagement is underway with third party compliance firm, Dean Dorton. Policy and Standards are actively being developed. This is an audit and compliance requirement.

**Housing Device Registration** – Residence Housing devices are required to be registered on the NORSE_VILLAGE network using Cisco ISE.

**Risk Assessment** – Two risk assessments were reviewed and confirmed by the ERP and Infrastructure teams. High residual risks were prioritized for remediation and corrective action plans are being processed. An internal risk assessment will be conducted in FY21 to gauge remediation and risk reduction to the FY20 baseline external assessment.

**Enterprise Systems/Development**
ABC Insights – Integrated ABC Insights, a premier benchmarking platform designed for finance executives in higher education regarding administrative efficiencies.

CARES Funding Application – Interface to distribute CARES Phase II funds of approximately $4M.

Course Permits – developed a program to mass add and remove course permits.

FIORI App – Updated for “My Benefits” and the graduation application automation, including document attachment for Financial Aid and a batch feed to ImageNow.

Graduation Application – Mass update of student status for all graduation applications.

PaymentWorks – Integration for Phase I and Phase II.

Mass Release of College Level Examination Program (CLEP) – CLEP upload and Mass release of CLEP transcript.

General Education Profile – Degree Audit use of new general education profiles for majors.

Healthy@NKU – Created a reporting interface that includes guests and University of Kentucky medical students.

MyNKU Upgrade – Phase II upgrades made to MyNKU’s MyInbox, including a redesigned workflow for parked vendor invoices.

New Housing Feature – Pre-payment feature added to the Housing application, Adirondack.

Sunapsis – An interface was developed for the Sunapsis online portal for international students to submit and check the status of their requests.

Infrastructure and Operations

2020 SAP upgrades – Completed the yearly SAP upgrades to the finance, HR, and student systems to insure NKU is up-to-date with security patches and software process updates.

Adirondack (RMS Replacement) – Migrated to a cloud-based solution called Adirondack that replaced RMS software in housing.

Sigma Hardware Migration – Migrated Sigma (Financial Aid Software) to Intel based hardware. This reduces our hardware refresh cost and increases our DR capabilities.

Security Camera Upgrade – Replaced obsolete security cameras and systems, campus wide, unifying them under one centrally managed solution that includes motion detection and other modern technologies. Academic buildings and dorms received these replacements.

COVID-19 Vaccine Site – Created a website and workflow for COVID-19 vaccine appointments.

COVID-19 Dashboard – Worked with various departments and developers to complete a COVID-19 dashboard to inform the campus and community of various data points.
Digital Document Workflow – Working with HR and Finance to create a cloud-based file storage application and process to securely upload new hire and payroll files. This was a tremendous process improvement and removed the need for new hires to physically come to campus or mail their documents.

Disaster Recovery – Completed the first two phases of our disaster recovery project by establishing a site at Commonwealth Office of Technology in Frankfort. This site contains backups and hardware to run critical applications in the event of an outage. We have also migrated our core authentication services to Azure (cloud).

Handshake Integration – Working with career services, replaced Gradleaders application with a new one named Handshake.

Bandwidth Increase – Configured and installed a new CenturyLink Internet connection. This increased our bandwidth from 1GB to 5GB on that circuit.

Dorm Authentication Upgrade – Replaced netreg with a modern and robust way to authenticate wireless and wired connections in the dorms.

Wireless Upgrades - Upgraded wireless access points in Norse Hall and Northern Terrace.

SQL Server 2017 – Migrating to a newer version of operating system and a virtualized SQL environment. This project is ongoing.

Virtual Lab GPUs – Installed and configured hardware allowing high performance applications to run in our virtual lab environment.
Training / Web

Accessibility – created Accessibility for Web Editors training course in Canvas to allow for on-demand training for new and existing web editors.

IT Website – created information website and online reservation hub for on-campus study spaces.

Training Processes – worked to develop and migrate to new training registration for users, allowing for faster and easier registration for users.

Training Videos – developed a series of videos discussing new features of new smart classrooms with instructions.

Service Desk (Team Dynamix) – developed main page content for Service Desk, including introductory training video for users.

IT Service Catalog – audited, reorganized, and moved service catalog to NKU Service Desk (Team Dynamix).

INTER-Alliance – High school talent used to complete NKU tech projects. Providing real-world experience to the students and providing IT support to departments requesting technology projects. Additionally, this frequently leads to the INTER-Alliance students coming to NKU to get their bachelor’s degree.

Norse Tech Bar

Services – The Norse Tech Bar processed 880 service tickets and 655 equipment loan checkouts. (Note: In previous years, loans were only available in two-week increments, starting in March of 2020 loans became long-term.)

Equipment Loan Checkout – The Norse Tech Bar implemented a software to better manage the inventory of over 1,300 devices for equipment loan checkout.

Statistics

Emails processed daily
- Sent off campus: 21,215
- Received: 200,157
- Blocked spam emails: 205,278

Hardware/Software
- Terabytes of data stored: 926 TB
- Physical servers: 80
- Virtual servers: 357
- Routers and switches: 822
- Wireless access points: 3,150
- Supported concurrent devices daily: 9,000 wireless, 6,500 wired

Printing
- Print jobs processed: 43,673*
- Student printing allowance value: $23,018.87*
- Students paid prints: $1545.91*

Resources
- Smart classrooms updated this year: 27
- Service requests recorded: 24,754

Streaming
- Campus events streamed: 21
- Campus events supported: 59
- Virtual events supported: 188
- Athletic events broadcast: 56

Tech Team
- Computer Replacements: 404
- Computers in 53 labs supported by IT: 1109

* dramatic decreases due to pandemic/virtual campus
**Accessibility**

**Accessibility Compliance using Ally for Web** -- identifies accessibility issues on the NKU web site to help get to a web site that is accessible to all without limitations. Improved score overall.

**Accessibility Compliance using Ally for LMS (Canvas)** -- identifies faculty files added to courses that need remediation to become accessible for all students.

**Live Streaming** – Emphasized to campus for online course work and events with Kaltura’s integration of Verbit captioning.

**WebCam and Enhanced Microphone Kits** – deployed directly to faculty to use to improve viewing / hearing of hybrid and online courses using Zoom and MS Teams.

**Web Editor Training Enhancement** – Instructor led training and Canvas Accessibility Training courses offered for all web editors. Taking one or the other of the two trainings is now a requirement to maintain web editing access.

**New Student Position** – Student hired to assist with ensuring web site accessibility.

**PDF Purge** – Held NKU’s first PDF Purge to help web editors eliminate inaccessible documents on their web pages.

**Communications**

**IT Website FAQs** – To incorporate better question resolution through the NKU IT website and the Team Dynamix knowledgebase.

**Student Technology Survey** – Revised and distributed the Student Technology Survey to help determine where students thought IT did well, and where there are opportunities for improvement, especially with the transition to remote learning during the pandemic.

**Faculty Technology Survey** – Created and distributed a Faculty Technology Survey to see where faculty thought IT did well, and where there are opportunities for improvement, especially with the transition to remote teaching during the pandemic.

**Internal IT Communication** – Tim Ferguson emailed the IT Staff distribution list at least one time per semester to communicate areas where IT has done well and has welcomed new staff and wished departing staff well.

**Monthly Newsletters** – IT distributes Newsletters with pertinent IT information to employees and to students. IT also provides information for the Administration and Finance Newsletters. When additional information needs to be shared with campus IT write-ups are added to ThisWeek and Twitter.
Computer Replacement Program

Computer Replacement Purchases – A total of 404 devices were purchased this fiscal year.

Project Management

Accelerated Online (AOL) Promotion Automation Launched April 2020 – This project was critical to the success of our AOL program which continues to experience increases in enrollment. This automation replaced a spreadsheet macro which was not able to process all possible scenarios and was not scalable.

New Steely Library Website for SACS Accreditation Launched July 2020 – SACSCOC, our institutional accrediting body had placed NKU on warning for not meeting the requirements for Core Requirement 11.1, which covers library and learning information resources. At its December 2020 meeting, the SACSCOC Board of Trustees reaffirmed our 10-year accreditation without any additional requirements. The Board of Trustees was very impressed with the progress made by NKU.

Online Study Rooms Launched August 2020 – With the move to online courses due to COVID-19, this allowed students on campus for both face to face and online courses to reserve study space on campus to attend their online courses. We accepted 10,000 reservations for online study rooms.
CHEQROOM Equipment Management Software Launched August 2020 – This software was needed to track laptop, tablet, webcam, and hotspot loaner inventory which quickly exploded from 200 to over 1,265 items valued at approximately $800,000 due to COVID-19 and the move to online learning.

COE Reorganization Completed July 2021 – Updates to the SAP HR organizational structure, budgets, SAP FI fund and cost center accounts, SAP SLCM academic structure and related security approvals were completed to facilitate the creation of two new departments. Undergraduate programs belong to the new Department of Teacher Preparation and Educational Studies. Graduate programs belong to the new Department of Educational Leadership and Advanced Studies.

AEM Upgraded – from 6.4.8 to 6.5.8 as well as from Java 8 to Java 11 Launched July 2021

TeamDynamix for IT Service Tickets – TeamDynamix (TDX) replaced the outdated (20-year-old) ticket system (Infra). TDX is known to the Campus as the NKU Service Desk and contains all of the IT services provided to campus. It provides a modern user experience with a responsive web application. In addition to processing tickets, IT has built and maintains a Knowledge Base Library to store self-help articles and training materials. TDX also has built in automation, workflow, and reporting that has made the routing of tickets faster and more accurate to decrease resolution and response times. This project was completed in January 2021.

Chatbots (Artificial Intelligence) – NKU purchased from Ivy.ai an artificial intelligence product to help provide front facing customer service 24 hours a day year-round. The Ivy.ai chatbot was installed on 4 websites: COVID, Information Technology, The Office of Financial Assistance and Student Account Services. The chatbot crawls through these web pages daily seeking new information and also provides a Live Chat option should a student, parent, or community member need additional information. This project was completed in February 2021.

Student Union Ballroom Renovation – The Student Union Ballroom renovation replaced outdated lighting (general and theatrical), A/V equipment and controls and Event production equipment and controls with modern equipment and controls. These improvements helped to make the largest space on campus more marketable to outside community partners and more useable with modern technology. This was a $1 million renovation project. The project was completed in September 2020.

Bookings – A Microsoft appointment scheduling software utilized at the start of the Fall 2020 semester. With the pandemic in full swing, this software ensured social distancing was maintained and business unit workflows could continue.

Computer Encryption – Significant progress has been made encrypting all university owned hard drives. Computer data security has greatly increased campus-wide.

Digital Signage Upgrade – Components of the previous system were EOL and required replacement. The new Visix system streamlines digital campus communications and provides an easy-to-use interface for content creators. The Student Union upgrade is complete. Remaining campus signs are in process and on track for completion December 2021.
First Two Days of Classes: IT Support – The annual NKU IT support process was once again effective in getting everyone's technology concerns addressed. Additional phone/remote support has been added due to the pandemic.

GSE 2021 – Another successful program completed, with this year involving two cohorts.

Police Radios – Equipment was successfully updated to the standard currently in use by all Northern Kentucky Police Departments. These upgrades guarantee rapid and effective communication to provide for a safe campus community.

Steely Library Makerspace – This recently completed project keeps NKU and our students in touch with current technology trends. Experiential learning and fostering creativity are key goals.

Sunapsis – The International Students and Scholars Office now has access to the immigration tracking/admissions software used by universities nationwide. This product will increase workflow and ease student transitions.

SAP Upgrade 2020 – The annual SAP system upgrade was a success. All components are functioning with the latest updates and security.

Windows 7 Upgrade – NKU IT continues to upgrade all University owned devices running Windows 7.

Policies

New Policies – Three new policies were written and approved: Account Lifecycle Maintenance Policy, Security Camera Policy, and the Listservs – Campus-Wide Policy.

IT OBJECTIVES FY21

Access - NKU will expand programs, services, and delivery options to increase access and become a preferred destination for learners across the Commonwealth of Kentucky, the nation, and the world.

Completion - NKU will align the institution so more learners—particularly first-generation, post-traditional, low-income, and underrepresented individuals—earn highly-valued degrees, certificates, and credentials.

Career & Community Engagement - NKU will increase its contributions to the economic, social, and civic prosperity of the region through talent development, research and innovation, & stewardship of place.

1) Access: Support summer outreach programs by providing accounts, equipment, and technical support (Governor’s School for Entrepreneurs, Summer Spark, etc.)
2) **Access**: Participate in review and recommendation for improving NKU’s equipment inventory process (RFID, policy recommendations, etc.) Cleanse, expand, and improve MS SCCM and JAMF (centralized computer hardware and software management) tools for better, more accurate and reliable reporting and functionality to account for 75% or better of the active managed assets accounted and managed.

3) **Access**: Address audit findings and federal/state compliance requirements. Address and remediation of critical and high-risk items identified in penetration tests and risk assessments.
   - Maintain governance and compliance of PCI-DSS compliance. Address compliance requirements when projects, changes, or upgrades necessitate.

4) **Access**: Maintain classroom technology standards that encompasses digital solutions which enhance the learning process in a fiscally prudent manner.

5) **Access**: Redevelop the approach to beginning of semester technology support.

6) **Access**: Evaluate and improve internal processes, services, and offerings to provide the most efficient and effective procedures to ensure quick response times and high-quality customer service.

7) **Access/Completion**: Enhance and improve classroom technology equipment and services to expand access and support student success toward their degree completion.

8) **Access/Completion**: Advance data security initiatives (policy, vendor management, education, etc.). Address critical and high vulnerabilities by the end of fiscal year ‘22.

9) **Access/Completion**: Offer online training courses, face-to-face workshops, and reference material for NKU provided software and training requirements (Zoom, AEM, One Drive, etc.).

10) **Access/Completion**: Enhance and improve the Personalize and Mobilize initiative for mobile access to all aspects of NKU life.

11) **Access/Completion**: Continue to participate in strategic discussions and implement administrative system improvements for faculty/staff.

12) **Access/Completion**: Continue to explore cloud computing options to improve services to customers, while weighing the feasibility, security, and compatibility with existing systems.

13) **Access/Completion**: Expand and improve student self-service capabilities, and emphasize the importance of user-friendly administrative systems for our students’ college experience.

14) **Access/Completion**: Update, expand, and modernize IT-related policies.

15) **Access/Completion**: Optimize IT processes through the consistent use of standard tools, best practices, and innovative technologies.

16) **Access/Completion**: Continue to expand our portfolio of security tools to improve our ability to monitor, remediate, and protect systems from malicious activities.
- Cleanse, expand, and improve MS SCCM and JAMF (centralized computer hardware and software management) tools for better, more accurate and reliable reporting and functionality of the active managed assets.
- SCCM and JAMF expanded use to manage undesirable or disallowed software for managed end points (Ex. Unlicensed/illegal use of MalwareBytes or CCleaner).

17) **Access/Completion:** Upgrade 50% of our classrooms with technology that supports hybrid instruction, and upgrade at least 10 classrooms to current AV technology, budget permitting.

18) **Access/Completion/Career & Community Engagement:** Support NKU’s goal of expanded offerings of online courses and expanded online enrollments by facilitating and implementing equipment and services that enable access and completion of degrees.

19) **Access/Completion/Career & Community Engagement:** Continue to emphasize a culture of accessibility, and reduce barriers to all NKU digital content.

20) **Access/Completion/Career & Community Engagement:** Improve availability, quality, and management of university data to enable transformative decision making.

21) **Access/Completion/Career & Community Engagement:** Engage in a formal Reporting & Analytics strategy project to better position NKU for future reporting and more importantly analytics needs.

22) **Access/Completion/Career & Community Engagement:** Provide resources for strategic initiatives that other areas are pursuing which are in support of access, completion, and/or career & community engagement; and continue to provide a stable and reliable technology foundation for new or ongoing strategic initiatives.

23) **Access/Completion/Career & Community Engagement:** Research opportunities to use new technologies and various delivery models to support the long-term vision, objectives, and strategies of the university.

24) **Access/Completion/Career & Community Engagement:** Implement an internal project prioritization process that includes intake, RoI, resource allocation, etc.

25) **Access/Completion/Career & Community Engagement:** Promote staff development and leverage employee strengths in support of access, completion, and career/community engagement.

26) **Access/Completion/Career & Community Engagement:** Implement policy creation/update processes that provide a secure framework, address compliance requirements, and formalize roles and responsibilities for all faculty/staff/students and other constituents who interact with NKU.

27) **Access/Completion/Career & Community Engagement:** Improve NKU’s ADA accessibility by implementing and leveraging technological solutions and enforcing policy that supports legal requirements (Blackboard Ally, Closed Captioning, LMS review, etc.). Implement a change in the
timing of the ITAC software request process to allow time for VPAT review and testing where needed for accessibility.

28) **Access/Completion/Career & Community Engagement**: Continue to collaborate with Facilities Management to support new and renovation construction projects (Campus Master Plan, Classroom Upgrades, etc.).

29) **Access/Completion/Career & Community Engagement**: Address deferred maintenance requirements by replacing aging technology infrastructure. Refresh data center network, server computers and building network hardware as funding allows.

30) **Access/Completion/Career & Community Engagement**: Improve technology event support by providing new and updated equipment/software that is required to deliver quality services.

31) **Access/Completion/Career & Community Engagement**: Leverage cloud technology where appropriate to provide scalable, agile, and resilient infrastructure.

32) **Access/Completion/Career & Community Engagement**: Leverage NKU’s social mobile presence in support of recruitment, outreach, learning, marketing, and communications.

33) **Access/Completion/Career & Community Engagement**: Support and maintain a user experience that is well-designed, personalized, and has an intuitive digital presence.

34) **Completion**: Collaborate with academic departments in researching and adopting emerging classroom technology.

35) **Completion**: Improve common student study spaces as more students are learning outside the formal classroom.

36) **Completion**: Continue implementation of a 5-year computer replacement cycle for faculty, staff, and computer lab devices while also focusing on inventory reduction and reallocation of viable devices.
   - Use available funding to purchase laptops and replace as many of the desktops/laptops as possible to complete the 5-year cycle. The desktops will be used for labs as needed.

37) **Completion**: Continually improve customer service by listening to customers, adjusting delivery methods, and implementing innovative solutions to meet the needs of our broad constituency base.

38) **Completion**: Continue to expand our disaster recovery solution that addresses critical system and communication requirements.

39) **Completion/Career & Community Engagement**: Provide real-world employment opportunities to students, enhancing their educational experience and assisting with career readiness (Interalliance, etc.).
   - Continue working with area High Schools, the INTERalliance program, and develop new partnerships to provide real-world summer employment opportunities to students, enhancing their educational experience and assisting with career readiness.