Explore Learning Analytical tools with faculty to measure student performance. This can be used to target at-risk learners in an effort to improve student retention as well as support course redesign and personalized student learning.

2016-17 Progress Narrative

The Educational Advisory Board’s Student Success Collaborative (EAB SSC) continued to rollout to a wider user base in 16-17. A full rollout is scheduled for 17-18. EAB SSC is focused on providing technology, consulting, and best practices to improve retention and graduation rates. It provides students and advisors with powerful communication and workflow tools to support institutional transformation. In addition to EAB SSC, NKU concluded the Learning Management System (LMS) pilot of Canvas and Blackboard. The pilot group selected Canvas, and it is scheduled to be implemented in 17-18. Canvas includes advanced analytics to help NKU turn rich learner data into meaningful insights to improve teaching and learning.

2015-16 Progress Narrative

NKU is now part of the Educational Advisory Board’s Student Success Collaborative (EAB SSC). EAB SSC combines technology, consulting, and best practice research to help colleges and universities use data to improve retention and graduation rates. SSC provides advisors and other student success specialists with powerful communication and workflow tools to transform insight to action and administrators with customized change management guidance to support institutional transformation. In addition to EAB SSC, NKU is running concurrent pilots of Canvas and Blackboard to determine which Learning Management System (LMS) will be our future solution. Both of these LMS solutions include advanced analytics to help NKU turn rich learner data into meaningful insights to improve teaching and learning.

2014-15 Progress Narrative

19.01 Inventory university data assets relative to student success.
19.02 Explore learning analytic solutions.
Focus trainings on business challenge and less on software tool to enhance “just in time” training approach, improve help resources, and support professional development. Software tool examples: • Blackboard • Data Dictionary

2016-17 Progress Narrative

The 2015-16 progress update indicated this item as completed. No additional narrative is required.

2015-16 Progress Narrative

We enhanced our “just in time” training approach by expanding and updating our library of online training courses and tutorials. We updated our introductory myNKU course (INT 100) to ensure accuracy and improve usability. We broke the videos into short segments so the user can focus intensely on one topic at a time, a proven method for improving comprehension of complex material. Following the template of INT 100, we also created a new time administrator training course (HR200) and a course about editing NKU’s web site (Adobe AEM/CQ Basics). We also combined the separate myNKU online trainings into one Blackboard organization, so it would be easier for users to view all relevant training information/available in one place and pick the training material they need. Furthermore, we updated the myNKU help website by adding "process-based" navigation, so users can locate the documentation they need based on the business task they are trying to perform in myNKU.

2014-15 Progress Narrative

23.01 Expand myNKU help website to include process based resources.  
23.02 Expand library of online tutorials.

IT Support
54 Expand the Virtual Desktop program and software available online.

2016-17 Progress Narrative

3 VDI thin clients have been deployed to staff as desktop replacements; the feedback has been positive. Additionally, 52 lower-cost thin clients have been deployed to Steely Library to replace existing PCs. We are planning on a storage refresh for the virtual environment in FY 17-18. We are also exploring alternative methods of delivering virtual desktop software, including cloud based solutions that could reduce the required, onsite, hardware footprint.

2015-16 Progress Narrative

Working with the VDI infrastructure to provide a reliable system for use for faculty and staff. General Computer labs and an athletics lab have been migrated, and we are working on migrating departmental labs. Migrated Dorm computer labs to VDI. IT is working with ITAC and ITPC to test thin clients for staff. This approach is a cost transfer from end user device to infrastructure needed to support thin clients. We have also expanded our virtual lab software offerings to include Windows 10 and MS Office 2016.

2014-15 Progress Narrative

54.01 Expand services in the virtual labs to include more departmental specific applications

54.02 Deploy additional thin client hardware in labs to be more efficient with resources.

132 Support efforts to improve student readiness as it relates to technology. Examples include the following. • Blackboard • Virtual Labs • Email • Mobile • Online Services

Information Technology, Vice President, Academic Affairs and Provost

Begin in 2017-18

2016-17 Progress Narrative

The 2015-16 progress update indicated this item as completed. No additional narrative is required.

2015-16 Progress Narrative

The IT website, it.nku.edu, has updated information regarding hardware and software recommended standards. We’ve created training documentation to support students’ ability to use Office 365, including the installation of Microsoft Office software and OneDrive. We also added “process-based” navigation to the myNKU help website specifically geared to students.

2014-15 Progress Narrative

132.01 Expand library of online help resources.

132.02 Develop and facilitate required online training.

132.03 Publish ongoing updates to hardware and software standards for students.

Mature data governance practices
The discipline of Data Governance embodies elements of data quality, data management, data policies, business processes, risk management, and personnel, which have all been addressed enterprise-wide by the Data Governance committee. This entails an agreed upon common set of policies, standards, methodologies and processes enacted to safeguard that institutional data is managed in such a way that the interests of the university and individuals are addressed in a fair, legal and appropriate manner.

The Data Governance website is now live and contains background information on the data governance initiative, committee members, identifies the stewards/custodians and their respective roles, a link to log and track data quality issues, and a help section with video. We have developed a data quality at NKU application that will provide a historical database of data quality issues. Three new policies have been written and approved. These include the Data Governance Policy, Information Security and Information Security Incident Response. All of these mature NKU’s overall Data Governance program.

Institutional Research and Information Technology have partnered to establish a Data Governance Committee (DGC) containing representatives from Academic Affairs, Legal, HR, Comptroller and Student Affairs. This committee is focused on managing data as an institutional asset and has created a charter, definitions and overall processes for data governance. A new website and data quality business process will be communicated to campus later this summer. This rollout will raise the awareness of data as an institutional asset. The new website and messaging will establish a web based form for reporting possible data quality issues and an official process and workflow for resolution of such issues. There will also be a historical database of all data quality issues that will allow for faster and easier tracking and resolution.
Enable student mobility by promoting access to services, expanding virtual computer lab offerings, and rolling out additional functionality in NKU mobile apps (NKU, Chase, Go Norse, CINSAM, International, n@NKU) with focus on smartphone rather than tablet. Examples of functionality that have been requested by students include: creating advising appointments, requesting All Card balance & digital card, requesting IT services, viewing dining info, paying bills, viewing parking garage status, and registering for classes.

Information Technology
Begin in 2014-15
5.6b

2016-17 Progress Narrative
The NKU web redesign project launched phase 1 in February ’17, and is now rolling out department websites through December ’17. This new design is mobile friendly and allows seamless access to NKU.edu via any mobile device.

The NKU mobile application continued quarterly releases through early 2017. At this point the mobile application architecture is starting to undergo significant technical architecture changes to support specific user interaction and more relevant content delivery in a timely manner.

2015-16 Progress Narrative
NKU's web redesign project is moving forward with an initial go live date of January 20, 2017. IT is working with Marketing and Communications and external developers to deliver the new product.

The mobile apps have established a quarterly release schedule and will communicate the functionality that will be included in the upcoming release. The next release is scheduled for July 29th. Homepage restructuring and updates are completed. Replaced existing center button with "Safety" button. Made the user interface more "intelligent" and majors selectable. Development team is working with infrastructure team to implement single sign-on for mobile functionality. Adobe and SPSS have been added to the virtual lab's software catalog and new software titles are being added. This is now the standard operating procedure as software packages are upgraded. Most recently, Windows 10 and Office 2016 were added.

2014-15 Progress Narrative
IT worked with Marketing and Communication to update the NKU website to a mobile responsive version. Work will continue to update content across campus. The IT mobile apps developers updated the NKU apps to function on the latest OS versions. Virtual Desktop was expanded to Steely library.

13.01 Enhance NKU's public website to be device friendly through the use of responsive design techniques.
13.02 Increase student services delivered via mobile applications
13.03 Increase software availability through virtual labs
Continue IT student survey

14  Continue to issue the annual IT student survey determining changes to services and offerings per student input.

Information Technology  
Begin in 2014-15

2016-17 Progress Narrative
The 2014-15 progress update indicated this item as completed. No additional narrative is required.

2015-16 Progress Narrative

The annual IT student survey was conducted in the Fall of 2014. 1,776 students responded. An overarching theme from respondents was in relation to an importance for broad and strong wifi coverage. IT expanded the overall university bandwidth to 2GB in the fall of 2014 and improved the coverage and saturation of the university’s wifi network by adding 200 access points.

Quick Survey Facts:
80% of student respondents feel Blackboard makes the learning experience better.
85% of student respondents own a smart phone
92% of student respondents own a laptop

14.01  Adopt standard survey platform
14.02  Enhance the delivery of questions based upon student profile.

Automate/enhance business processes
Automate and enhance business processes to improve efficiency, service and usability. (myNKU projects will continue to be prioritized through the project request processes with final approval from IT Policy Council). Examples include the following. • Automate more undergraduate admissions applications. • Automate PLUS loan processing in Financial Aid. • Enhance transfer processing. • Provide course demand/scheduling. • Enable mass advisor assignment. • Implement course waitlisting. • Enhance student recruitment.

2015-16 Progress Narrative

Completed the one.nku.edu student portal which streamlined all major campus services and applications students need to access in one centralized location. We continue to support the EAB Student Success Collaborative Project. Graduation Planning System (Degree Audit/Academic Planning) project kicked off in August 2016 and will roll-out in phases throughout the year to enhance both the advisors business processes and students efficiency in scheduling classes. The Degree Audit portion of that project will more accurately indicate a student’s remaining requirements before being eligible to graduate. We are working on a new Budget Software project (scheduled to roll-out Summer 2017) which will improve the entire budget program across campus departments. Two other projects of note that are currently in process are Course Waitlisting and a new CRM tool for admissions which will greatly enhance our admissions staff’s ability to better recruit students to NKU.

2016-17 Progress Narrative

Completed the one.nku.edu student portal which streamlined all major campus services and applications students need to access in one centralized location. We continue to support the EAB Student Success Collaborative Project. Graduation Planning System (Degree Audit/Academic Planning) project kicked off in August 2016 and will roll-out in phases throughout the year to enhance both the advisors business processes and students efficiency in scheduling classes. The Degree Audit portion of that project will more accurately indicate a student’s remaining requirements before being eligible to graduate. We are working on a new Budget Software project (scheduled to roll-out Summer 2017) which will improve the entire budget program across campus departments. Two other projects of note that are currently in process are Course Waitlisting and a new CRM tool for admissions which will greatly enhance our admissions staff’s ability to better recruit students to NKU.

15.01 Work with colleges and business units/functional areas to expand online forms availability for self-service and university compliance.
15.02 Implement business process for technology acquisition to improve efficiency and mitigate risk.

15.03 Implement myNKU business process changes based upon prioritization by IT Policy Council.

15.04 Expand paperless initiatives via technology such as document imaging.

**Strengthen communications**

- **16** Strengthen communications. Examples include the following. • Push notifications regarding system status; campus notification of system issues. • Develop Faculty/Staff portal. • Push notifications to students via email and mobile for appointments, holds, registration window, etc. • Consider micro surveys for student engagement and feedback.

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<th>2016-17 Progress Narrative</th>
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An SLA for Communications was created during the summer of 2016. The redesign/conversion to a service catalog format of the IT website was completed last summer. The annual student technology survey wrapped up in March. An SLA for communicating outages was enacted last summer.

In Spring 2017 we began development of a Faculty/Staff Portal that will make it easier for fac/staff to access many of the most frequently used activities/processes. This will enhance productivity and improve communication.

**2015-16 Progress Narrative**

We have developed an internal and external processes for communication related to systems outages. The process includes who to notify, how long to wait, how often to provide updates, etc. This includes internal to IT communications as well as NKU community communications utilizing the appropriate methods for each situation (e-mail, website, Twitter, IT Help Desk, etc.) formalized process to communicate system outages. We are also re-designing the IT website. We are currently refining content and developing a service catalog, however, this is dependent on other variables underway such as Vfire implementation and design changes forthcoming by Marketing and Communications.

**2014-15 Progress Narrative**

A committee with representation from Student Success and Assessment, Educational Outreach, Enrollment Management, Marketing and Communications, and IT convened to coordinate technology-based push communications for students. A spring schedule for push notifications was reviewed. Marketing and Communication will oversee the content sent to students and IT will physically push out the approved notifications.

IT system notifications are now posted on homepage of IT website as well as the IT Help Desk page. Depending on the severity of the event, additional communications such as email, portal notifications, Twitter feeds, etc. are used to notify the impacted campus community.

16.01 Implement mechanisms to facilitate push notifications capabilities through various mediums.
16.02 Utilize customer engagement methods to garner feedback for use in improving customer service.
16.03 Notification of system availability.

**Enhance IT support for colleges and units**

| 17 | Enhance IT support to meet the specific technology requirements of different colleges/units through a hybrid technology support model, combining centralized and decentralized support services/resources, and expanding IT Help Desk services. For example: • Add additional Academic Technology Analysts. • Consider expanding to video chat. • Expand self-help knowledge base. • Provide support for Faculty/Staff personal devices. | Information Technology | Begin in 2014-15 | 5.6a, 5.6b |

**2016-17 Progress Narrative**

The 2015-16 progress update indicated this item as completed. No additional narrative is required.

**2015-16 Progress Narrative**

IT was given special one-time funds to replace many of the instructor computers in classrooms. IT technology support is being expanded to include Chase College of Law, with the utilization of our current technical staff; unifying services to reduce costs. An IT HelpDesk Service Level Agreement has been created to set service goals and track achievements. The SLA tracks such items as speed of service and ability to complete the customer's requested service. We’ve developed training materials and resources to support the use of a new ordering system for University Printing, as well as a suite of training videos to support advisors’ and faculty use of EAB – SSC Campus. We’ve also facilitated “specially-tailored” training sessions for specific groups including new deans and chairs and coordinators in the College of Arts & Sciences.

**2014-15 Progress Narrative**

IT has worked with the College of Education & Human Services and the College of Informatics to created two synchronous classrooms to enhance the delivery of instruction. IT has also focused on area specific technology support providing focused support for the Sciences. We have also upgraded key virtual environment infrastructures and audio/video production technologies in support of many college and unit needs.

**17.01** Offer customized trainings to departments and colleges based on their needs
**17.02** Continual system improvement of support processes to provide better service.
**17.03** Expand decentralized support while keeping resources centralized.

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Friday, October 06, 2017
Develop roadmaps by evaluating technology software and service sourcing strategies that encourage cost efficiencies and keep technology current. Examples include the following. • Adobe Enterprise License • Consultant development services • Computer replacement • Classroom technology • ERP/Data Warehouse

2016-17 Progress Narrative
We have improved computer replacement by leveraging vendor services (asset tagging, imaging, etc) to improve productivity and expedite computer delivery. We have also personalized the customer experience to ensure funding meets the requirements of the person/position. We have committed to a new LMS (Canvas) which will deliver their services from a cloud based solution. This will reduce the required hardware footprint to support our LMS, but will increase our yearly operating costs for our LMS. We are continuing to work with SAP, Microsoft, Cisco, Dell, and other vendors on roadmap strategies.

2015-16 Progress Narrative
We have reviewed campus software contracts for fiscal efficiency. Migration of NKU students, staff and faculty to cloud email has been accomplished. This has increased functionality for the areas and help reduce some IT future spend. We are in the process of re-evaluating our computer replacement program to improve the efficiency, timeliness, and effectiveness of the program. We are supporting the efforts to expand the role EAB plays in supporting student success. We are continuing to work with SAP, Microsoft, Cisco, Dell, and other vendors on roadmap strategies.

18.01 Adopt creative centralized software solutions that benefit student success
18.02 Investigate cloud hosting alternatives and document a roadmap detailing the advantages, disadvantages, risks and challenges along with a estimated timeline.
18.03 Monitor and mature software and sourcing strategies/solutions to keep pace with the university and higher ed needs.

Serve students through Norse Tech Bar
Provide student technology support through the Norse Tech Bar expanding & changing services per student input.

The 2014-15 progress update indicated this item as completed. No additional narrative is required.

2014-15 Progress Narrative

The Norse Tech Bar provides IT services to our students. Over the last year we have expanded services in response to student input. Through our monitoring of student demand, the IT Student Survey, and an onsite electronic feedback process; it was determined that the checkout of technology equipment was a high demand service. IT expanded the service by providing 24 additional laptops for checkout. For information about all Norse Tech Bar services, please visit http://oit.nku.edu/techbar.html

Assess cloud computing

Ensure all cloud computing options are secure and robust.

Office365 has been officially adopted as NKU’s cloud storage platform. From a security perspective, it features both in-transit and at-rest encryption to ensure that important data is kept safe. With multiple datacenters spread out across the world, it is a highly robust platform with high availability and guaranteed up-time.

Investigation into the viability of cloud computing for core business solutions continues. We have successfully transitioned NKU email to the Microsoft Cloud and provide storage options, in the cloud, through Microsoft’s One Drive.

IT is involved with a number of initiatives researching the benefits and challenges of cloud computing. We are in discussion with SAP regarding their roadmap plans and service offerings. We are working with Microsoft to transition NKU email to the cloud and to provide storage services for students. Many other campus services that are delivered via software are being transitioned to a cloud based service (e.g. Parking Services)
Investigate available hosting options for core business solutions.

Reevaluate the baseline hardware technology that faculty should have and other alternatives such as subsidizing personal purchases and explore bring your own device opportunities including policy, support and acquisition.

**2016-17 Progress Narrative**

The 2015-16 progress update indicated this item as completed. No additional narrative is required.

We regularly review baseline technology requirements. An example of that is our recent increase in our baseline computer memory requirements from 4gb to 8gb to meet faculty needs. We have developed procurement procedures and are working toward a Technology Procurement Policy. The review of virtual desktops for staff is being supported by ITPC and ITAC and is in the evaluative process. A set of policies and procedures for cellular devices has been developed and approved.

**2014-15 Progress Narrative**

Feedback regarding baseline technology and BYOD was collected from the IT Advisory Committee faculty/staff survey and indicated most felt that NKU should provide tools required to perform work duties. A subcommittee of ITAC will have a pilot group to inve

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<tr>
<td>173.01 Develop cellular device policy and procedures to recommend for ITPC approval</td>
<td>Completed</td>
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<tr>
<td>173.02 Create faculty workgroup to explore baseline technology solutions</td>
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</table>
Expand university bandwidth and improve the wireless experience to support learning and efficiencies to meet the growing demands.

2016-17 Progress Narrative

The 2015-16 progress update indicated this item as completed. No additional narrative is required.

2015-16 Progress Narrative

In December, OIT transitioned to a 10GB network called Internet2 through a collaboration with KyRON. Internet2 is an extremely high bandwidth connection linking universities, libraries, research facilities, and others working to further scientific discovery and innovation. This private network will allow high speed data transfer between members enabling research collaboration and other opportunities for innovation. On campus, we installed or upgraded 200 wireless access points in Steely Library, Fine Arts, University Center, Administration Center, Norse Commons, and the Health Center.

IT has expanded the University's overall bandwidth to 2GB in the fall of 2014 and improved the coverage and saturation of the university’s wifi network. 200 new wireless access points were added to four high wifi utilization buildings and older wireless access points were replaced in Steely Library, Landrum Hall, and the Health Center. IT will continue to monitor campus bandwidth and wifi utilization and make improvements based on the changing requirements of campus.

2014-15 Progress Narrative

53.01 Expand bandwidth to improve the student experience

53.02 Improve wireless coverage by adding wireless access points
Pilot a personalized student experience (portal) enabling easier access to campus resources & targeted messaging and communications.

Information Technology, Vice President, Academic Affairs and Provost

Begin in 2014-15

5.6b

2016-17 Progress Narrative

This project was completed in August 2016. We received very positive feedback from student representatives of the SGA and Presidential Ambassadors. We were able to get all major student applications (Blackboard, myNKU, email, etc.) activated with Single Sign On. We will continue working to keep the site up to date and explore additional options to enhance the portal in the future.

2015-16 Progress Narrative

Project has commenced and the environment is being prepped for an August rollout. myNKU single sign on is in development and on target for a move to production in the coming weeks.

2014-15 Progress Narrative

IT presented options for a student portal to the IT Policy Council and IT Advisory Committee. A scheduled demo was held to view the University of Indiana’s student portal. Next steps will include a follow up of the UI demo.

131.01 Explore options, alternatives, and features of student portal systems

131.02 Present features and alternatives of the portal experience to IT governance for feedback and direction