**University of Central Arkansas**

**Instructional Technology Report**

Written By

**Academic Affairs Committee**

Duston Morris, M.S., Ph.D., CHES, AAC Chair

Jane Dahlenburg, Ph.D.

Steve Forbush, Ph.D., P.T., OCS

Vance Johnson Lewis, Ed.D

Roger Pauly, Ph.D.

Krista Peppers, Ph.D.

Julia Winden Fey, Ph.D.

For

Michael Hargis, Ph.D.

Executive Vice President and Provost for Academic Affairs

and

Instructional Technology Peer Review Team

**Executive Summary – Academic Affairs Committee Instructional Technology Report**

**Purpose and Background**

This report contains a brief analysis, findings, and recommendations of the Academic Affairs Committee (AAC). Pursuant to continuous concerns regarding the University of Central Arkansas’s Instructional Technology (IT) and for the upcoming IT peer review, the formal charge to the AAC included, but was not necessarily limited to:

1. Identifying IT problems and concerns related to teaching efficiency and efficacy.
2. Identifying any possible solutions and provide recommendations regarding IT issues and problems.

Faculty Senate President Taine Duncan appointed seven Faculty Senators from various departments and colleges to serve on the AAC. AAC was announced and given their original charge (i.e. “Instructional IT – Work with Peer Review Process”) in Faculty Senate meeting on September 12th, 2017. Immediately following the Faculty Senate meeting, AAC members briefly met to establish their first official meeting to be held on Tuesday, September 19th during x-period. Prior to the meeting, Faculty Senate President contacted AAC via email for slight modification in their charge. The charge was modified to include a brief report to be provided to the Provost and the IT Peer Review Team prior to the scheduled IT Peer Review to occur on Tuesday, September 26th, 2017.

**Methodology**

In order to quickly address the charges from the Faculty Senate President, AAC completed the following activities:

1. Completed an abbreviated literature review concerning IT significance, structure, and integration related to collaboration between IT and operation of higher education.
2. Compiled concerns and possible solutions from Faculty Senators’ constituents from various colleges and departments across the UCA Campus.

**Task Force Composition**

The AAC was composed of Faculty Senators from the University of Central Arkansas who represent faculty constituents that have a stake in the IT issues and concerns at UCA. The AAC members are listed below.

* *Duston Morris,* M.S., Ph.D., CHES, Associate Professor of Health Sciences
* *Jane Dahlenburg,* Ph.D., Associate Professor of Music History
* *Steve Forbush,* Ph.D., PT, OCS, Associate Professor of Physical Therapy
* *Vance Johnson Lewis,* Ed.D., Assistant Professor of Marketing and Management
* *Roger Pauly,* Ph.D., Associate Professor of History
* *Krista Peppers,* Ph.D. lecturer II of biology; director of biology 1400
* *Julia Widen Fey,* Ph.D., Adjunct Professor of Philosophy and Religion; Director of Student Success

**Organization of the Report**

This report begins with an explanation of the University’s current situation regarding IT and then turns to the charges provided to AAC by President Taine Duncan. After discussing each charge, the report presents its conclusions and recommendations.

**Background and Statement of the Problem**

Over the past 5 years, UCA has seen a greater emphasis on reliance on IT for teaching and research in academics on the UCA campus. Hybrid and online learning has increased through the numbers of courses offered and the complexity of the IT necessary for adequate course offerings. Hybrid learning is considered to be courses in which some traditional face-to-face seat time has been replaced by online learning activities. Online learning is considered to be a way of studying or learning without needing to attend classes on campus (Chen, Lambert, & Guidry, 2010). UCA recognizes the need of both hybrid and online learning as many students wish to study and acquire degree completion alongside work and other life commitments.

Today’s higher education institutions require technology for faculty to prepare and offer quality learning environments. Moreover, students report that using technology provides higher learning satisfaction, encouraged participation, and motivation to interact with the subject matter (Filer, 2010). It is intertwined into almost every part of the learning environment. The literature points out a number of reasons students need technology in the classroom (Mareco, 2017; Roscorla 2016). These include:

1. Helping students prepare for technology-based careers.
2. Integrated classroom technology is an effective way to connect with students through various learning styles.
3. Provides opportunities for enhanced interaction among classmates and instructors.
4. Gives teachers and other faculty members the opportunity to develop their student's [digital citizenship skills](https://www.commonsense.org/education/digital-citizenship)**.**
5. Helps students stay engaged.
6. Enhances the learning experience and create new learning opportunities.
7. Allows the teacher to be the encourager, adviser, and coach.
8. Helps students be more responsible.
9. Transforms the learning experience as students have easier access to needed resources and learning opportunities.
10. ***When technology is readily available and performing correctly in the classroom, students are able to access the most up-to-date information quicker and easier than ever before.***

UCA continues to see growth in technology based learning. Over the past six years, there has been a consistent increase in the number of traditional, hybrid, and online class offerings (Figure 1). As these trends continue, it is imperative that UCA provide technology support needed to make sure all types of classroom structures run as smoothly as possible. But as these classroom trend offerings have increased, the number of IT support staff has not seen the continued growth required to keep pace with technology needs and the result has been numerous classroom technology issues.

Also, reliance on IT support for research, especially with metadata granted studies, has increased here on this campus and throughout most academic settings. The IT support offered on this campus for both needs has been limited or sometimes lacking. Faculty have expressed concerns and some of the concerns and possible solutions are offered through this white paper. Charge 1 of this report outlines many of these current issues at UCA.

***Figure 1: University of Central Arkansas – Course Technology Offerings***



**Charge 1: Identifying IT problems and concerns related to teaching efficiency.**

A summary of areas of concern for faculty related to teaching and research follow:

1. Lack of adequate numbers of computer labs and space for computer labs on campus.
   1. Many programs on campus need testing and education centers that might house up to 60-70 computers. Uses would include on-line testing and education within existing and developing courses.
   2. Presently there are only labs with 15-20 computers and these labs have diminished in number with space limitations on campus.
2. Speed and access to WI-FI throughout campus and antiquated infrastructure.
   1. Most of the base IT infrastructure is outdated and cannot handle the needs of this campus (2004-2005 infra-structure in 2017).
   2. WI-FI is not consistently available on campus outside of main buildings limiting continuous use of resources when outside buildings.
   3. Outages and limitations in bandwidth lead to numerous instances of classes being limited in use of computers in classes within buildings with WI-FI access.
3. Updates to existing computer software/hardware are not adequate or done efficiently.
   1. Many computers on campus are outdated and need replacement and are not on cycle to be replaced through central sources. Distribution and replacement of computers are on the onus of departments and colleges and not centrally controlled by the University.
   2. Software updates occur at times when classes are being conducted, interrupting the class time.
   3. New computers transfer of data is left to the individual and not controlled or assisted by IT staff.
   4. Introduction of Active Directory was done poorly with much concern by faculty on campus.
4. The culture of the IT department is not properly connected to the culture of campus.
   1. Help is hard to get for persons with immediate issues on campus.
   2. There seems to be an “us versus them” mentality instead of a team philosophy.
   3. New projects are commonly instituted without much information shared by IT to campus community (HIPAA, Active Directory, software limitations under Google, inability to use Drop Box that was later rescinded).
   4. Director of IT doesn’t use IT Committee appropriately to assist in rolling out projects.
5. The faculty have limited access to appropriate software for courses offered.
   1. Limits are placed or suggested by IT for outside software necessary for proper instruction or research reviews.
      1. SPSS is limited in access off campus.
      2. Other software (not Google oriented) is hard to access when necessary.
6. Researchers are limited in support from IT infrastructure.
   1. Metadata researchers are NOT supported on campus through computer storage or adequate firewalls.
   2. Many of these high-value, granted researchers are considering leaving our institution for one with more support.
   3. Many have been told there would be extensive costs to a department or the metadata would have to be housed off campus.
7. Limited training for faculty on programs such as Blackboard, GradeFirst.
   1. There is no on-going, frequently available training for our primary LMS, Blackboard.
   2. This has been shuffled back and forth between IT and CTE (Center for Teaching Excellence).

**Charge 2: Identifying any possible solutions to the IT problems and concerns.**

Below are recommendations of possible solutions based on support of the literature, reports from faculty constituents, and summary of problems and issues identified above in charge one.

1. Review of Administrative Leadership of IT and coordination occurring between this level and employees and support through IT
2. Need upgrade of infrastructure to acceptable levels for an institution of our size and caliber
3. Need to have a change in culture toward helpfulness in the IT support of academics
4. Coordination of IT with IDC and CTE to allow global culture of media coordination for consistent and reliable education of students on and off campus
5. WI-FI needs to be available throughout campus within the borders of the institution for students to have reliable access
6. Band width needs to be adequate for multiple students to access materials on Blackboard and on web while in class
7. Need to be computer labs on campus dedicated to larger classes for instructional purposes.
8. Assignment of IT staff to specific buildings, similar to maintenance staff building assignments.

**Conclusions and Recommendations**

AAC’s findings from review of supportive literature and numerous conversations with faculty constituents support the need to review and make considerable changes to the current IT process at the University of Central Arkansas. The identified problems have repeatedly limited and interfered with UCA’s learning environment and has been a continual problem across numerous academic years. IT is an integral part of the UCA learning environment and without a more efficient process and greater collaboration among IT and faculty UCA’s e-learning will continue to fall behind peer and aspirant institutions.

AAC have also identified cultural inadequacies in IT that constrain instructional effectiveness. These include a tendency to dismiss requests, problems, and concerns expressed by faculty members to IT staff members; a perception that IT staff members seek loopholes (such as those regarding who "owns" a set of instructional computers) to avoid responsibility for solving immediate problems; and a general lack of investment and engagement by IT staff members in the instructional mission of the university.

We encourage a reaffirmation by UCA that IT serves in a *supporting*capacity to facilitate teaching and learning, as well as a re-commitment by IT staff members to work as members of a team with faculty and students. This will require improvements in responsiveness, helpfulness, and timeliness on the part of IT staff members.

**References**

Chen, P. D., Lambert, A. D., & Guidry, K. R. (2010). Engaging online learners: The impact of web-based learning technology on college student engagement. *Computers and Education, 54*(4), 1222-1232. doi: <https://doi.org/10.1016/j.compedu.2009.11.008>.

Filer, D. (2010). Everyone’s answering: Using technology to increase classroom participation. *Nursing Education Perspectives, 31*(4), 247-250.

Mareco, D. (2017). 10 reasons today’s students need technology in the classroom. *Securedge Networks.* Retrieved from: https://www.securedgenetworks.com/blog/10-reasons-today-s-students-need-technology-in-the-classroom

Roscorla, T. (2016). *The Top 10 Higher Ed IT Issues of 2016.* Retrieved from: http://www.centerdigitaled.com/higher-ed/The-Top-10-Higher-Ed-IT-Issues-of-2016.html.