Truman State University

Current State *of* Information Technology *2012-2013*

Information Technology Services Mission Statement

Information Technology Services (ITS) supports the Truman State University Mission of offering an exemplary liberal arts education to well-prepared students by providing leadership, expertise and resources to seamlessly integrate technology and information systems into the operations, instruction, research, and service endeavors of the University.

ITS will achieve this mission through:

- *support of excellence in teaching, learning, and other scholarly work;*
- *a focus on technology services that enable students to thrive, both personally and academically;*
- *strategic lifecycle management of innovative, secure, reliable, cost-effective and green technologies;*
- *responsible management and digital curation of Truman's information assets, ensuring availability and access to quality data;*
- *acquisition, development and support of campus applications and tools that expand and improve University operations;*
- *the promotion of information and technology literacy;*
- *participation in strategic planning and policy/compliance activities; and*
- *exploration of emerging trends.*

All of these activities are carried out by a customer-focused and professional information technology staff in collaboration with the ITS Governance committees and the overall University community.

Table of Contents

Summary of Activities for Academic Year 2012-2013

Major Highlights:

77 classrooms were upgraded on campus. Classroom technology is a core component of modern academic instruction. Well-designed, up-to-date classrooms and teaching technology help to set the stage for good learning environments.

Developed, piloted and implemented a custom audio-visual control system that provides uniform controls in all classrooms.

Assisted with the Nursing project course redesign effort in support of the Accelerated Bachelor's Degree in Nursing, as well NCAT and NSF grant-funded course redesign projects.

Automated classroom technology training to support on-demand access to training certification.

Partnered with Google to create an electronic map of our indoor public spaces. This information makes our campus more accessible for visitors.

Redesigned the TruView interface; the first major change since it went live in 2004.

Trained 172 faculty and 471 students in a variety of technology workshops.

Developed a new Judicial Affairs Conduct system, saving approximately $9,500 per year.

Designed and implemented a Foundation scholarship system allowing students and scholarship committees to more effectively manage all scholarship dollars.

Implemented a dashboard for Admissions, creating key performance indicators that allow them to more accurately track progress.

Installed and implemented energy management software and meters that track electrical usage, creating a baseline for determining future efficiencies.

Installed a process workflow system, positioning us for future enhancements and process efficiencies.

Approximately 64% of our students have SMARTphones, so we released a new version of our Truman mobile application for them.

Completed a wireless survey of coverage across campus, ensuring 100% wireless coverage, as well as enhanced wireless monitoring for quality assurance.

Replaced 635 campus computer systems with new zero client systems. The new systems were acquired at a 44% discount, and have an expected lifetime of 8 years. Electrical power usage was reduced by 93%, saving approximately $27,594 annually in electrical costs.

Doubled the internet bandwidth, increasing from 250Mbps to 500Mbps. The additional bandwidth also provides failover redundancy if the primary University internet connection fails.

Rewired the Data Center, resulting in a more stable environment, power redundancy, and enhanced monitoring of environmental systems.

Increased the storage and retention capabilities of our backup system.

Implemented additional environmental monitoring (temperature and humidity) and automated self-tests to ensure operability.

Upgrading all systems to Windows 7 - expect to complete by April 2014.

Upgraded Banner to the most current version of the system.

Infrastructure Improvements

Server upgrades and virtualization
- Upgraded the residence hall perimeter access server and system

Data Storage and Backups
- Completely rewired the McClain Data Center, and improved the data backup processes.
- Upgraded the disk infrastructure used by many of our application systems
- Implemented backup processes for Google Apps data

Network and Telephone Upgrades & Installations
- Doubled our internet bandwidth speed
- Network electronic upgrades to West Campus Suites and Centennial
- Completed network installations for Centennial, Counseling Center (as new residence hall), General Services, and Barnett (as part of their construction projects), with wireless access points added to all of these locations
- Completed telephone, network, and computer moves for the University Press, Counseling Center, Psychology and McClain projects
- Piloted VoIP (voice over IP) phone system as possible University replacement
- Researched and selected a new cable television service provider
- Analyzed and recommended a new cell phone strategy for campus

Security Systems
- Added network identification and authentication to the wired network, resulting in greater network segmentation for proper system security

Summary of Activities for Academic Year 2012-2013 (continued)

Maintain & Improve Physical Learning Spaces

Complete Classroom Builds – These rooms were either newly constructed spaces, or had complete overhauls to the academic technology in the room.
1- A-level: *(teaching console, data projector, console computer, digital document camera, dedicated laptop connection)*
2 - B-level: *(teaching console, data projector, console computer, digital document camera, dedicated laptop connection + amp and room speakers)*
2 - C-level: *(teaching console, data projector, console computer, digital document camera, dedicated laptop connection + amp and room speakers + DVD/VCR/TV Tuner, SMART Board or Sympodium, Panopto Course Capture System and A/V/T push button control panel at console)*
3 - Specialty Rooms: Two large computer classrooms (with 48 and 57 systems) were installed in Violette and Barnett, and a research/classroom was upgraded in Barnett

Classroom Improvements - Many rooms had targeted improvements on a smaller scale
- New white boards – 20 Violette Hall classrooms
- Six classrooms were upgraded with new projectors and AV control systems
- Installed a web-based audio/visual control system in 75 classrooms as a pilot in the Fall semester

Improvements and Support for Instruction

- Completed the Blackboard upgrade (database, application patches and hardware)
- Preventative maintenance completed on all classrooms
- All of the classroom console software was upgraded, along with the public lab software
- Worked with the HES units to redesign three online courses as part of the Accelerated Bachelor's Degree in Nursing
- Created a training portal for various technology tools
- Assisted in the development of the Online Strategic Plan (in review with the Provost)
- Designed and delivered 18 Lunch-n-Learn workshops on a variety of teaching and learning technology topics throughout the year
- Upgraded the lecture capture system
- Researched and selected a projector and whiteboard that functions as an interactive board (similar to a SMARTBoard)
- Delivered the Ready, Set, Click! course to 18 faculty teaching fully online
- Working on the cutover of VHS to DVD formats
- Worked with the Truman Institute on summer online course grants
- Delivered 20 workshops for students on a variety of technology tools

Information Systems Improvements

- Banner and DegreeWorks upgrades were completed
- Completely re-wrote applications to manage JBA and other Truman Institute Academy programs
- Implemented Argos, a new dashboard tool, which was initially used for Admissions dashboards
- Implemented Digital Measures to assist with program reviews, departmental support, and accreditation
- Implemented a web-based software application to monitor classroom projectors
- Released new mobile applications for Apple iOS and Android systems
- Released new reports for University Assessment (5 year program review data)
- Developed a process for storing and updating emergency contact information
- Redesigned the TruView interface
- Partnered with Google on an indoor mapping project
- Upgraded the classroom/space management system
- Installed new financial aid and enrollment management system
- Completed Banner social security number masking project
- Upgraded the relationship management system
- Upgraded the loan management system
- Installed the Kuali eDocLite system for workflow management
- Installed and implemented energy monitoring system
- Developed a new Foundation scholarship awarding system
- Implemented the hosted Foundation accounting application
- Implemented new online application for non-degree seeking students
- Implemented a benefits enrollment system
- Supported the STAMATS marketing project
- Upgraded the eCommerce system
- Developed a Judicial Affairs Conduct system

Workstation Replacements and Upgrades

- Completed the upgrade of faculty and staff workstations on campus
- Replaced 635 lab and classroom machines with zero-clients and virtual desktop applications
- Upgraded all classroom and public lab systems to Windows 7
- Reconfigured all Macintosh systems to use the central system for single sign-on to campus services

Campus Venue Improvements

- Completed the sound system upgrade at Pershing Arena
- Upgraded several conference rooms with additional technology features

Compliance Activities

- Co-sponsored a campus-wide copyright workshop with the Library
- Automated the FERPA data release process

Summary of Activities for Academic Year 2012-2013 (continued)

SUPPORT SERVICES

Service Center:
Requests for Assistance
8,249

Supported Public and General Use Workstations
1,099

Items of Equipment Loaned
1,904

Supported Faculty, Staff & Research Workstations
1,493

Telephone Operator Requests
35,456

Supported Printers
382

Number of Faculty, Staff and Students Supported
7,083

TECHNOLOGY INFRASTRUCTURE

100%
Wireless Coverage

Physical Servers
33

Network Data Ports
11,500+

Virtual Servers
92

Number of Wireless Access Points
512

Internet Bandwidth Speed
500 Mbps

450 Service Items Monitored for Up-Time and Quality *Every Second*

DID YOU KNOW?

700+ *Number of Hosted Websites*

Number of Faculty Workshop Attendees
172

Number of Student Workshop Attendees
471

$14.7M *Accepted via Online Payments*

Unique Visitors to Truman Home Page   **371,671**

EDUCATIONAL TECHNOLOGY SERVICES

Number of Classrooms
181

63 - *A Level Rooms*
71 - *B Level Rooms*
14 - *C Level Rooms*
33 - *Specialty Rooms*

136 have console computers

Blackboard Users
20,046
(monthly average)

Number of Active Blackboard Courses
1,289 - *Fall*
1,331 - *Spring*

Outgoing Phone Calls
333,129

Total Phone Lines
1,393

Number of Faculty & Staff Accounts
1,164

Number of Student Accounts
7,464

Number of Emails Delivered Daily (on Average)
100,000+

Number of User or Departmental Email Accounts
63,578

PROJECTS & ORGANIZATION

Projects Completed
114

Active Projects
194

Financials
Total IT spending as a % of Truman budget
3.7%

25 *Full-time Staff*

77 *Student Staff*

Total IT spending by institutional headcount (students, faculty, and staff)
$ 480

ITS Organization - Who We Are

Information Technology Services consists of four major functional units:

Learning Technology Services is led by Diane Richmond and helps faculty enrich the educational experience of students through wise use of technology by providing classrooms, labs, courseware, and specialized services. Through a training program, the Learning Technologies unit provides faculty and students with the skills they need to be academically successful.

Infrastructure Services is led by Jim McNabb and includes several teams: the Desktop/Classroom Support Team, the Service Management Team, and the Systems & Networking Team. These teams provide support for individuals in their offices, technology in the classrooms, the Help Desk, telephone services, the equipment checkout program and core infrastructure services such as managing the data center, maintaining the university servers, network connectivity, email and internet access.

- Systems & Networking is responsible for the deployment and maintenance of the technical infrastructure and for providing production monitoring and support for the University's core business systems. This includes oversight of the data center, and campus-wide server management (including planned vulnerability scans). The team also provides services and support for campus-wide voice and data network planning, procurement, management, security, and infrastructure. This includes wired and wireless access in all buildings, network monitoring, and jack activation and repair.
- Desktop/Classroom Support provides technical support for technology in the classrooms, and coordinates the design, installation, and maintenance of technology systems in these rooms. The team also provides technical desktop support for all faculty, staff and public workstations on campus.
- Service Management provides a high level of service to students, faculty and staff, and does this through individual consulting, help desk, and overall responsibility for the problem reporting and service request system.

Web Integration Services is led by Greg Marshall and is responsible for all of the services needed to create campus/departmental websites. The unit also offers web development and database services for the Truman campus, and is the primary support for the content management system, campus portal (TruView), mobile applications, and Google analytics.

Administrative Computing is led by Tammy Roberts and is responsible for the implementation, operation, maintenance and evolution of the University's administrative and academic systems.   This unit works with the University to plan, acquire, develop, and maintain core operational and student support systems. It consults with University clients on the re-design of business processes, and the application of technology to facilitate and support operational change. The Administrative Computing unit works to appropriately permit access to University data, and provides leadership in the research and development of digital library initiatives. This unit also provides project management leadership for Information Technology Services efforts.

ITS Organization – What We Do

Support for the Technology Infrastructure	Support for Information Systems

Support for the Technology Infrastructure

We provide bandwidth support and management that many of our academic and administrative systems rely on, including:
- Management of on campus network services provided through support for DNS, DHCP, routers/switch maintenance, domain management, wired data ports, and wireless access
- Off-campus internet access provided through MOREnet and Bluebird

We provide a secure environment for our academic and administrative systems through:
- Management of firewalls, anti-virus scans, and malware detection
- Identity and role management, including authentication and authorization services
- Ensuring systems adhere to FERPA, DMCA, Copyright, HIPAA, SOX, GLBA, PCI and other state and federal regulations

We provide support for emergency services:
- 911 services
- Emergency notification system (electronic mail/text messaging)
- Code Blue telephone line support

We provide printing services for users

We support the physical environment for our academic and administrative systems:
- Data Center Facility – Manage electrical power, physical security, and environmental controls
- Inside and outside cable plant maintenance (including building wiring closets)
- HVAC systems that are controlled over the network
- Security and fire alarm systems
- Electrical meters on the network

We provide data management services for our academic and administrative systems, including:
- Large-scale storage device management
- Database management & tuning
- Data and backup services for supported servers
- Backup services for user workstations

We provide support and administration of central servers for our academic and administrative systems, including:
- System administration and tuning
- Proactive server monitoring
- Operating system upgrades
- Security patch management
- Hardware and software upgrades, maintenance and system planning

Support for Information Systems

We maintain and support university-wide support systems, and are responsible for:
- the payroll system for faculty, staff and students
- the electronic registration functions for the University
- the systems used for recruiting and matriculation, including customer relationship management systems
- student academic records including academic history, transcripts, grades, and academic standing
- student academic advising including degree audit and transfer articulation
- the ID Card system (which provides access to meal services, library services, student recreational center, and perimeter access)
- University academic records including faculty load, course records, catalog, and curriculum
- financial records, including the University budget, accounts payable/ receivable, purchasing, and grants
- student housing records
- electronic documents
- campus commerce records including online bill payment for students and their authorized users and secure online payments for campus web applications
- the academic classroom and event schedule records
- student conduct and judicial sanctions records
- the systems used for alumni relations, donor management, and fundraising
- student campus life records including housing, study abroad, internships, student organization memberships, and co-curricular (out of classroom) experiences
- financial aid records, including scholarships, institutional and work study student employment, and loans
- employee records in accordance with state and federal laws
- the campus portal and self-service applications
- the development and deployment of mobile applications

We provide specialized services in support of university systems, including:
- Training
- Specialized equipment support – cashiering systems, scanners, special forms printing

Support for Academic Achievement

We support systems our faculty rely on to deliver instruction, such as:
- the course management system (Blackboard) and collaborative module plug-ins
- test compilation services (i.e., optical test scanning service)

We support systems our students rely on for instruction, including:
- Printing
- Student computing labs
- Specialized laboratory software

We provide key services in support of academic pursuits:
- Personal and Shared Storage
- Training

We provide targeted support for video delivery, storage, support, retention and editing for systems delivered using video streaming services and TruTube

We support and maintain the technology used in our classrooms, including:
- Classroom capture
- Presentation and sound support for A, B and C level classrooms

We support and maintain access to university web sites (for structured and unstructured course materials)

We hold workshops and seminars for faculty on strategies to teach with technology

Professional Staff with the Knowledge and Skills to Ensure An Efficient and Effective Technology Experience

- Web application analysis and development
- Student mentoring in technology fields
- Academic course development and academic materials production
- Network and cable plant engineering services
- Help Desk services
- System Administration
- Security scanning
- System tuning, performance and monitoring
- Database administration

- Computing and printing equipment asset management
- Technology asset management
- Application system analysis, design, and development
- Technology Purchasing Services: Investigation, research, request for proposals, vendor review
- Technology Vendor Management - consulting and interface
- Workstation installation and support
- General IT Consulting
- Sound and video engineering

Support for Personal Productivity

We provide a way for faculty, staff and students to communicate with each other:
- Electronic Mail – Exchange & Gmail
- Telephone Services – handsets, voicemail, and dial-tone
- Guidance on mobile communications support (cell phone models and support the enterprise BlackBerry service)
- Cable television services
- Targeted videoconference support

We provide user support for:
- Truman-owned workstations
- Personally-owned student workstations
- Personal digital device integration
- Targeted software application support

Support for Websites & Web Delivery Systems

We develop, support and maintain university web sites

We provide design, development and implementation services for departmental and campus-wide web delivery and applications

We support the development and deployment of mobile websites

We maintain the campus search engine and provide analytical information on web traffic

Support for Technology Planning and Performance

We provide frameworks that guide the development of technology strategies and their tactical implementations (including budget management)

We provide guidance for the IT governance structure -- with oversight of technology policies, resource management and prioritization

We provide project management services to ensure appropriate resource utilization

We support regulatory compliance, assessment, reporting, and survey data

How We Function - ITS Assessment

Educause Core Data Survey

Master's Institutions
(Carnegie Basic Classification 2000)
Number of 2012 CDS participants: 216

In the summer of 2012, more than 2,700 institutions were invited to contribute data to the EDUCAUSE Core Data Service (CDS). This information summarizes data from a subset of responding institutions. Some publicly available data from the Integrated Postsecondary Education Data System (IPEDS, www.nces.ed.gov/ipeds/) are used in calculating metrics. Reported statistics are either an estimated proportion of the population or an estimated median (rather than a mean).

IT FINANCING
(3.7%) 5% Total central IT spending as percentage of institutional budget
($4,384) $5,046 Total central IT spending per institutional employee (faculty & staff)
($548) $779 Total central IT spending per institutional FTE (students/faculty/staff)
(2%) 6% Percentage of institutional IT spending outside central IT
62% Institutions with a designated student technology fee
$300 Annualized student technology fee

IT STAFFING
☒ 49% Institutions whose highest-ranking IT officer is on presidential cabinet
(95%) 92% Central IT staff as a percentage of total institutional IT staff
(75%) 22% Student workers as a percentage of central IT staff
(3%) 5% Central IT staff as a percentage of institutional employees (faculty and staff)
5% Institutions that have outsourced most of their IT staff
($962) $749 Spending per central IT staff on training/conferences/seminars and travel

EDUCATIONAL TECHNOLOGY SERVICES
Most common teaching and learning support services:
☒ • Faculty individual training in use of educational technology upon request (99%)
☒ • Course/learning management system operation (99%)
☒ • LMS training and support for faculty (99%)
Most common capabilities in centrally scheduled classrooms:
    Wireless Internet connectivity (89%) **(100%)**
    Wired Internet connection to instructor station (85%) **(100%)**
    Video projector(s) (84%) **(100%)**
    Computer(s) for instructor (73%) **(99%)**
    Instructor docking station/connectors for laptop computer (68%) **(99%)**
    Document Camera **(100%)** – *this is a unique Truman indicator*

DATA CENTERS
25% Institutions using commercial data center services
23% Institutions participating in cross-institutional data center hosting
☒ 63% Data center occupancy based on square footage
☒ 72% Data center occupancy based on cooling capacity
☒ 61% Servers that are virtualized
☒ 88% Institutions using public-grid power as a primary power source for data centers
1% Institutions using on-site power as a primary power source for data centers
24% Institutions that tested data center disaster recovery plans in past year
12% Institutions with no data center disaster recovery plans in place

SUPPORT SERVICES
(454.6) 267 Institutionally owned computers per IT workstation support staff FTE
4% Institutions providing all students with a desktop or laptop computer
☒ 63% Institutions providing computer labs in student housing
☒ 73% Institutions offering assistance with mobile apps for faculty and staff
☒ 64% Institutions offering assistance with mobile apps for students
☒ 88% Institutions offering hardware repair for faculty and staff
32% Institutions offering hardware repair for students
☒ 97% Institutions offering walk-in help desk services
☒ 75% Institutions offering help desk services via web form
34% Institutions offering help desk services via instant message
5% Institutions offering help desk services via text message
☒ 95% Institutions offering full support for smartphones (any type)
☒ 96% Institutions offering full support for iPads or other tablets
☒ 3% Institutions offering full support for e-book readers

COMMUNICATIONS INFRASTRUCTURE
(500Mbps) 390 Mbps commodity Internet capacity
☒ 98% Institutions using some method to shape bandwidth
☒ 94% Student housing with wireless in some or all rooms
(5%) 47% Proportion of wireless access points that are 802.11n
35% Institutions that have deployed or are planning to deploy IPv6
☒ 40 Hours per week the network operations center (NOC) is staffed
0.3 Voice over IP (VoIP) stations per institutional employee (faculty and staff)
☒ 70% Student housing with landlines in some or all rooms
☒ 52% Institutions that encourage students to register cell phones
44% Institutions that provide ubiquitous cell service
81% Institutions with dedicated videoconferencing or TV-quality studio

Truman statistics highlighted in purple
☒ *Indicates Truman is in agreement with/or participates in this activity*

Educause Center for Applied Research (ECAR) Student Technology Use Survey

Student behaviors are leading indicators of mainstream technology use and drive the adoption of technology used by faculty and staff. To get a better understanding of these student behaviors, Truman students participated in a nation-wide survey regarding their preferences toward technology and its use in higher education. Survey results were shared with Truman, along with information regarding the national data, and CASE (the Center for Applied Statistical Evaluation at Truman) reviewed our Truman data to see if and where it might have deviated from the national norms.

KEY FINDINGS AS IDENTIFIED BY THE REPORT

RECOMMENDATIONS

The Connected Age

For higher education, the "connected age" describes the technology-assisted hyperconnectivity of learners, faculty, and institutions to those around them.

Survey Results

National Stats:
- \>113,035 undergraduate students participated in the survey
- 251 institutions surveyed
- 7% overall response rate

Truman Stats:
- 18.7% participation
- 992 student responses
- 2.95% margin of error

Students prefer blended learning environments while beginning to experiment with MOOCs.

Students say they learn best in blended learning environments. More students are taking online-only courses, and digital badges are not well known to them.

- Provide opportunities for blended learning experiences.
- Develop a MOOC strategy.
- Educuate students about MOOCs.
- Determine the role of badges and competency-based learning.

Students are ready to use their mobile devices more for academics, and they look to institutions and instructors for opportunities and encouragement to do so.

Students hold high expectations for anytime, anywhere access to course materials and for leveraging the use of their personal digital devices inside and outside of class.

- Provide instructors with systems, support, and encouragement to put course materials online.
- Create a strategy for mobile devices in the classroom, as well as IT infrastructure barriers to use.
- Educate the campus about ways in which students say they would use their smartphones in class.
- Plan for the continued growth of students' use of Internet-capable devices on campus.
- Assess students' mobile device experiences with institutionally provided/supported services, applications, and webistes to improve services.

Students' relationship with technology is complex. They recoginize the value of technology but need guidance when it comes to better using it for academics.

Students are generally confident in their preparedness to use technology for coursework, but are interested in more "in class" guidance. Basic technologies are the most valued.

- Provide practical, hands-on technology experiences that smoothly transition from academia to the workplace.
- Students expect their instructors -- not others -- to train them to effectively use the technology required for coursework. Instructors need support, encouragement, and possibly incentives to do so.
- Improve students' "end user" experiences with institutionally provided technology resources such as the CMS and websites.
- Consider options for meeting students' expectations for uniform experiences with the CMS from course to course and from professor to professor.

Students value their privacy, and using technology to connect with them has its limits.

Students prefer to keep their social and academic lives separate, and they maintain those boundaries in their use of technology. Students prefer face-to-face interactions, email, and the CMS as ways to communicate more with their instructors.

- Respect students' boundaries for privacy by being aware that technology has its limitations for engaging students.
- Approach learner analytics purposefully and thoughtfully by adhering to information privacy principles.
- Communicate beneficial applications of learner analytics to students in innovative ways.
- Don't underestimate the value students place on face-to-face time with instructors. Technology can be used to make connections, but it should not supplant face-to-face interaction.

Educause Center for Applied Research (ECAR) Student Technology Use Survey

Students are ready to use their mobile devices more for academics, and they look to institutions and instructors for opportunities and encouragement to do so.
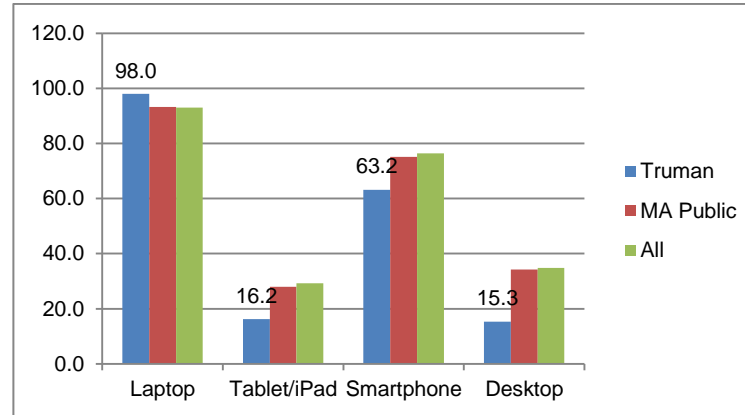
**National Outcomes**
Top 5 in-class use for smartphones:
1. To look up information
2. To photograph information
3. To access digital resources
4. To record my instructors
5. To participate in activities

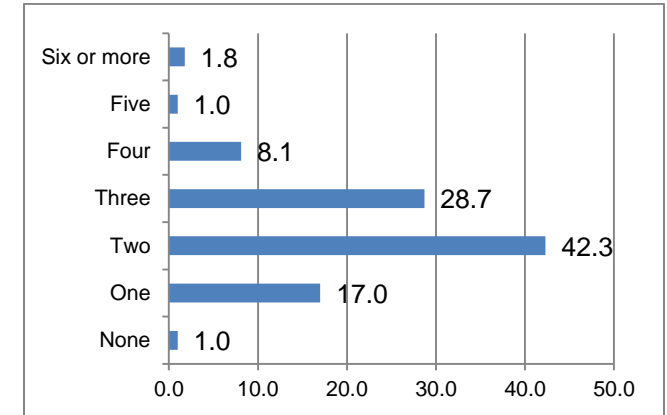**Students' in-class Bring-Your-Own-Device experience:**
• **74%** say smartphones are banned/discouraged
• **30%** say tablets are banned/discouraged
• **19%** say laptops are banned/discouraged

Device ownership, including Truman student responses.

Number of internet-capable devices Truman students brought to campus.

NOTE: MA Public – Carnegie Master's Public Institutions

Students prefer blended learning environments while beginning to experiment with MOOCs.

**National Outcomes**

• **63%** of students say they prefer blended learning classes

• **38%** of students are taking about ½ or more of their classes as blended learning

• **41%** of students said they took a traditional online course in the past year

Of those students with a preference, 60.7% of Truman students prefer blended learning environments.
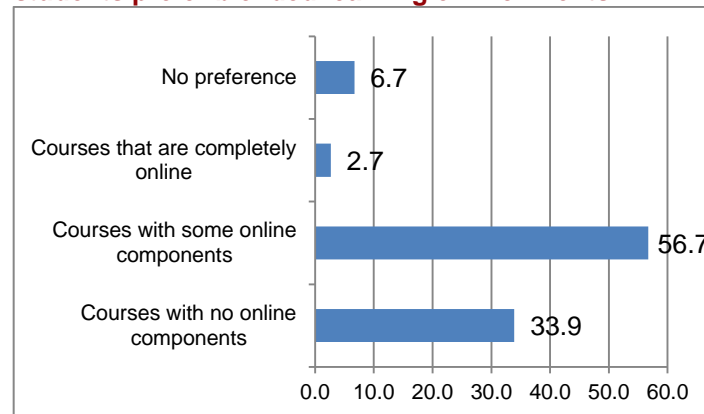
37.5% of Truman students are taking ½ or more of their classes as blended learning.
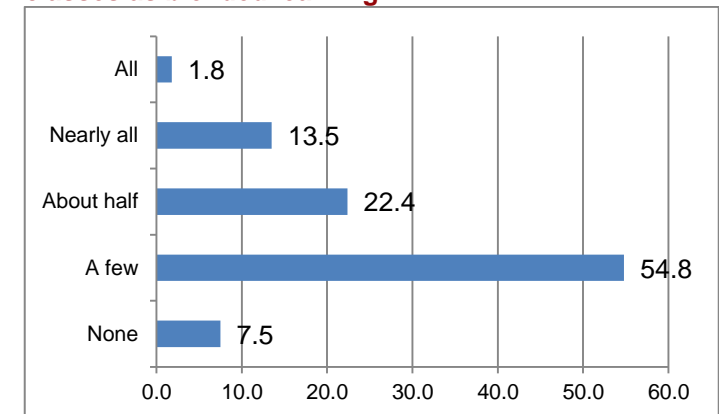
Educause Center for Applied Research (ECAR) Student Technology Use Survey

Students' relationship with technology is complex – they recognize its value but still need guidance when it comes to better usage for academics.

National Outcomes
Technology helps me:
… achieve my academic outcomes (76%)
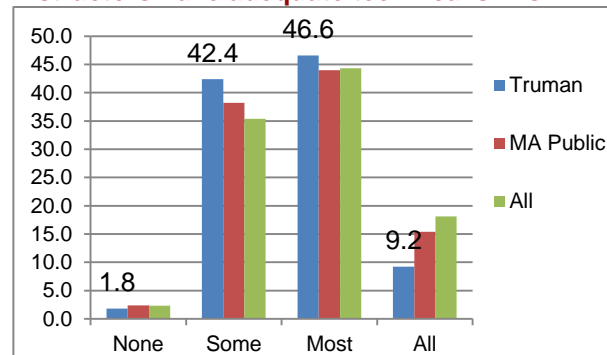… prepare for future educational plans (76%)
… prepare for the workplace (61%)

2/3 of students said most/all of their instructors:
… have adequate skills
… use technology effectively

55.8% of Truman students believe their instructors have adequate technical skills.

53.9% of Truman students believe their instructors effectively use technology.
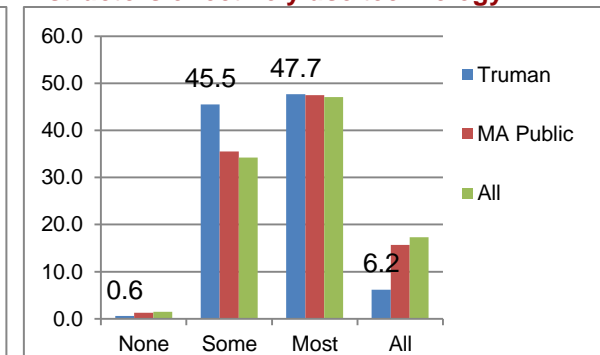
It's important for students to be better skilled at using technologies, and they want to learn more.
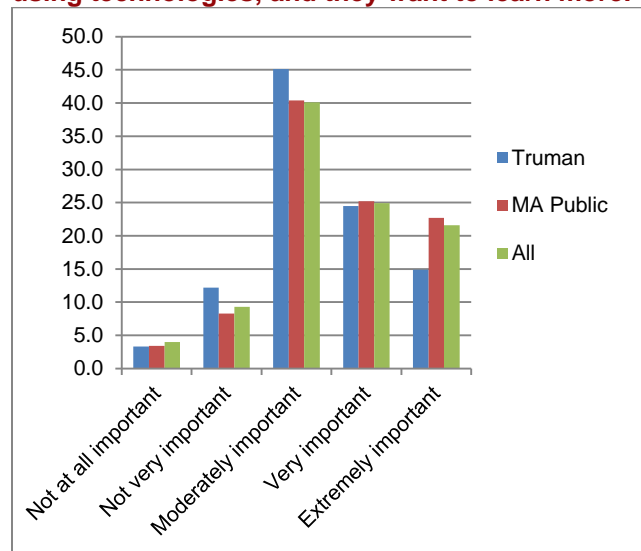
42.9% of Truman students prefer getting their technology training through web resources.
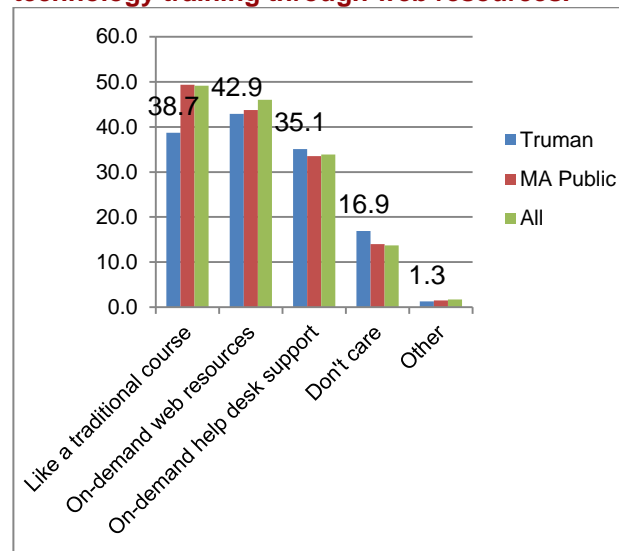
54.7% of Truman students prefer to get technology training from their instructors.
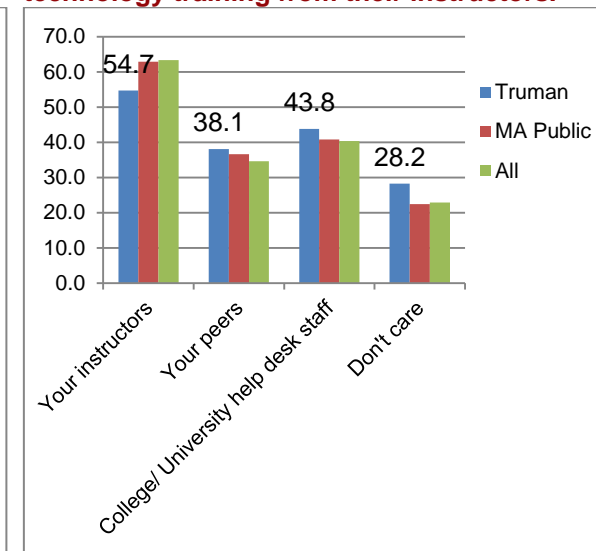
Students value their privacy, and using technology to connect with them has its limits.

National Outcomes
Technology makes me feel more connected to;
• The institution (64%)
• Professors (60%)
• Other students (53%)

60% of students prefer to keep their academic and social lives separate.
Note: This is more important to older students than younger students.

How We Function - Technology Funding and Expenditures

Operational Budget

The IT budget is allocated across a variety of services that support the mission of Truman State University. The chart to the right shows how the operational funds are expended by service area, and the information below outlines the representative software and hardware maintenance expenditures across all service areas.

Software & Hardware Maintenance Costs as a Percentage of the Total Operational Budget
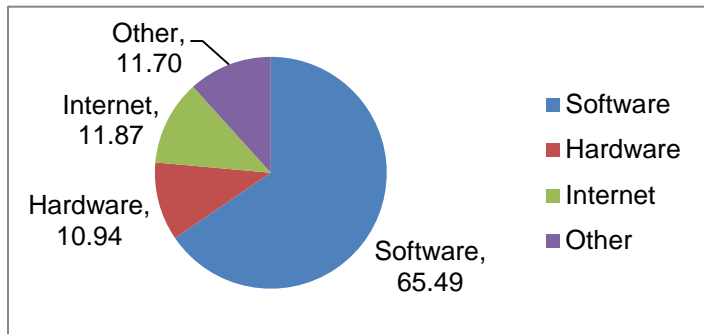
Staffing

The operational costs shown include the costs for student salaries, but not the costs for full-time staff salaries. The total staffing for information technology services includes:

- 25 full-time staff
- 77 students

IT Operational Expenditures by Service (as a Percentage)

Legend:
- Enterprise Applications
- Systems & Networking
- Security
- Capital Funds
- Administration
- Academic Technology
- Web Services
- IT Service Center
- Workstation Management
- Student Technology (Auxiliary)

Enterprise Applications, 25.69
Student Technology (Auxiliary), 14.02
Workstation Management, 9.76
IT Service Center, 5.85
Web Services, 1.44
Academic Technology, 13.07
Administration, 2.43
Capital Funds, 13.70
Security , 0.61
Systems & Networking, 13.43

Notes:

- The majority of the student technology auxiliary funds were carried over to fiscal year 2013 to cover the costs associated with additional bandwidth for the residence halls.
- Approximately $265,657 in telephone back-charges are not represented on this chart as an IT operational cost.

How We Function - IT Governance Structure

IT governance is concerned with who makes which decisions, who provides inputs and analyzes the issues, who sets priorities, and who settles disputes when there is no clear consensus. IT governance is concerned with the whole IT enterprise, not just the central IT organization.

IT governance is ultimately concerned with the ability to conduct institution-wide IT activities:

1. Can we develop important IT policies that apply throughout the institution?
2. Can we implement important IT decisions that apply throughout the institution?
3. Can we coordinate the activities of IT personnel effectively throughout the institution?

The IT Governance Model is defined as follows.

Key IT Decision Areas

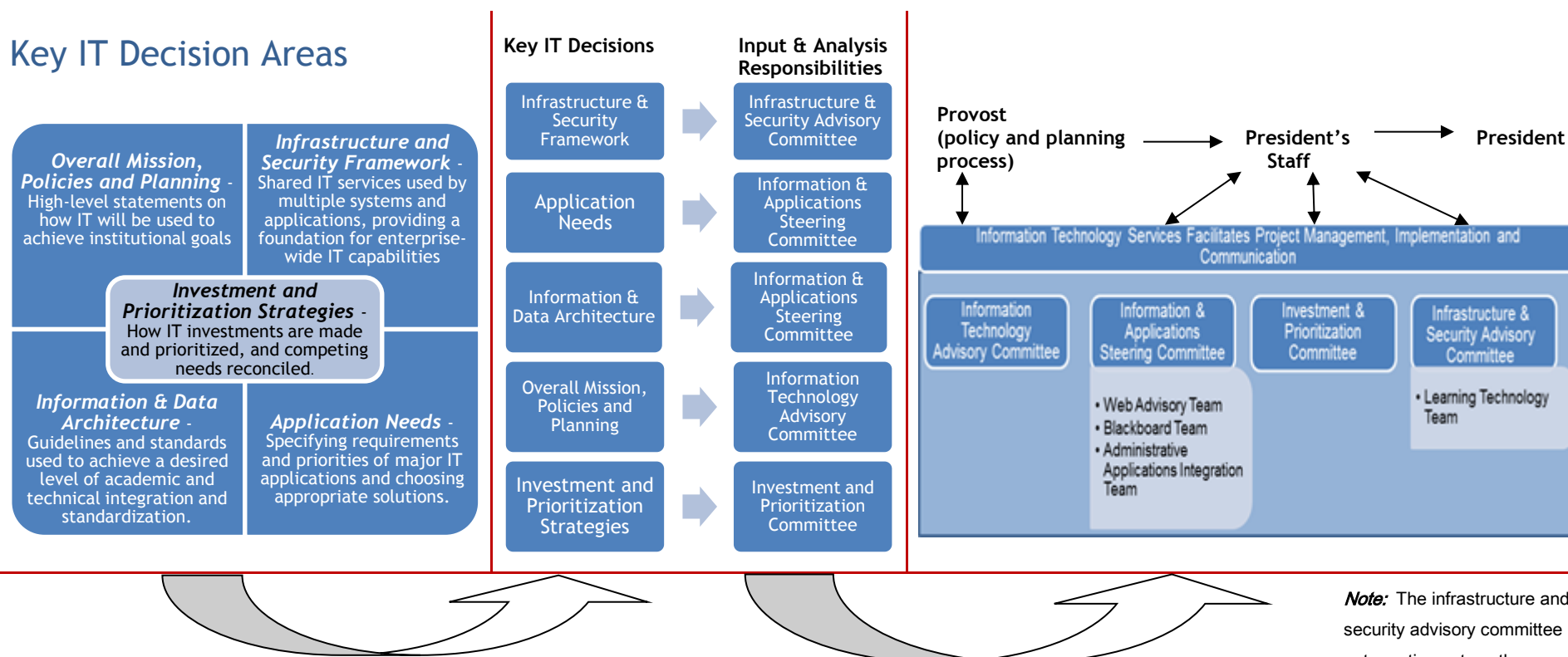**Overall Mission, Policies and Planning** - High-level statements on how IT will be used to achieve institutional goals

Infrastructure and Security Framework - Shared IT services used by multiple systems and applications, providing a foundation for enterprise-wide IT capabilities

Investment and Prioritization Strategies - How IT investments are made and prioritized, and competing needs reconciled.

Information & Data Architecture - Guidelines and standards used to achieve a desired level of academic and technical integration and standardization.

Application Needs - Specifying requirements and priorities of major IT applications and choosing appropriate solutions.

Key IT Decisions

- Infrastructure & Security Framework
- Application Needs
- Information & Data Architecture
- Overall Mission, Policies and Planning
- Investment and Prioritization Strategies

Input & Analysis Responsibilities

- Infrastructure & Security Advisory Committee
- Information & Applications Steering Committee
- Information & Applications Steering Committee
- Information Technology Advisory Committee
- Investment and Prioritization Committee

Provost (policy and planning process) → President's Staff → President

Information Technology Services Facilitates Project Management, Implementation and Communication

- Information Technology Advisory Committee
- Information & Applications Steering Committee
  - Web Advisory Team
  - Blackboard Team
  - Administrative Applications Integration Team
- Investment & Prioritization Committee
- Infrastructure & Security Advisory Committee
  - Learning Technology Team

Note: The Student Senate had a standing committee to deal with technology issues, called the Student Technology Improvement Committee, but this committee was abolished in 2011-2012 to be replaced by special topic groups as needed.

Note: The infrastructure and security advisory committee is not meeting yet, so the Director of Learning Technologies is attending in the interim.

Services and Support – By the Numbers

Support for Teaching and Other Scholarly Activities	Technology Infrastructure	Information Systems and Institutional Data	General Campus Computing

Technology in the Classroom

All classrooms have Internet access and a strong wireless signal. There are currently 181 rooms used for instruction, with 148 equipped with one of our technology profiles:
- 63 A-level rooms
- 71 B-level rooms
- 14 C-level rooms
- 33 special rooms – Includes studios, rehearsal rooms, tutoring rooms, laboratories, etc.
- 136 classrooms with console computers

Student Computing Labs
- ~1099 workstations available across the campuses in public and academic labs

Course Management System

Courses Active in Blackboard for the year:
- 120 – summer average
- 1289 – Fall average
- 1331 – Spring average

Blackboard Usage:
- 53.5% of faculty used Blackboard for Summer
- 69.8% of faculty used Blackboard for Fall
- 68.6% of faculty used Blackboard for Spring

Average Monthly Usage:
20,046 average total users per month, of which:
- 16,527 were students
- 818 were instructors

Blackboard Mobile – monthly averages:
- 425 unique Blackboard mobile users
- 3,718 total mobile logins
iPhone/iOS: 85.8% - Android: 14.1% -Other: >1%

Teaching with Technology
- 22 local workshops conducted for faculty on a variety of technology tools
- 4 Ready, Set, Click! Courses offered
- 2 C-level orientation sessions taught
- 20 workshops for students

Research Computing
- File Storage: Highly robust and redundant storage, archive and backup services

Data Center and Internet Bandwidth
- ~1,218 sq ft of space in 2 Data Centers
- 125kw of total power usage
- 33 physical servers
- 92 virtual servers
- 500Mbs connection to the Internet

File Storage and Backup Services
- 64.3 terabytes central file storage available
- 145 terabytes backup storage available

Service Monitoring

Services are being monitored in real-time to ensure system and service availability -
- 1,580 monitored systems; and
- 60,000 monitored data points; and
- 20,800 monitoring rules; results in
     450 items monitored every second

Telephone System
- 1,393 Phone lines in use
A total of 333,129 outgoing calls from Truman, consisting of:
- 109,228 Local outgoing calls
- 222,901 Long Distance Auth Code Calls

Network Connections & Access
- **>11,500** data ports for network access
- 512 wireless access points currently installed and maintained to support ~8,600 users
- **100%** of campus covered by wireless
- >75 IT equipment closets in campus buildings

Network and Telephone Installation and Maintenance
- 237 Phone, data and cable TV installations, moves or repairs

Information Security
- 137 enterprise systems or switches are regularly scanned for vulnerabilities on a weekly or monthly basis

Identity Management:
- 1,164 active faculty/staff user accounts
- 7,464 active student user accounts

Administrative Systems
- 237 Banner users on campus
- >100 applications and databases supported across 26 servers
- 310,256 online registration transactions
- 257,482 web withdrawals
- 22,239 administrative registrations
- 139,117 Banner reports run through job submission

eCommerce:
- >$14.7M was accepted via online payments, of which $13.7M was for tuition, housing, and fees
- 93.6% of eCommerce traffic is bill payment, with 10% paid with credit card and 90% with electronic checks

Email
63,578 user/departmental email accounts:
- 1,634 mailboxes on Exchange
- 55,272 mailboxes on Google Apps

Processing
- >100,000 central email messages delivered daily (on average)
- >350,000 messages blocked daily as SPAM

Web Development Services
- ~ 125 applications and databases supported across 9 servers

Web Content Services
- ~700 Web sites hosted
- 138 Average concurrent logins to TruView (reaching a maximum of 853 concurrent logins)
- 371,671 unique visitors to the Truman home page every month (monthly average)

Mobile Applications
Mobile application for iOS & Android
- 2,494 iOS Mobile Apps downloaded
- 1,631 Android Mobile Apps downloaded

Student Technology Profile

Truman students are connected:
- 98% own laptops; 99.9% have computers
- 16.2% own tablets
- 16.4% own dedicated e-readers
- 63.6% own smartphones

IT Service Center
Staffed 102 hours per week
8,249 Requests for assistance which included:
- 6,111 phone calls (469 classroom 4911 calls)
- 2,138 walk-in requests for assistance

1,904 Requests to loan equipment, including:
- 324 items checked out by Faculty/Staff
- 1,580 items checked out by Students

Telephone Operator Requests for Information
- 35,456 inbound requests for assistance
- 13,049 outbound requests for assistance
- 3,402 calls serviced after hours using the automated attendant

Software
- Manage ~104 software contracts (that are reviewed on an annual basis)
- 74 software applications installed and supported on public workstations, 16 apps for specialized classrooms
- 39 software applications installed and supported on faculty/staff workstations

Desktop/Personal Workstations
- ~1,493 Workstations used for faculty, staff, research labs and offices.

Printing
Provide support for network printers
- 331 printers for faculty and staff
- 58 printers for students

Project Management & Governance
- 194 major projects, of which 114 were completed during this timeframe
- 6 active IT governance groups

Services and Support – Classroom Equipment Standards

The technologies identified in the chart to the right are the *minimum* baseline technologies for each type of room classification.		C-Level Rooms	B-Level Rooms		A-Level Rooms
		C	B+	B	A
		High Tech - SMART	**Mid Tech - Computers**	**Mid Tech**	**Tech Ready**
Video/Data Projector	Projector (wide screen) and remote - or - LCD panel	X	X	X	X
Projection Screen		some	X	X	X
AV Control Program	Extron/Chumby touch panel -or- software control panel	X	X	X	X
Teaching Console	Space for electronic devices	X	X	X	X
Classroom Capture	Classroom capture software	X	*	*	*
	Classroom capture video camera & confidence monitor	X			
	Voice tracking microphones	X			
	Webcam and Microphone		*	*	*
Laptop Connection		X	X	X	X
Console Computer		X	X	X	X
Cable Television	Cable TV tuner in special DVD/VHS player	X			
DVD/VHS Playback	DVD player in computer (must convert VHS to DVD)	see cable TV	X	X	X
	DVD/VHS player (use only existing inventory)	twilight	twilight	twilight	twilight
Document Display	Document camera	X	X	X	X
Interactive Whiteboard	SMART Board or Sympodium	X			
	SMARTBoard Airliner slate	on request			
Writing Boards	Dry erase white boards and/or chalk boards	X	X	X	X
Sound Amplification	Amplifier	X	X	X	
	External speakers	X	X	X	
Student Workstations	Group work - Thin client PCs in BT, VH and BH	X			
	Individual workstations		X		
Network Access	Wireless access in room	X	X	X	X
Telephone	Phone hotline for support (x4911)	phone in room	use cell phone	use cell phone	use cell phone

* *Items Available on Request - Microphones, Webcams, Television Sets, SMARTBoard Airliner Slate, Classroom Netbooks for students*

NOTE: Features marked as 'twilight' will be phased out in the coming years, with other alternatives employed to provide these same functions.

Services and Support – Blackboard Usage and Metrics

School	Department	Summer 2012			Fall 2012			Spring 2013			Academic Year 2012-2013			Change from previous year
		Blackboard Active Instructor with Banner Course	Banner Active Instructors	% Using Blackboard	Blackboard Active Instructor with Banner Course	Banner Active Instructors	% Using Blackboard	Blackboard Active Instructor with Banner Course	Banner Active Instructors	% Using Blackboard	Blackboard Active Instructor with Banner Course	Banner Active Instructors	% Using Blackboard	
School of Arts & Letters	Art	1	4	25.00	8	15	53.33	7	13	53.85	8	15	53.33	⬇
	Classical & Modern Languages	2	12	16.67	22	37	59.46	22	36	61.11	23	37	62.16	⬆
	English & Linguistics	6	10	60.00	34	42	80.95	34	41	82.93	36	43	83.72	⬆
	Music	2	11	18.18	15	29	51.72	12	27	44.44	15	29	51.72	⬆
	Theatre	1	2	50.00	3	5	60.00	3	5	60.00	4	6	66.67	⬆
Totals for Arts & Letters		12	39	30.77	82	128	64.06	78	122	63.93	86	130	66.15	
School of Business	Accounting	1	1	100.00	6	8	75.00	9	9	100.00	9	9	100.00	⬌
	Business Administration	8	10	80.00	17	20	85.00	17	20	85.00	17	20	85.00	⬌
Totals for Business		9	11	81.82	23	28	82.14	26	29	89.66	26	29	89.66	
School of Science & Mathematics	Agricultural Science	0	3	0.00	4	7	57.14	4	6	66.67	4	7	57.14	⬇
	Biology	2	9	22.22	20	25	80.00	21	26	80.77	21	27	77.78	⬇
	Chemistry	1	8	12.50	15	18	83.33	13	19	68.42	16	19	84.21	⬇
	Mathematics/ Computer Science	3	10	30.00	17	34	50.00	17	34	50.00	18	35	51.43	⬆
	Physics	2	3	66.67	5	8	62.50	4	7	57.14	5	8	62.50	⬆
Totals for Science & Mathematics		8	33	24.24	61	92	66.30	59	92	64.13	64	96	66.67	

School	Department	Summer 2012			Fall 2012			Spring 2013			Academic Year 2012-2013			Change from previous year
		Blackboard Active Instructor with Banner Course	Banner Active Instructors	% Using Blackboard	Blackboard Active Instructor with Banner Course	Banner Active Instructors	% Using Blackboard	Blackboard Active Instructor with Banner Course	Banner Active Instructors	% Using Blackboard	Blackboard Active Instructor with Banner Course	Banner Active Instructors	% Using Blackboard	
School of Social & Cultural Studies	Society & Environment	1	2	50.00	5	5	100.00	6	6	100.00	6	6	100.00	⬆
	Communication	4	6	66.67	14	15	93.33	13	14	92.86	14	15	93.33	⬇
	Economics	7	8	87.50	7	8	87.50	7	7	100.00	7	8	87.50	⬇
	History	2	5	40.00	10	14	71.43	9	13	69.23	10	14	71.43	⬇
	Justice Systems	2	2	100.00	5	8	62.50	7	8	87.50	8	9	88.89	⬆
	Military Science	0	0	0.00	4	5	80.00	3	5	60.00	4	5	80.00	⬆
	Philosophy & Religion	2	3	66.67	8	11	72.73	8	11	72.73	8	11	72.73	⬇
	Political Science	1	2	50.00	6	7	85.71	6	7	85.71	6	7	85.71	⬇
	Psychology	6	8	75.00	10	14	71.43	10	13	76.92	12	15	80.00	⬆
Totals for Social & Cultural Studies		25	36	69.44	69	87	79.31	69	84	82.14	75	90	83.33	
School of Health Sciences & Education	Communication Disorders	7	7	100.00	10	11	90.91	10	11	90.91	11	11	100.00	⬆
	Education	8	9	88.89	11	17	64.71	12	17	70.59	14	21	66.67	⬇
	Health & Exercise Science	10	12	83.33	21	36	58.33	23	46	50.00	23	49	46.94	⬇
	Nursing	1	1	100.00	12	13	92.31	11	12	91.67	12	13	92.31	⬆
	Professional Development	0	1	0.00	0	3	0.00	0	3	0.00	0	3	0.00	⬇
Totals for Health Sciences & Education		26	30	86.67	54	80	67.50	56	89	62.92	60	97	61.86	
Graduate Office (LDRS)		0	0	0.00	0	1	0.00	1	1	100.00	1	1	100.00	➡
Library & Museums		0	0	0.00	3	4	75.00	3	4	75.00	3	4	75.00	⬇
New Student Program		0	0	0.00	8	9	88.89	2	7	28.57	8	10	80.00	⬇
Truman Institute (JBA)		0	1	0.00	0	1	0.00	0	1	0.00	0	1	0.00	
Inter-Divisional (IDSM)		1	1	100.00	1	1	100.00	1	1	100.00	1	1	100.00	➡
Overall Totals:		81	151	53.64	301	431	69.84	295	430	68.60	324	459	70.59	

Services and Support – Applications Supported

Enterprise Applications

Banner
- Internet Native Banner (INB)
- Self-Service Banner (SSB)
- Banner Relationship Management (BRM)
- BRM Mail
- CLEAN_Address
- FM/Calc

Blackboard
- Blackboard database/application

Evisions
- MAPS
- Intellicheck
- FormFusion
- Archiver
- Argos

Banner Document Management System (BDMS)
- Desktop viewing
- Web Access
- Image Capture

Operational Data Store (ODS)
- Enterprise Data Warehouse
- Recruiting and Admissions Performance (RAP)
- COGNOS

TouchNet
- Payment Gateway
- Bill+Payment
- Marketplace
- Cashiering
- PayPath

DegreeWorks
- DegreeWorks application/database
- DegreeWorks web / Planner
- SureCode/Scribe/Transit

Event Management System (EMS)
- EMS Campus & VirtualEMS

- CampusCall
- Luminis (TruView)
- Campus Loan Manager
- ePrint
- Digital Measures (Faculty Mgt System)
- RAVE (Emergency texts)
- TutorTrac
- Acalog (Course Catalog)
- Mailers+4
- Titanium Scheduler (Counseling Services)
- ION Enterprise (Energy Metering System)
- Perimeter Access System
- ID Card System
- DSpace (Institutional Repository)
- Greenstone (Digital Library Collections)
- Vivature (Health Center Management)
- Conference Programmer (Residence Halls)
- Project.net (Project Mgt)
- Education Development Project
- Kuali eDoc Lite workflow management
- Network Installation Management (NIM)
- Tivoli Key Lifecycle Manager
- Hardware Management Console

Banner Integration with Other Applications
Many applications are tightly integrated with Banner (i.e., data is shared in real-time or through data files).

Web Applications

Relationship Management & Applicant Support
- Admissions Department web App
- Visitor's Guide
- Online Deposit Payment for Graduate Studies
- Study Abroad Online App
- Study Abroad Scholarship App
- ISO Online App
- Speed-E Letter
- eCards
- Newsletter System
- Alumni Contribution Form
- Alumni Info

Academic Academies
- Truman Institute App
- Truman Institute Payments
- McNair Program Apps
- McNair Summer Research Institute

Personnel Support
- Search Committee Process
- iClearances
- TruPositions
- Student Timecards

Online Payment Support
- Online Stores
- Online Loan Payments
- Counseling Service Payment
- Art Payments
- Mailroom backcharge

Misc Support Programs
- Auction Invoice
- Staff Council Voting
- Risk Management Self-Assessment

Advising & Placement
- Placement Tests
- French Placement
- Incoming Student Worksheet
- Incoming Transfer Student Worksheet
- Advanced Placement App

Student Portfolios
- Senior Portfolio System
- HES Portfolio App
- Education MAE Portfolio

Evaluation Support
- Academic Advisor Evaluations
- Department Chair Evaluation System

General Academic Support
- School of Social & Cultural Studies Mode Review
- Theatre Production Schedule
- TruTube
- Music Library
- Course Evaluation System
- SB389 Course Evaluation

Research Programs Support
- Student Research Conference System
- Office of Student Research app
- Institutional Review Board
- Faculty Forum
- Truman State University Press
- Physics Colloquia

Internships/Service/Career
- Internships Online
- Career Center Resource Library
- Career Center Visitors
- Serve Center Volunteer Management (TruService)

Student Organizations
- Student Organizations
- Homecoming Elections
- Homecoming Parade Entry
- Student Senate Voting

Student Life
- Rec Center Activities Scheduler
- Hall Desk Software
- Conduct Hearing Evaluation Survey
- Behavioral Concern
- Student Health Center Immunization Records

Athletics
- Athletics Hall of Fame
- Football Recruiting App
- Mobile Athletic Training Competency App
- Soccer Women's Recruiting App
- Soccer Men's Recruiting
- Softball Recruiting App
- Volleyball Boosters App
- Volleyball Recruiting App
- Athletic Insurance Questionnaire

Public Safety
- Emergency Ops
- DPS Ticket Appeal
- Campus Crime Log
- DPS Threat Level
- DPS Crime Watch

Information Technology
- OTRS Reporting
- ITS Equipment Checkout
- Phone Bill Processing
- ITS Purchase Request
- Copyright Violations
- PML Guest Accounts
- Classroom A/V Control System
- Mobile Applications for iOS and Android
- Wireless guest
- Pay-per-use Wireless Guest

Website Management Tools
Menu Editor, Page Editor, Announcements, FAQ, Photo Gallery, Alumni, Form Builder, Slideshow, Profile Slideshow, QuickFacts, File Browser, Hompage Management, Student Profiles, Faculty/Staff Directory

General Programs
- Truman Directory
- Calendarix
- Checkbox Survey System
- Event Manager

Content Management - WordPress installations for
- Faculty/Staff and Student Organizations
- Blogs
- Truman Media Network

Services and Support – IT Service Center Call Statistics   (Report from July 1st, 2012 to June 30th, 2013)

Abandoned vs. Completed :: Summary

Abandoned Call Count:	206 calls	Completed Call Count:	5642 calls
Abandoned Call Rate:	3.5%	Completed Call Rate:	96.5%
Abandonment Total Hold Time:	4.7 hours	Completion Total Hold Time:	14.8 hours
Abandonment Avg. Hold Time:	1.4 minutes	Completion Avg. Hold Time:	9 seconds
Abandonment Longest Hold:	34.6 minutes	Completed Longest Hold:	11.4 minutes

Weekday Call Distribution

Date	Completed	Abandoned	Total Calls	Complete / Abandon / Volume
Sun	101 calls	6 calls	107 calls	94% / 6% / 2%
Mon	1207 calls	33 calls	1240 calls	97% / 3% / 21%
Tue	1239 calls	34 calls	1273 calls	97% / 3% / 22%
Wed	1099 calls	32 calls	1131 calls	97% / 3% / 19%
Thu	1012 calls	55 calls	1067 calls	95% / 5% / 18%
Fri	907 calls	41 calls	948 calls	96% / 4% / 16%
Sat	78 calls	5 calls	83 calls	94% / 6% / 1%

Call Distribution by Hour

Call Distribution :: Hour
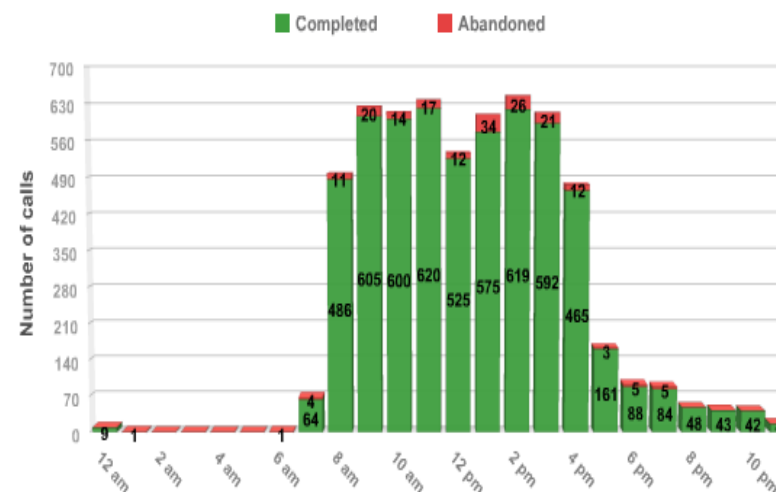
Services and Support – Measuring Systems Availability & Reliability   (Report from July 1st, 2012 to June 30th, 2013)

How good does it need to be?

Availability $\dfrac{\text{Total Hrs.} - (\text{Planned and Unplanned Outages in Hrs.})}{\text{Total Hrs.}} \times 100$

Availability – "9's"

Percent	Downtime (per year)
99.0	87.7 hours
99.9	8.77 hours
99.99	52.62 minutes
99.999	5.26 minutes
99.9999	31.6 seconds

Reliability vs. Availability
Reliability deals only with "unplanned" outages.

Truman's IT Maintenance Window

Daily Maintenance: 3:00am-5:00am daily, for production maintenance/backup processes
Weekly Maintenance:
• Thursday, 8:00pm through Friday, 6:00am for on-campus services
• Saturday, 12:00am until Sunday, 12:00pm (MOREnet, off-campus internet)
• Sunday, 8:00am until Sunday, 8:00pm, for enterprise systems upgrades (used only when needed)

This does not mean that every Thursday or every holiday that all servers and network access will be down for 10 hours. Most server maintenance can be done within a couple of hours, and servers will only be taken down in a manner that will minimize downtime of all network services within this maintenance window.

System Maintenance is considered a "Planned Outage" and is factored into the "Availability" calculations noted below.

Service	Reliability	Availability	Service	Reliability	Availability	Service	Reliability	Availability
Internet	99.9844%	99.9792%	*Application & Web Services*			*File Services*		
			Departmental Web Sites	100.00%	100.00%	W: Drives	100.00%	99.9963%
Local Area Network			Student Org Web Sites	100.00%	100.00%	Y:Drives	100.00%	99.9963%
Wired Network	100.00%	99.8756%	Web Application Database	99.9948%	99.9948%			
Wireless Network	99.9948%	99.8704%	Student Org Web Sites	100.00%	100.00%	*Print Services*		
			TruView Portal	99.3884%	99.1163%	Faculty/Staff Printing	100.00%	100.00%
Remote Network			Banner Self-Service Apps	99.8911%	99.8367%	Student Printing	100.00%	99.9948%
VPN	100.00%	100.00%	Banner Database & Forms	99.9067%	99.8212%			
Proxy Server	100.00%	100.00%	Blackboard	100.00%	99.9455%	*Computer Labs*	100.00%	99.9974%
			WordPress	100.00%	100.00%			
Network Security			Lecture Capture System	99.9974%	99.9974%	*Telephone Services*	100.00%	100.00%
Firewall	100.00%	100.00%	DegreeWorks	99.9067%	99.6294%			
Bandwidth Mgt.	100.00%	100.00%				*Email Services*		
						Anti-Spam System	100.00%	100.00%
Cable Television	100.00%	99.8756%				Faculty / Staff Email	99.9979%	99.6403%
						Student Email	100.00%	100.00%

NOTE: This is not a complete list of services, but includes those which could significantly impact a large number of users.

Services and Support – Compliance and Regulatory Issues

General Legislative and Regulatory Issues with IT requirements that Information Technology Services must monitor and respond to:

Federal
- Gramm-Leach-Bliley Act
- Digital Millennium Copyright Act
- FERPA (Family Education Rights and Privacy Act of 1974)
- HIPAA (Health Insurance Portability and Accountability Act of 1996)
- FISMA (Federal Information Security Management Act)
- TEACH Act (Technology Education and Copyright Harmonization)

- HI TECH (The Health Information Technology for Economic and Clinical Health Act)
- PCI DSS (Payment Card Industry Data Security Standard)
- USA Patriot Act
- Higher Education Opportunity Act
- Identity Theft Program - Red Flag Rules
- ECPA (Electronic Communications Privacy Act)
- eDiscovery

- Distance Education Approval of Out-of-State Providers (effective July 2011, but challenged)
- Copyright Act (while there are no direct IT requirements, how information is used electronically must adhere to copyright law)

State
- Data Breach Notification
- Sunshine Law (Open Records)
- Records Management/Records Retention

FTC & FCC Telecommunications Legislative and Regulatory Issues that Information Technology Services must monitor and respond to:

Open Active Issues
- 700 MHz Licensing
- Broadband Reporting and Mapping
- Communications and Video Accessibility
- Customer Proprietary Network Information (CPNI)
- Digital Television Transition
- Disaster Planning and Response: Backup Power
- Disaster Planning and Response: CMAS
- Disaster Planning and Response: CSRIC
- Exclusive Contracts For Video Services In Multiple Dwelling Units
- FCC Telemarketing Rules
- FTC Telemarketing Rules
- Local Number Portability
- Mobile Phone Fringe Benefit Tax
- National Broadband Plan
- Network Neutrality/Network Management
- P2P File Sharing and Copyright Issues

- Mobile Phone Fringe Benefit Tax
- National Broadband Plan
- Network Neutrality/Network Management
- P2P File Sharing and Copyright Issues
- Radio Webcasting
- Spectrum Reallocation
- Telephone Relay Service (TRS) and Video Relay Service (VRS)
- Unbundled Network Element-Platform (UNE-P)
- Universal Service Contributions
- Universal Service Fund
- VoIP and IP-Enabled Services

Open Inactive Issues
- Biennial Review
- BRS/EBS
- Hearing Aid Compatibility (Wireless)
- Law Enforcement Access/CALEA
- Long Distance Competition
- Mergers
- Spam
- Unauthorized Charges: Cramming
- Unauthorized Charges: Slamming
- Wireless Open Access

Archived Inactive Issues
- Over The Air Reception Devices (OTARD) Rules
- PIC Change Charges
- Telecommunications Excise Tax
- Video Franchising
- White Space