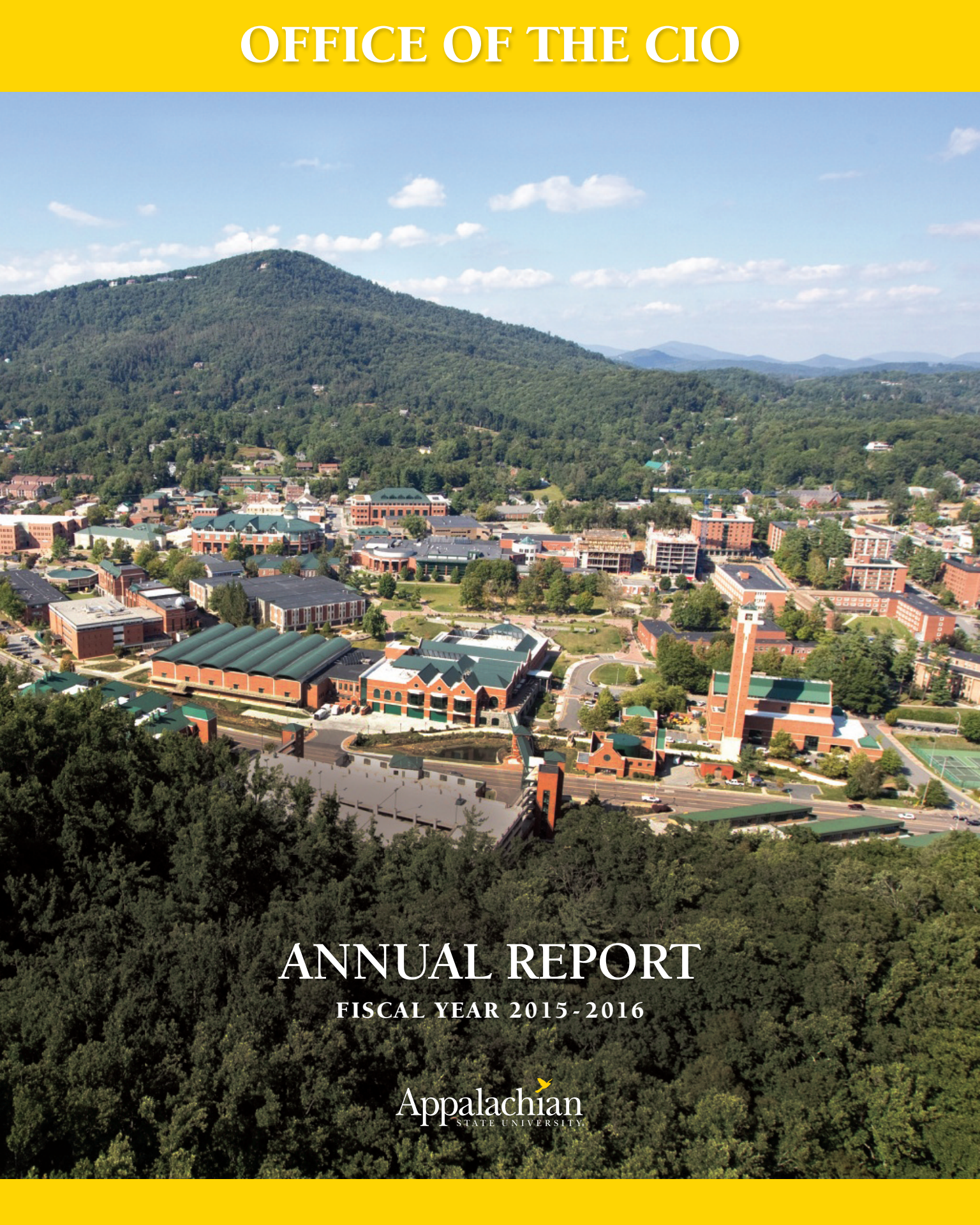


# OFFICE OF THE CIO



## ANNUAL REPORT

FISCAL YEAR 2015-2016

Appalachian  
STATE UNIVERSITY

# OFFICE OF THE CIO

## LETTER FROM THE CIO

It has been an exciting year of IT project implementation and incredible progress on new services that will launch soon. Moving Appalachian State University forward with strategic implementation of technology requires a diversity of voices. Working with our Technology Portfolio Committees and other campus technology units, we created a Technology Roadmap with all major technology projects and work groups. Our Technology Roadmap, published on [cio.appstate.edu](http://cio.appstate.edu), provides a transparent and accessible window into anticipated and proposed technology changes for our campus. Our Technology Portfolio committees have sponsored many initiatives this year and have continued their work on a prioritization model to help committees and campus leadership determine strategic investment for funding and resources.

The Telecommunications Technicians and Web Services teams moved to ITS this year to provide efficiencies in services and resource management. We developed a network and computing master plan to prioritize and schedule infrastructure lifecycles. The plan supported critical capital investments this year and will help us determine a stable funding level for campus technology resources and services. We collaborated with Business Affairs, Academic Affairs and General Counsel to adopt a purchasing model to even out large capital investments, and signed an initial installment contract for our telephony project.

A significant portion of our roadmap projects are focused on using technology to streamline existing practices and support continual advancement in administrative processes. Our major declaration process improvement impacts all colleges and is realizing significant paper and time savings for students and faculty/staff. Fortis Imaging was expanded to eight new departments as part of this process improvement. The Digital Measures redesign streamlines and improves annual reporting processes. Three Banner Workflows for Special Course Forms and Audit Requests were designed and the Overloads Workflow was implemented in the past year. We collected baseline metrics on campus printers and copiers to measure progress on paper reduction and the impact of upcoming sustainability projects in print management, mobile printing, and Scan to Google licenses for our printers.

Our Information Security Office increased the protection of our campus networks by establishing revised data classifications, implementing password management, minimum security requirements and data management. We rebuilt our Banner server environment to a new secure architecture and tested our disaster recovery plan in a tabletop exercise. In addition, we created an Incident Response Team and processes to ensure that incidents are evaluated, reported and treated consistently in a timely manner; and an Information Security Liaisons group to collaboratively develop security solutions and serve as a central point of contact for security efforts.

Our Analytics project added Admissions, Registrar, Financial Aid, and Student Accounts data to the warehouse. The first cohort of analytics super users, including Associate Deans and other users, completed Analytics training with dashboards and reports that substantially improve data access, reporting work and data management. A second cohort of analytics super users is underway for academic chairs and others.

Many of the initiatives and projects in this report have been accomplished with other IT areas on campus. These include Open Forums held in collaboration with the Center of Academic Excellence to gather feedback on Web Conferencing, OnLine Evaluations and a new Portal. The Library, CAE and ITS held the second annual Technology Fair this spring and multiple groups have come together to plan for the new Beaver College of Health Sciences. We are working with Student Development on better wireless onboarding for our students, Business Affairs on better Fund Authority Workflows and the Registrar's office on Preferred First Name initiatives for faculty, staff and students

As I think about this past year, I am amazed at how much we have achieved and how well prepared we are to move forward. I am extraordinarily proud and grateful for the collaboration and hard work of my staff and all campus IT for what they do on a daily basis to improve technology for Appalachian State University.

Cathy



*Cathy Bates  
Chief Information Officer  
and  
Associate Vice Chancellor*

# PROJECT MANAGEMENT

## IT GOVERNANCE

The Technology Portfolio Committees and Information Security Advisory Council provide a collaborative framework of governance for technology at Appalachian State University. Each committee is charged with managing a portfolio of services and applications within Appalachian's Services Catalog. In the 2015-16 year, we combined our Security and Infrastructure services into one committee. We now have four Technology Portfolio Committees to govern the Service Catalog.

1. **Academic and Research Services Technology Portfolio Committee** led by Dr. Jim Denniston and Ms. Mary Beth McKee
2. **Productivity and Security Services Technology Portfolio Committee** led by Mr. Emory Maiden and Mr. Kevin Patterson
3. **Administrative Services Technology Portfolio Committee** led by Ms. Heather Langdon and Ms. Beth Pouder
4. **Web and Mobile Technology Portfolio Committee** led by Dr. Jay Fenwick and Mr. Jason Grubb

To solicit campus participation in IT governance, we created a Portfolio Request form (available at [cio.appstate.edu](http://cio.appstate.edu)) for faculty, staff and students to suggest additions, changes, or improvements to the service catalog. Assisted by our ITS Project Management and Communications unit, our Portfolio Committees review the requests to consider the adoption of a new application/service, the retirement of an application/service, or further study through campus workgroups and/or other channels to seek campus input.

Thank you to all our Technology Portfolio committee members for their efforts and dedication!

## WHAT'S NEXT?

We will work to continue to mature our IT governance and project management practices to ensure that our IT resources are aligned with institutional priorities and needs. We will develop a campus wide technology plan as a corollary to the campus strategic plan and campus master plan and identify strategic investments, areas of simplification, service improvements, sustainability and savings.



# TEACHING AND LEARNING

## CLASSROOM AND TECHNOLOGY PLANS

*In collaboration with the Beaver College of Health Sciences, Wake Forest University and the Office of Design and Construction, multiple groups from IT worked to finalize the technology and classroom design plans for the new Beaver College of Health Sciences. Designs were developed for new 24 and 36 seat classrooms with flexible furniture and collaborative learning technologies. This building will take advantage of many innovations in classroom and infrastructure technologies.*

## ACTIVE AND COLLABORATIVE LEARNING SPACES

*Active and collaborative learning spaces are increasingly being developed in higher education to support transformational learning. This spring we held our first Active Learning Spaces Furniture Expo, with six different vendors bringing their furniture to display. Nearly 150 faculty, staff and students came to see the collaborative furniture possibilities and start the discussion on active learning spaces.*

## PANOPTO

*Belk Library is working to add equipment, software, signage, and implementation information for all the library classrooms to be Panopto-ready video recording classrooms. The use of Panopto campus-wide increased 25% this year with over 2700 recordings created and 6000 hours of videos viewed.*

## FACULTY TECHNOLOGY WEBSITE AND FAIR

With campus partners of the Library and Center for Academic Excellence, development on a teaching with technology website continued. The second annual Tech4Teach Fair was held in February with 45 E-Poster presentations, tabletop discussions, vendors and 160 faculty and staff attendees. Faculty gave high marks for the opportunity to come and talk about teaching and learning with technology.

[tech4teach.appstate.edu](http://tech4teach.appstate.edu)

## CLASSROOM TECHNOLOGY UPGRADES

Currently there are over 320 Smart Classrooms at Appalachian. During the past 18 months, ITS has installed 24 new Digital Smart Classrooms, replaced or refreshed 52 analog projectors, replaced or refreshed 52 podium computers, and replaced 15 manual projector screens with digital electric screens in Peacock Hall. We have over 200 classrooms with older analog technologies and we need to develop a plan to make the analog to digital transition process happen more quickly for campus.



This past academic year, AsU Learn usage continued to increase. There were over 7,000,000 sessions last year, which is an 11% increase from last year. In partnership with the Center for Academic Excellence, we improved AsU Learn service and performance. The average page load time was 1.63 seconds, which is a 20% decrease from last year.

In May, the team upgraded AsU Learn to Moodle version 3.0. Some of the features and changes we made are:

- New question types, including select missing words and several drag and drop options
- File upload dates can now be displayed for file resources
- Improved filtering options on the enrolled users screen
- Easier section editing via a single action menu
- Atto editor improvements, including table configuration
- Updated theme (based on newer version of Bootstrap framework) that is more consistent with home page design ([appstate.edu](http://appstate.edu))



The successful pilot for Turnitin was completed in December, 2015 and was approved for purchase with a three-year license for the University. Turnitin is a Teaching and Learning tool and not just an anti-plagiarism tool. It is currently being used by over 150 faculty members, with 4066 students having submitted papers through it. Usage is expected to continue to grow. If you want to learn more about Turnitin, please contact anyone on the CAE team.

# TEACHING AND LEARNING

## IT RESEARCH SERVICES

Our Cisco Graduate Assistantship Program supported 2 STEM graduate students during the 2015-16 year. These students provided over 450 hours of IT research support to 20 research projects ranging from ICECAP, GEAR UP, DAGGER, Bio DNA Annotations, AppalAIR and the Moral Judgement Study. Six of the projects are likely to contribute to proposals for external funding; and three of these supported projects that are externally funded. This program supports Strategic Direction 2 of the University Strategic Plan to support increased participation of faculty and students in research and grant opportunities. Our High Performance Computing resources are currently being utilized by Biology, and Philosophy and Religion. For more information about IT support for research, see: [its.appstate.edu/research](http://its.appstate.edu/research)



## USING ANALYTICS FOR STUDENT SUCCESS

*Our Analytics project added Admissions, Registrar, Financial Aid, and Student Accounts data to the warehouse. The admissions and registration data was rolled out to a cohort of analytics super users, including Associate Deans and other users, who completed Analytics training with dashboards and reports that substantially improve data access, reporting work and data management.*

*Feedback and new data requests were incorporated for a second cohort of analytics super users, including Department Chairs and Administrative Staff, which is currently underway. All feedback from both cohorts has been incorporated for a tailored campus go-live this fall.*

## A PORTFOLIO

COLLECT. REFLECT. CONNECT.

A-Portfolio completed its second pilot year and is now on a three year implementation track (2016-2019). The system is fully available for interested faculty, students and programs to use for pedagogical purposes, program assessment, and integrative student ePortfolios. Since the inception of the A-portfolio pilot in 2014, every college including Honors College and University College have participated. Almost 4000 student eportfolios have been initiated, 65 faculty members have participated, with 335 sections of courses.

# TEACHING AND LEARNING

## OPEN FORUMS HELD ABOUT PORTAL, WEB CONFERENCING AND ONLINE EVALUATIONS

The Center for Academic Excellence and ITS held open forums in January for our campus to talk about what faculty, staff, and students want to see in their next online portal, web conferencing solution, and online evaluation product. Feedback from these forums confirmed there is a desire for a replacement for our current portal. We also learned that BlackBoard Collaborate was not meeting our web conferencing needs. Faculty and administrators also want the capability to do online evaluations instead of paper evaluations, and a second pilot will begin in the fall. These open forums were a great success and have proven to be a great opportunity to hear what our campus has to say, and make a difference with the IT planning process!



## WEB CONFERENCING SOLUTION CHOSEN!

Under the direction of the Academic and Research Services Portfolio Committee, two web conferencing products were piloted for the spring semester, Zoom and WebEx. Based on feedback of faculty, staff, and students, the final recommendation was to license Zoom for campus. Zoom will be available through AsULearn as a course activity, or it can be used outside the learning management system through [appstate.zoom.us](http://appstate.zoom.us). This product is being rolled out to the campus over the Summer of 2016, and is available for all faculty, staff, and students. The CAE team is ready to help you with the transition from Blackboard Collaborate to Zoom.



## ONLINE EVALUATIONS – PILOT CONTINUATION DURING 2016-17 ACADEMIC YEAR

This year, we conducted a pilot of an online course evaluation software product called CoursEval with 335 classes participating. CoursEval was not recommended for wider use because of lack of customizable reporting features for different colleges and departments. The Academic and Research Services Portfolio committee recommended a new pilot of a different product during the 2016-17 academic year. The product, Blue eXplorance, has some advanced functionality and is expected to perform well. There will be several presentations offered to campus in the early fall semester of 2016. This pilot is open to any departments who would like to use it.

# STUDENT SERVICES

## IMPROVED PROCESSES FOR STUDENTS!

### Course Overload Workflow Improvement

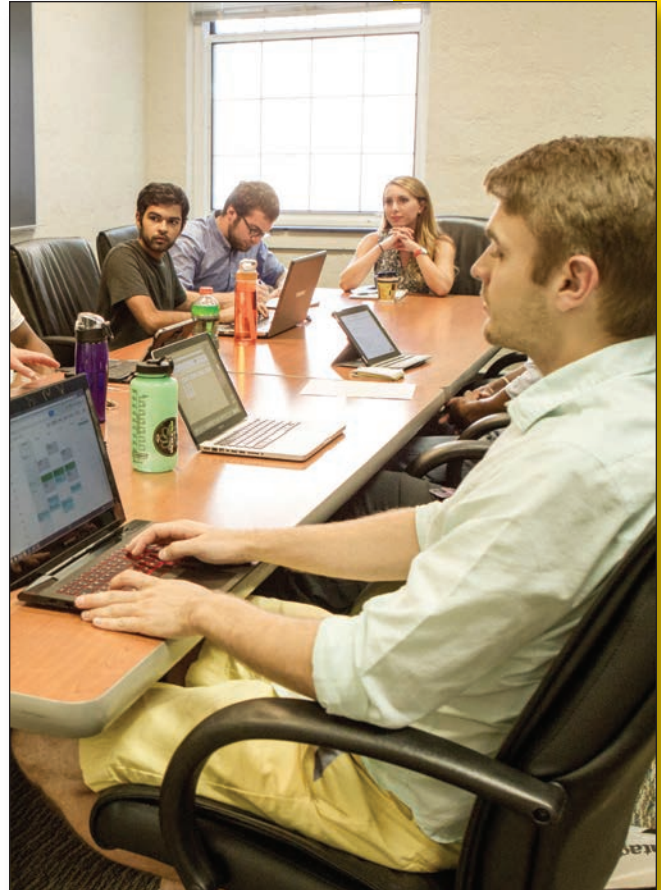
We simplified the process for students who wish to take more than 18 credit hours in a semester. Students who meet the GPA requirements required by the individual colleges will automatically be allowed to add the course. College intervention can still be completed electronically, eliminating the paper process. During Spring 2016 registration, there were 220 requests with 85 of those being automatically approved.

### Financial Aid System for Summer Enhanced

Financial Aid counselors and students are provided with more information about Financial Aid options. The registration process for the students was simplified and enhanced to help make registration easier and faster for the students and reduce errors. Increased automation was included to decrease the workload for the counselors as well.

### Major Declaration Improvements

Working with the University Advising Council, we improved the process for advising and specifically the process of major declaration by students. Students can declare their major electronically and University College can see the declaration request immediately to approve or deny the request. Approvals will be automatically sent to the appropriate college and denials will be emailed back to the student.



## PREFERRED FIRST NAME INITIATIVES FOR FACULTY, STAFF AND STUDENTS

The Office of the Provost recently announced the implementation of a Preferred First Name for use by our students. This Registrar's Office initiative allows students to indicate a preferred first name that will display on selected pages accessible from the Faculty Services and Advisor menus. There is a similar initiative in progress for faculty and staff. Faculty and staff have the ability to indicate a preferred first name (e.g., middle name, nickname, or other preferred name) that will display in the online directory and the Global Address List (GAL) in Mountaineer Apps.



# STUDENT SERVICES



## GREATER WIRELESS CAPACITY ON CAMPUS

During the summer of 2016, the number of wireless access points were increased by 500. This gives our students greater wireless networking capacity. The demands for wireless coverage continue to grow with ever-increasing streaming services, the connection of more diverse student devices and a desire from students to expand the coverage to outdoor spaces. Members of our Networking team met with student representatives from SGA, and held a wireless campaign in January to assist students and collect feedback. We placed door hangers in every resident room with wireless connection FAQ's, as well as tables in the Student Union and Library specifically for wireless.

Based on student feedback, plans for this fall include a wireless onboarding solution which will simplify student wireless connections.

## ONLINE SCHOLARSHIPS

*We continued to expand customizable online scholarships this year. The College of Education was the first college to participate in the unique and continuing applications for their students. This year, two additional areas are utilizing separate scholarship applications for their students. These are the Office of International Education and Development and the College of Health Sciences. During the 2015-2016 year, more than half of our incoming freshmen applied for scholarships. Continuing students in these three areas had nearly 500 applications.*



## QEP – QUALITY ENHANCEMENT PLAN

### Study Abroad System Enhancements

We improved the Study Abroad system to give the program leaders more detailed information about their program. This includes the number of students registered, individual students name and age, flight connections, dates, cost, and status of payments. Access to this information helps the leaders better prepare for their trip.

### New Administrative Application Software for International Students

A software solution called Terra Dotta replaced the previous software fsaATLAS. This is used by the Office of International Education and Development to maintain federal reporting compliance and streamline the International Programs administrative processes.



# STUDENT SERVICES



## SURVEYS HELP US IMPROVE IT SERVICES FOR STUDENTS

Over 1600 undergraduate students responded to our annual ECAR (EDUCAUSE Center for Analysis and Research) survey conducted in March/April of 2016. Data from this survey provides information on campus usage of and attitudes toward technology.

In accordance with the University Strategic Plan, we used the 2015 Educause Center for Analysis and Research (ECAR) Faculty and Student Technology Survey responses to set benchmarks for satisfaction with technology.

### Our goals include:

- Technology Support will continue to receive at least a 5% higher favorability rating than other Master's Public Institutions.
- Student favorability ratings for Wireless will meet or exceed other Master's Public Institutions.
- Faculty favorability ratings for University data privacy and information security practices will meet or exceed other Master's Public Institutions.

## MOBILE PRINT

Mobile Print was piloted in the Library during the summer of 2016, and will be rolled out to the campus this fall. This mobile app will allow students to print from their personal devices. Currently, if a student needs to print in a lab or the Library, they access the document on a lab or library computer and submit it to print. With the mobile app, the student can submit the print job to the queue and release the print when they arrive in the lab or Library.

## GUIDEBOOK MOBILE APP

Working with University Communications, the Web and Mobile Governance committee is reviewing the Guidebook Mobile App. This product is currently being used by other higher education institutions to quickly and easily build an app for particular events on campus such as orientation. There are several areas on campus who have requested this type of app, including the Bookstore, Admissions, Ambassadors Traditions, and for fundraisers such as a 5K race.

## DEGREE WORKS

Degree Works had almost 27,000 hits during the 3rd week of May this year. That is a new record!



A popular and successful mobile app is available to provide timely and important information for students. This mobile app shows grades, course schedules, directory searches, maps, AsU Learn, Library info and GOASU. To download, go to the Apple App Store or the Google Play store and search for Appstate.

# FACULTY AND STAFF SERVICES

## PORTAL REPLACEMENT

The Web and Mobile Governance committee is overseeing the recommendation of a plan to replace Appalnet and myASU. The technology behind these portals is outdated and a modern portal will support targeted messaging, communities of interest, and a single service for campus events and news.

## DRUPAL MIGRATION

The Web Services group joined the ITS team this spring to help provide better efficiencies among the two areas. A major project for our Web Services group is the development of a Drupal 7 platform. The use of a single Drupal 7 platform provides uniformity of appearance and features across all sites as well as improved stability. The Web Services team worked closely with University Communications to develop consistent themed designs. This year, thirty-three sites were migrated and fourteen new sites were built and launched in Drupal 7. There are plans to migrate fifty more sites this year. More than 200 users have attended Drupal training this year, allowing them the ability to update and maintain their own sites.

## WEBFOCUS

WebFocus is being upgraded to version 8, which will provide a central portal for users to be able to access all the dashboards and reports in which they have access. There are currently thirty-eight WebFocus dashboards with a total of 3,737 unique reports that have been run over 24,334 times during the last year!



## SUSTAINABILITY - EFFORTS CONTINUE TO REDUCE PAPER USAGE ON CAMPUS!

We are proud to share that Appalachian's overall paper usage from copiers and printers was reduced by 8.4% last year! Workflow improvements, Fortis expansion and an upcoming print management solution are expected to help Appalachian maintain this momentum.

### Campus Print Management Solution

We piloted a print management software solution during the Spring 2016 semester within ITS, the Physical Plant, College of Education, and UREC. Pharos Beacon is a print management solution designed to help educate departments and individuals about their paper consumption and has the potential to lower print numbers and costs. The pilot was a success and the Productivity and Security Governance committee recommended that it be rolled out to the rest of the campus during the coming year.

### Fortis Expansion

Fortis Imaging Scanning is a major part of the success of our efforts for paper reduction along with all of our recent workflow improvements. By storing documents electronically, paper is saved and forms do not have to be physically sent to the various departments involved. At this time, all of our colleges have been trained on the Fortis System and are using the Fortis Advising database. There are currently over 10,000 documents in the Fortis Advising Database.

### Fund Authority Workflow

Business Systems and ITS designed a workflow to streamline the request process for the approval for a new fund or modifications to an existing fund. This workflow will decrease the number of paper forms needed and increase the efficiency of the offices involved. This workflow will also allow the requester to track the progress of the request and the result will be a faster approval time.

### Special Courses Workflow Improvements

A workflow is currently being tested to allow faculty to choose the Special Course Form for courses such as Independent Studies, Honors Thesis, Individual Study, Instructional Assistantship, Research Assistantship. These can be approved by Chairs and Deans without using paper forms. Since Fall 2014, there have been over 3500 paper forms for Special Courses which will be eliminated. This feature will be available for Spring 2017 registration.

# FACULTY AND STAFF SERVICES

## PASSWORD EXPIRATION DATE EXTENDED

During the Fall of 2015, an improved Password Manager was introduced to help our users create and use stronger passwords. A new University Password Standard was approved during Spring 2016, which allows strong passwords to expire after 180 days. A strength meter is now a part of the password manager and informs the user when the password is created how long it will be valid. Passwords that are not as strong could expire in 90 or 120 days.



## PLAN TO REDUCE DAILY EMAILS FOR FACULTY AND STAFF

Our move to Mountaineer Apps last summer improved our communication and collaboration with each other in many ways. The “Announce” system has been replaced with Google Groups which enables enable the campus to control the types and number of emails received each day with greater ease.

General campus announcements will be combined into one daily digest email under the header Announce. Emergency emails or those considered important to the campus community by the Office of the Chancellor or Vice Chancellor’s offices will still be delivered individually. All faculty and staff can subscribe to other areas in which they are interested. Go to [announce.appstate.edu](http://announce.appstate.edu) and subscribe to these groups!



## VOICE OVER IP TELEPHONE SERVICE FOR CAMPUS

Partnering with NC State, Information Technology Services conducted a pilot of Voice Over Internet Protocol (VOIP) telephone service over the last two years. This pilot has gone extremely well and has prompted a commitment with NC State to expand VOIP services for the campus in the coming year. VOIP will replace our current centrex telephone service, which will be discontinued in a few years. The Telecommunications Technicians joined ITS this year to provide efficiencies in services and resource management to implement this project. The rollout to campus is currently getting underway, look for updates in the coming months.

## LYNDA.COM

During the past year, Lynda.com has been used by many of our faculty and staff!

- Active Users - 1135
- New Users - 294
- Total Hours of video viewed - 1742
- Total number of Videos Viewed - 24,253
- Total Course Certificate of Completions - 293



## INFORMATION SECURITY EDUCATION FOR PRIVILEGED USERS

*During the Spring 2016, two hundred “privileged users” who routinely handle confidential data participated in this information security training. Feedback has been extremely positive with many supervisors on campus asking for additional staff in their areas to participate. Plans to expand the opportunity to all faculty and staff is underway.*

# FACULTY AND STAFF SERVICES

## CLOCKWORKS

The Office of Equity, Diversity and Compliance joined the Office of Disability Services in using a software solution called ClockWorks. Clockworks serves as a file management system, houses all medical documentation of clients and has an online module for students and faculty. Clockworks increases the efficiency of the offices and broadens their capacity to serve our campus.

## DIGITAL MEASURES REPORT DEVELOPMENT

Digital Measures is used by many departments and is a faculty assessment tool that records research, publication and service activity. Phase I of a re-engagement process was completed in Spring 2016, with a new interface, updated screen and data field options, and improved support materials. Phase II plans are underway, which include improving reporting capabilities to match campus needs (such as automated accreditation report and department annual reports), developing training workshops for faculty, chairs and administrators, and forming a faculty advisory committee to manage and oversee continued development of the application.



## HELPING USERS WITH TECHNOLOGY

Supporting our users is a high priority for all of ITS, the following are examples of some numbers!

**Classroom Technology** - The Classroom Tech Team responded to over 1,450 incidents last year. Of those requests, 681 came from the Intercom located on the podium in the classroom.

**Desktop Support** - Our Desktop Support team visits offices of faculty and staff on campus to assist with their computing needs. This group closed over 5,700 support request through our Tech Excel incident management system.

**Enterprise Applications** - The Enterprise Applications team completed 800 requests, including new systems, enhancements and upgrades. They also resolved 430 problem tickets supporting the Administrative and Academic areas

**Help Desk** - Our Help Desk was busy this year, with over 19,000 calls and 6,000 email questions from faculty, staff, students, applicants, incoming students, parents, alumni and retirees!

**Technology Support Center** - Over 4,000 requests came through the IT Support Center in Anne Belk Hall this past year. Seventy-eight percent of these were students. The feedback survey shows that satisfaction 96% of people were satisfied with this service!

**Test Scoring** - Our faculty requested over 3,700 tests to be scanned during the 2015-2016 Academic Year.

**Web Services** - On average, Web Services receives 5-12 support requests a day for a total of more than 2,000 support requests handled this year.

## NETWORKING MASTER PLAN AND INFRASTRUCTURE UPGRADES

A network and computing master plan was developed this year to prioritize and schedule infrastructure lifecycles. This plan supports critical capital investments and will help us determine a stable funding level for campus technology resources and services. We collaborated with Business Affairs, Academic Affairs and General Counsel to adopt a purchasing model to smooth out large capital investments, and signed an initial installment contract for our VOIP project.

Because of this plan, funding has been identified to begin the refresh of all campus edge network switches. In addition, there are plans to replace and consolidate our aging storage area network. Both of these are necessary improvements as the technologies have either reached or are nearing the end of vendor support. These opportunities will allow us to take a greater look at Cloud Services and how they may play a part in enhancing our network and storage infrastructure.

## ESTABLISHMENT OF NEW INFORMATION SECURITY STANDARDS

In coordination with Information Security Advisory Council and Information Security Liaisons, several new information security standards have been ratified that support the implementation of the Information Security Policy. These include:

**Minimum Security Standard** - Defined minimum technical security controls required for protecting important IT services and university data.

**Risk Management Standard** - Established risk assessment, reporting, and treatment requirements to ensure cost-effective management of Information Security Risks.

**Password Standard** - Defined a set of practices to help balance security objectives with password complexity and expiration requirements.

**Data Management Standard** - Established common data classifications, data management roles, and governance groups to enhance the value and security of University data.

## DATA LOSS PREVENTION TOOLS

Several new security tools have been deployed to safeguard University data that is regulated by federal, state, and contractual obligations. These tools help the ITS Office of Information Security work with individuals to clean up potential confidential data on their desktops or Google Drive.

**Identity Finder** - This tool scans desktop PCs, University web pages, and servers for confidential data. So far, ITS has scanned over 150 machines and has worked with each individual to help clean up any confidential data.

**Cloud Lock** - This tool scans Google Drive to allow for awareness when confidential data is at risk of being exposed to unauthorized parties. Our security team works with individual users and departments to eliminate this data risk.

## DISASTER RECOVERY TABLETOP EXERCISE

*On December 11, 2015, Environmental Health, Safety and Emergency Management and ITS hosted a tabletop exercise to review procedures and roles in the case of an IT disaster. The escalating scenario unfolded in several segments where small working groups in IT discussed how they would respond and how the campus would be informed. Building on the success of this exercise, additional tabletop exercises are planned for the upcoming year.*

## DEFENDING APPALACHIAN'S INTERNET SERVICES

*On any given week, over 500,000 attack attempts occur against our servers. To help reduce our risk, vulnerability scanning has been implemented to proactively identify possible vulnerabilities on University systems that are open to the Internet. Since the implementation of these scans, over 230 servers are being routinely reviewed for potential security issues.*

# LOOKING FORWARD



## **ASSET MANAGEMENT SOFTWARE**

A workgroup formed in the Productivity and Security Governance group to explore the needs of the university and recommend an asset management software solution. WebCheckout was chosen with the College of Education and Commercial Photography being the first to use this new solution. Several other colleges on campus are interested in this joining them this year.

## **AUDIT REQUESTS WORKFLOW**

Students who wish to audit a course will soon be able to make this request online. The instructor will be notified to approve or deny the request and additional approvals needed from the Dean's Office, Graduate School or the Office of International Education and Development can be done online as well.

## **BANNER XE UPGRADE**

Over the next several years, our Enterprise Applications (EAA) team will be upgrading Banner to Banner XE. This upgrade is required because the entire structure of Banner is being changed to adapt to new technology. This project will be completed in stages and can be run in parallel to minimize business disruptions. A steering committee will be formed to help identify timeframes and resources. Our EAA team has been preparing by attending training and identifying Appalachian customizations that will need to be transformed during this major project.

## **CATALOG AND CURRICULUM SOFTWARE PROJECT**

A Catalog software solution will be implemented during the coming year. This solution will increase efficiency and accuracy as well as improve our paperless processing. Additional advantages include mobile accessibility and easier search options.

## **E-TRANSCRIPTS**

Working with the Registrar's office, the Administrative Services Technology committee is reviewing an e-transcript solution to provide electronic transcripts to students. Electronic transcripts will be a great convenience to alumni and students.



# LOOKING FORWARD

## DEGREE WORKS AND STUDENT EDUCATIONAL PLANNER

During the upcoming year, Degree Works will be upgraded to the latest version including the rollout of a Student Educational Planner. This will give students and advisors a planning tool to keep coursework on track.

## FACULTY WORKLOAD

The Faculty Workload project is planned to be implemented during the 2016-2017 academic year. Implementing the Banner Faculty Workload module adds the capability to dynamically calculate and report workload on a term or contract basis and facilitate the scheduling of instructors ahead of a given semester. It also allows for faster and more accurate analysis and reporting.

## GRADUATE ASSISTANTSHIP INVENTORY MANAGEMENT

A Graduate assistantship inventory management system is being developed to assist in the requests and dispersal of graduate assistantship opportunities. An inventory system will streamline the management of graduate assistantships.

## GUIDEBOOK MOBILE APP

Working with University Communications, the Web and Mobile Governance committee is reviewing the Guidebook Mobile App. This product is currently being used by other higher education institutions to quickly and easily build an app for particular events on campus such as orientation. There are several areas on campus who have requested this type of app, including the Bookstore, Admissions, Ambassadors Traditions, and for fundraisers such as a 5K race.



# IN MEMORIAM

## **ERIC PETRIE**

In January 2016, ITS lost a well-respected, long standing member of our team. Eric Petrie worked in ITS for over 17 years and was the manager of the Database Administration, Security and User Reporting Group. Eric will be missed by everyone who had the privilege of working with him.



### **OFFICE OF THE CIO**

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