

IT Educational Technology Update

Tom Jackson

Vice Chancellor for Information Technology and Chief Information Officer

BOT Business Affairs Committee

February 23, 2024



Topics

- Classroom and Computer Lab Program
- AMP-UP iPad Initiative
- Learning Management and Support
- Software
- Faculty Development and Client Support
- Distance Learning

Classrooms and Computer Labs



FY17 Classroom and Computer Lab Assessment

- 39% missing projectors
- 47% missing computers
- 57% missing sound systems
- Most equipment out of date
- No plan to upgrade equipment
- No method to detect failed projector bulbs
- Lack of consistency across campus
- Old and underpowered computers
- 32 buildings, 393 rooms



Classroom and Computer Lab Program

- Technology baseline
 - > Laser Projector
 - > Automated Projection Screen
 - > Crestron Control System
 - > Instructor's Computer
 - > Instructor's Podium
 - > Sound System
- Additional or substitute equipment as needed
- Discipline appropriate computers (Macs or PCs)
- Consistent across campus
- Upgrade 20% per year, prioritized by upcoming accreditation
- Upgrade computers on a 3- or 4-year cycle



First Five-Year Classroom and Computer Lab Cycle

- Classroom and computer lab upgrades completed
- Supply-chain issues forced delays in FY20 – FY23
- Computers not upgraded during pandemic
- \$5.7 million investment, mostly from E&T fees
- Pandemic Upgrades
 - > Added web cameras to 163 spaces
 - > Upgraded room to camera and sound systems when available
 - > \$553 thousand investment, from HERRF



Second Five-Year Classroom and Computer Lab Cycle

- Began in FY22
- Remaining supply chain issues will be resolved Summer 2024
- Added document cameras as requested
- Computer lab upgrades back on track



STEM Early and Middle College Technology

- Same technology baseline
 - > Laser Projector
 - > Automated Projection Screen
 - > Crestron Control System
 - > Instructor's Computer
 - > Instructor's Podium
 - > Sound System
- Alternative equipment (e.g. smart screens) as requested by principals
- \$500 thousand investment, from Title III
- Separate network infrastructure
- Computers provided by Guilford County Schools



Aggie Academy Technology

- Macintosh laptops for faculty and students
 - > Protected by Zscaler and CrowdStrike
 - > Meets NC Department of Public Instruction (DPI) requirements
- Classrooms
 - > Large screen (85") monitors
 - > Soundbars
 - > Apple TV units
- Cafeteria
 - > Projector
- Canvas Learning Management System (LMS)

AMP-UP iPad Initiative





AMP-UP iPad Initiative

- Student success project
- Assess impact of iPads on student learning
- Distributed iPads to new freshman and special populations in FY22-FY24
- ITS role
 - > Distribution
 - > Security
 - > Client support
- Academic Affairs is assessing the impact of the initiative

Learning Management and Support



Blackboard Learn

- Foundation for online classes, collaboration tool for in-person classes
 - > Moved to Blackboard hosting (~2017)
 - > Moved to Software-as-a-Service (SaaS) (2019)
 - > Institutional Hierarchy added to provide access to deans and chairs (2020)
 - > Mediasite integration (2020)
 - > Zoom integration (2021)
 - > Ally integration to provide accessible content and feedback to faculty (2023)
 - > Ultra-based navigation (Summer 2024)
- Used by over 600 campus organizations
 - > Collaboration and communication platform
- SaaS model enabled seamless pivot to online instruction during pandemic



Current Blackboard Learn Integrations (30+)

ALEKS	Follett Willo	Perusall
AWS Academy	Great River Learning	Porfolium
BryteWave	JoVE	Realizeit
Cambridge	Labster	SAGE
Cengage	Macmillan Learning	Science Interactive Cloud
CodeGrader	MATLAB	Suitable
Cognella	McGraw Hill Connect	Top Hat
Edpuzzle	myBusinessCourse	Vitalsource
Elsevier Evolve	Odiga Course	WileyPLUS
Flipgrid	Packback	Wiris Quizzes
Follett Discover	Pearson	Zybooks



Additional Learning Support Systems

- Camtasia – screen recordings
- Collaborate/Class – web-conferencing
- GoReact – online performance-based teaching
- Mediasite – video creation and hosting
- Qwickly Attendance Pro - attendance
- Qwickly Course Tools – interact with multiple courses at one time
- Respondus – test creation
- Respondus LockDown – test security (prevent browsing, messaging, etc.)
- Respondus Monitor – test security (records students)
- SafeAssign – plagiarism check tool
- SoftChalk – interactive lectures
- VoiceThread – online, media-rich presentations
- Zoom - web-conferencing

Software



Software

- Adobe Creative Cloud and Express
 - > Creative Cloud available to employees and in computer labs (2017)
 - > Express available to all students (2024)
- Aspen – process simulation
- Autodesk, SolidWorks – computer added design (CAD)
- MatLab, Mathematica – mathematical analysis
- Microsoft 365 and Office, Google Workspace for students
- Qualtrics – online surveys
- SAS, JMP, SPSS, AMOS, R Studio - statistical analysis
- Dozens of additional applications available on a limited basis

Faculty Development and Client Support



Faculty Development

- Provided by Instructional Technology and Training Development (ITTD)
- Workshops and individual consulting
 - > About 50 workshops each month
 - > Developing technology skills and effective use of technology in teaching
- Technology Sandbox
- LinkedIn Learning
 - > Over 60,000 videos and 21,000 expert-led courses
 - > Learning paths linked to specific academic programs
- Faculty Commons and Aggies Teach web sites
 - > Partnership with Center for Teaching Excellence and Extended Campus
- Faculty receptions
 - > Partnership with Center for Teaching Excellence



learn.ncat.edu

- Online, self-passed professional development
- Over three hundred items
 - > Aggies Teach - 15
 - > Bluford Library - 38
 - > Business and Finance - 42
 - > Center for Academic Excellence - 50
 - > Center for Leadership & Organizational Excellence - 68
 - > Center for Teaching Excellence - 6
 - > Research and Economic Development - 2
 - > Student Affairs - 1
 - > Human Resources - 8
 - > Instructional Technology and Training Development - 115
 - > Technology - 1
 - > The Graduate College - 2



Client Support

- Help Desk
 - > Bluford Library and Student Center
 - > Residence Hall Popup locations
- Blue and Gold Field Technician teams
- Media Services team
- Student Technicians
- Instructional Technology and Training Development
 - > Bluford Library Faculty Commons
- Blackboard 24x7 Help Desk

Distance Learning



Distance Learning

- ITTD provides online course development
- Many applications leverage cloud services for ubiquitous access
- AggiesAnywhere provides remote access to desktop applications
- Key forms in the Registrar's Office and Financial Aid have been moved to a digital process to support efficiency as well as remote access for students
 - > Working with The Graduate College this spring



Questions?