Technology Task Force Subgroup
High Priority Campus Needs
Preliminary Report

**Infrastructure**
- Increased Wireless
- Voice over IP
- iClassrooms
- Network Access Control

**Training/Support**
- Improved Help Desk/Trained Support
- Self-Service Tools/Online Documents
- Technology Training (Faculty, Staff, Students)
- Increased Access to Instructional Technology

**Functional Needs / Tools**
- Additional 24-hour Labs/Printing
- Collaborative Technology Workspaces
- Technology Test Lab and Sandboxes
- Pilot Program/Incubator

**Governance / Decentralization**
- Technology Governance
- Decentralized Technology Budgets
Summary

The Technology subgroup of the Technology and Online Education Task Force held multiple discussions to determine the highest priorities needs for implementations or improvements in campus technology. These initiatives were grouped into four major categories or themes:

- Digital Infrastructure
- Training and Support
- Academic and Administrative Functional Needs
- Governance and Decentralization

While there are many competing needs, the following items were determined by the subgroup, and verified by the entire Technology and Online Education Task Force, as immediate and mid-term (two-five year) needs. For each high-priority need, the full task force provided what they determined as barriers to implementation, consequences of failure to implement, and general thoughts or notes on the scale of the initiative. The final report will contain estimated costs for each priority initiative, along with expected timelines for implementation.

Digital Infrastructure

Improve existing infrastructure to standards that provide more up-to-date and industry-standard work spaces (e.g. classrooms, offices, labs, collaborative spaces) with current technology for all campus constituents.

Immediate Needs:

- Increased Wireless Access

To support both academic and administrative needs, complete and adequate wireless coverage is needed across all areas of campus. Under this initiative, the wireless infrastructure would be upgraded to provide acceptable levels of both coverage and bandwidth in all academic areas. Secondary considerations include wireless coverage in common outdoor areas (e.g. canal, green spaces, outdoor seating areas) and an upgrade/refresh of the dormitories to place the residence halls on their own wireless network.

Barriers to Implementation

- Funding

Consequences of Failure

- Online resources cannot be used by faculty or students in class
- Students will choose to go to other schools and facilities
- Guests: corporate, business and social

Scope/Miscellaneous Thoughts

- During the fall and spring semesters many students study in Smith Mall - very helpful
- Multiple mid-range items need immediate attention
- Security?
- Can cell phone receptors can be included?
- Future-looking issues need attention
• **Voice over IP (VoIP) In All Buildings**

This initiative involves the conversion of all remaining buildings to VoIP. Some buildings and offices are still utilizing the older, copper-leased lines. As part of this project, new call center software would be implemented and placed in the new data center. The new software could potentially allow additional features, such as visual voice mail, advanced call forwarding and other benefits.

**Barriers to Implementation**
- Cost to upgrade building wiring
- Training
- Good Hall and other older brick buildings

**Consequences of Failure**
- Still do not have a useable work phone
- Coverage IP system goes down
- Still need access to fax and other hardwire servers

**Scope/Miscellaneous Thoughts**
- Access VoIP in spaces like Esch
- Swipe cards for all buildings is an immediate need

• **iClassrooms**

The primary goal of this initiative is to place technology in every appropriate learning space to achieve a minimum level of “laptop-ready.” In some spaces, this may mean mounting of flat panel monitors. In others, it may mean installation of projectors and/or teaching workstations at a substantially higher cost. Adequate funding would be needed to keep classroom technology current through refreshes and updates to existing installations.

**Barriers to Implementation**
- Getting everyone to agree what is best for the space
- Funding
- Need more electrical outlets
- Need to be in compliance with ADA
- Need wireless “laptop-ready” classrooms

**Consequences of Failure**
- Media Services will still deliver equipment
- People will just do it on their own

**Scope/Miscellaneous Thoughts**
- Faculty and staff need training to use iClassrooms
- iClassrooms, as configured, still only take into consideration teaching as stand and deliver
- Whiteboard with projector, smart boards, etc; should have some flexibility
- Film-ready: dark shades, HD projector, stadium seating, sound system
- Mobile device ready; flat screen TV
- Collaboration classroom: moveable desk, flat screens, plugs, access
- Moveable chairs and tables
- Outlets in the floor for laptops
Network Access Control (NAC)

Network Access Control is used to provide security, virus control and device registration on the network. Our current NAC was an internally, custom-written application that was developed in early 2005 and is no longer capable of supporting today’s needs. One of the primary developers is no longer with the University and the current system is hampering overall network design and optimization. A new NAC would provide the ability for easier self-registration of all device types and provide more robust support for bring-your-own-device (BYOD) to all campus constituents.

Consequences of Failure
- Information integrity – lawsuits
- Security of network
- Limits support of devices such as tablets and cell phones
- Inability to control who accesses network resources
- Hampered network expansion; robustness

Scope/Miscellaneous Thoughts
- UIndy will need to step up on salaries for IT personal to be more competitive

Mid-range goals (2-5 years):
- Card Swipe Access / Security Cameras
- More Technology-friendly Classroom Spaces
- Cellular Phone Repeaters (may need to be high priority for security reasons)

Training/Support

A consistent message was heard from the Technology Task Force and others about the need for improved technology support and training for all areas of campus. From a better front line Help Desk to field support and a myriad of training for students, faculty and staff, a better support and training model is a high priority for campus.

Immediate Needs:

- Improved Help Desk / Highly-Trained Support Staff

A more visible, user-friendly and professional Help Desk is highly needed on campus. Better training and customer service is needed at both the full-time and student worker level. Since it would be cost-prohibitive to completely staff the Help Desk with full-time, professional staff, recruiting and retaining better student workers is imperative. To do so, the University policy of equal pay for all campus jobs needs to be reviewed. By implementing differential pay for qualified and returning student workers, the overall quality and abilities of student workers can be maximized.

Consequences of Failure
- Reputation decreases
• Viability of online programs
• Further frustration/lack of respect for technology staff on campus

Scope/Miscellaneous Thoughts
• 24-hour Help Desk needed; online students can be international and in different time zones
• Put a call out to students on campus; find technology-savvy kids and offer them a job
• Consider outsourcing
• Creating GA/TA positions for graduate students for better staffing
• How can Six Sigma help this entire process?
• Building-specific IT staff

More Self-Service Tools and Online Documentation Of Frequently Asked Questions and Solutions

Implementation of new or improved, online, self-help tools, such as password resets, would alleviate the Help Desk from more mundane tasks and allow them to focus more on other issues. In addition to the self-help tools, better and easier-to-locate information on common questions and solutions regarding the use of technology and devices on campus would allow many users to self-diagnose and solve problems without the need to contact the Help Desk or wait for the Help Desk to be open.

Barriers to Implementation
• Location to self-help tool (advertisement and communication)
• Instructions need to be clear and written by users

Consequences of Failure
• Without self-service help or training, the Help Desk will be in a constant period of requests
• Getting further behind in all aspects

Scope/Miscellaneous Thoughts
• Provide tutorials, print outs or guides to staff regarding Banner, ACE and other tools
• Training for students as part of freshmen orientation or New Student Experience
• In different languages: Chinese, Spanish, etc.
• Discount software

Increased Technology Training

A loud and clear message was received about the need for more frequent and better technology training. This ran the gamut from training for students on the use of ACE and training for faculty on instructional technologies to training for all constituents on the use of common campus software tools. Under this initiative, a dedicated technology training center would be created. This would be configured with the necessary equipment and tools to provide the various technology training classes as opposed to the current situation of fighting for computer lab space with academic classes. Based on feedback and need, a regular training schedule would be created. It has been suggested by the Task Force that attendance at training should be incentivized or mandated for certain classes of employees.

Barriers to Implementation
• Faculty/staff who can lead a horse to water
• Who is qualified to train?
Tracking if students have been trained or not/getting students to do the training
Time for training has to be a priority

Consequences of Failure
Faculty taking class time to continue training students
Technology is not getting used
Need to be self sufficient
Students falling behind, losing points or even failing because they do not know how to use ACE

Scope/Miscellaneous Thoughts
Need face-to-face training especially for faculty who are not using or want to use technology/ACE
More student training
Unit training would be more helpful
Need follow up on training; on-going support to increase knowledge/use of technology
Unit-centered people to help with the technology
Access to video training/archived webinars to play on-demand for training on specific tools; accessible from anywhere/anytime (for students and faculty)
Distributed model of technology help
A “place” to go for help
Ongoing faculty development/training on technology

Increased Availability and Support For Instructional Technologies

Outside of the standard Help Desk, there is a need for a “one-stop shop” regarding the development and use of Instructional Technologies and ACE. Currently, instructional technology staff are scattered and cloistered in various sections of the library. Under the new design, a sort of “mini-help desk” specifically for instructional technology would be created. This would house instructional designer(s), instructional technology trainer(s) and other support staff for both addressing of questions or problems on a walk-in basis and for scheduling of more formal training.

Barriers to Implementation
No follow-up or on-going support after training

Consequences of Failure
Falling further behind
Students not prepared for careers

Scope/Miscellaneous Thoughts
Student tracking/engagement
Outsourcing hardware support
IT needs to move out of IS and into Academic Affairs
Good experience for student workers
Make it visible (Schwitzer)
Separate from Help Desk
Streaming server
Creating GA/TA positions for graduate students for better staffing

Mid-range goals (2-5 years):

- 24-hour Call Center
- Distributed IT Support
Better Support/Technology For Athens

Academic and Administrative Functional Needs/Tools

Immediate Needs:

- Additional 24-hour Lab Space/Printing

Students have indicated both through the Technology, Space and Visioning sessions, a need for additional 24-hour accessible computer lab space and printing resources. One immediate planned addition to alleviate printing needs will be to begin a pilot project of print release stations in the residence halls. However, a secondary 24-hour computer lab is also desired. This may be accomplished via a new lab in the Schwitzer Student Center or by possibly working on the security necessary to allow the existing lab space in the basement of Esch to remain open for 24 hours.

Barriers to Implementation
- Training for RAs/RDs in building
- Location
- Staffing
- Funding
- Security

Consequences of Failure
- Retention of students
- Need to expand to support online classes if they become a reality

Scope/Miscellaneous Thoughts
- Can we do something with the lone computers in Schwitzer near the Perk; hook them to a printer?
- Dorm printers
- Work-study students as lab monitors
- Encourage faculty to look at paperless
- Would it be better to give all students laptops and access to printers
- Adequate security; actual officers walking in the building
- More 24-hour printing; printing charge must be considered
- If online education is going to be a priority then having a paperless campus has to be a priority. This is a foundation to an online environment for students

Collaborative Tech Workspaces

While KML has some basic collaborative computer workstations available, these are limited to two or three students working together and are not conducive to larger group projects or situations where faculty may wish to work with students on collaborative projects involving technology. Creation of dedicated technology workspaces, with a variety of equipment, would meet the needs of larger collaborative projects and give the faculty the ability to work directly with students on technology projects

Barriers to Implementation
- Space
- Location(s)
**Consequences of Failure**
- Retention/attracting students and faculty
- Students that lack collaboration and communication skills

**Scope/Miscellaneous Thoughts**
- Need to have webinar capabilities for online students and faculty
- Need for “curb-to-curb” access
- Moveable desks and group desks
- Smartboards
- Access through the computers

**Technology Test Lab/Sandboxes**

A test lab and the creation of technology “sandboxes” would involve an isolated network and series of servers independent of the production UIndy environment. This test lab and the sandboxes would allow new technologies to be tested and vetted. Sandboxes could be created upon request for departments, programs or even for individual projects to investigate new technologies. The test lab could also be used for troubleshooting of devices or sample configurations.

**Barriers to Implementation**
- Explanation of why necessary to justify cost
- Support for faculty on testing the new technologies
- Need process and policies for access/usage of sandbox
- Would vendors allow us to test software without purchasing agreement already in place

**Consequences of Failure**
- Purchasing technology without knowing full scope of use
- Retention/attraction of students
- Falling further behind in the ever changing world of technology
- Faculty falling behind in scholarship and research in fields
- Continued stifling of ideas and creativity

**Scope/Miscellaneous Thoughts**
- Hatchery
- Great idea
- Departments need to be proactive regarding what software is needed prior to semester not after

**Technology Pilot Program**

The Technology Pilot Program would function similarly to a scaled-down version of the University Incubator Program and focus on piloting of new technology for the campus. Departments or individuals could propose new or unique technologies that meet certain guidelines. Some funding would be available to pilot this new technology, with the option to expand successful projects to betas and eventually to the entire campus.

**Barriers to Implementation**
- Lack of collaboration and planning with faculty
- Setting up protocols/parameters
- Faculty time and training to understand need/use of new technology

**Consequences of Failure**
- Will get further behind
- Faculty falling behind in scholarship and research in fields
**Scope/Miscellaneous Thoughts**

- Tie in with Innovator Grant

**Mid-range Goals (2-5 years):**

- Hosted, Industry-standard E-mail, Calendar, Document Sharing and Collaboration Suite
- Industry-Standard Replacement Cycles For Computers
- Increased Mobile Support / Mobile Friendly Apps
- Centralized Document Imaging/Management

**Governance/Decentralized IS**

Another key message communicated by the Task Force was for more flexibility and autonomy in the implementation and use of technology on campus. This would mean moving from a more centralized model of Information Systems to a more decentralized model.

**Immediate Needs:**

- Technology Governance

A multi-constituent committee consisting of faculty, staff and students would be formed for the purpose of providing technology governance for the campus. This diverse group would be tasked with development of policies and procedures regarding technology use. In addition, this committee would vet new technology requests and set priorities for competing budget dollars.

**Barriers to Implementation**

- Turf
- Cabinet has to allow committee decisions to be implemented
- Must have broad representation
- Lack of knowledge of other functional areas
- Knowledge of budget process and levels
- Status quo

**Consequences of Failure**

- Status quo
- Falling behind
- EITC already was a failure; how is this different?

**Scope/Miscellaneous Thoughts**

- Should have clear goals and broad representation
- People need to have decision making authority
- Should have the authority to implement change
- Need a real committee with real input and real reporting with real outcomes
- Long-range planning potential to set us ahead
- Stakeholder involvement
- Get faculty/staff to have some responsibility for equipment they want/use
- Need to have constant benchmarking to insure compliance and forethought

- Distributed IT Budgets

This initiative would allow individual departments to determine technology purchases and needs from within their own budgets. This could include hardware, software and other
technology initiatives. Currently, ‘cycle purchases’ are made through a limited budget controlled by Information Systems. New technologies would need to be vetted, likely through the Governance Committee for viability, but the actual dollars would be controlled by departments.

**Barriers to Implementation**

- **Education**
- Many departments do not have near that type of budget; would have to rethink how funds are allocated
- **Centralized process may facilitate better use of processes**
- Where would maintenance costs for software fall
- **Need in writing online parameters**
- **Funding**

**Consequences of Failure**

- Run out of funds
- IT will still be looked upon as the “bad guy” because of their lack of funds

**Scope/Miscellaneous Thoughts**

- Like when RA goes to RHA to allocate for funds
- Deadline for that: Before school year? Beginning of semester? During the semester?
- Mid-range to long-range scope of care and responsibility (tie to Governance)
- System or tracking to avoid duplicate purchases; have to have departments try to collaborate to cut costs
- Should have preferred vendors/boundaries
- Needs versus wants taking a higher level look at what the University NEEDS
- Is this budget for necessities or for extra add-ons?

**Mid-range goals (2 -5 years):**

- Distributed IT Support