

Committee on Academic Computing and Telecommunications Final Report

2002-2003

Accomplishments

The full committee met four times during the academic year to consider ACTC charges from SenEx. Donna Liss served as Provost's representative at each meeting. Recommendations were provided to Marilu Goodyear and Donna Liss on changes or additions to current university policies related to information technology (listed at

www.ku.edu/~vcinfo/IT_policy/index.htm).

The items below summarize the discussion of the group on several of this year's key points:

- In December 2002, a new system was in place by which email address information could be gathered as faculty are appointed. Once that information is collected, the new faculty member will receive from the computer center a letter with a secure password in it. Faculty can then utilize the secure password to set up their KU Online ID. Once the ID is set up they will be able to utilize electronic mail services, access Blackboard and claim Web space to transfer information from their current institution to KU. The computer center has controls in place to deal with faculty who do not show up at KU. Human Resources is also working on the implementation of a similar process for staff.
- A number of committee members expressed dissatisfaction with using Microsoft Exchange servers for email because of security problems, and suggested that KU switch to open-source software for

email and course facilitation services like those now provided by BlackBoard. Others believe that the costs associated with developing and maintaining our own systems are outweighed by benefits associated with using standardized software.

- Online computer-based-training (CBT) is contracted through Skillsoft (formerly SmartForce). The contract for this service runs through June 30, 2004, and KU has contracted for 137 training modules. The web site for the courses can be found at: www.ku.edu/acs/cbt.

The training modules are available to anyone who has an active KU Online ID, which includes students, faculty and staff on the Lawrence, Edwards, KUMC and Wichita campuses, as well as approved KU affiliates.

- On December 3, 2002 a draft (attached) of a new KU Information Resources Security Policy went out from Marilu Goodyear to deans, directors, department chairs, and vice provosts. The policy was scheduled for implementation during March 2003.

Several documents related to ACTC's work are included as attachments to this report. These are:

1. FY 2003 Technology Fee Allocations;
2. Information Services (IS) Training Report
3. KU Campus Tech Support — Fall 2002
4. Meeting minutes

Recommendations for 2003–2004 Committee

- Add a representative from UPSA (unclassified staff) and the Classified Senate (state civil service employees) to ACTC, beginning next year.
- Monitor the implementation of online enrollment and make suggestions for improvement.
- Investigate the feasibility of changing from the Microsoft Exchange servers for email and other Microsoft products because of security problems.

- Investigate the feasibility of switching to open-source software for course-facilitation services like those now provided by BlackBoard.
- Investigate the security issues associated with wireless networks on KU campuses.

ACTC FY-03 Members

Chair: **John Charnes**, Business (2003); Council Representative: **Nancy Baym**, Communication Studies, (2004); **Jeremiah James**, EECS, (2004); **Paul Atchley**, Psychology, (2004); **Satya Mandal**, Math (2003); **James Waegelein**, Business, (2003); **Rebecca Schulte**, Libraries (2005); **Paul Johnson**, Political Science, (2005); **Ross Black**, Geology, (2005); **Will Bohne**, Student, Vice Chair; **Pat Bengston**, Student; **Ryan Faulconer**, Student; Ex-officio: **Donna Liss**, Associate Vice Provost, Informational Services.

FY 2003 Technology Fee

\$6 per credit hour	
\$4 from enhancement	2,400,000
\$2 continuing	<u>1,200,000</u>
Total	3,600,000
Distribute to Schools/College based on credit hours	1,200,000
Proposed:	
Infrastructure Uses	
Blackboard Level II	157,000
PeopleSoft Student System	235,000
(in addition to \$1 million continuing)	
Authentication	250,000
Digital Library	275,000
Bandwidth	180,000
Upgrade Classroom Equipment	<u>298,000</u>
Total Infrastructure	1,395,000
Specific High Impact Student Projects	
Upgrade Student Labs	175,000
Student Portal	224,000
Digital Library	68,000
Student Technology Coordinator	40,000
Wireless	<u>50,000</u>
Total Projects	557,000
Science Teaching Equipment	447,000
Total Technology Allocations	3,599,000

Information Services (IS) Training report for the ACTC

This report addresses the various types of training that IS makes available for IT professional staff at KU and recommends standards to insure that all campus technical support personnel obtain an adequate level of training. Highlighted are the various training opportunities currently provided by the Information Services Academic Computing Services (ACS) division, the new security training that will be provided by the KU Security Officer, the support provided to the KU Network Administrators (KUNA) group by Information Services, the status of departmentally sponsored training opportunities among KUNA members, and finally recommendations for standards in the training of technical support personnel.

ACS Training Support

Classroom Training

The Academic Computing Services (ACS) division of Information Services offers an extensive schedule of workshops to help the members of the KU community gain confidence and skill in computing and using information technology. The ACS training staff is joined by other ACS staff as well as staff from Instructional Development & Support (IDS) and the Libraries to teach a wide range of workshops on Internet and Outlook services; authoring, publishing, and managing Web sites; graphics, multimedia production, office productivity, and data analysis software; and operating systems.

Last year approximately 3000 people were trained in these scheduled workshops.

Descriptions for all these courses are at www.ku.edu/acs/train. Most of these courses are offered this semester but some of the workshops are rotated so that not all (but most) are taught each semester.

Here is a sampling of courses offered that have more technical content:

1. Web Authoring series including:
Introductory and Intermediate Perl, Forms, Database Integration;
Web Accessibility, Cascading Style Sheets Introductory and Intermediate,
Design Basics, Foundations,
2. Dreamweaver: Introductory and Intermediate
3. Statistical workshops including:
SPSS (Getting Around; Getting Results, Output and Graphics Getting Published),
SAS (Data Entry, AppDev Studio, and for Windows)
4. Operating systems: UNIX; XP; Mac OS X
5. Excel Database Design
6. GIS: ArcView Introductory and Intermediate
7. Hardcopy to Digital: Getting Images onto the Web
8. Multi-media
Flash: Introductory
iMovie

Computer Based Training (CBT)

In addition to instructor-led workshops, ACS offers hundreds of [Web-based computer training courses](#) for people at all levels of knowledge. These courses are available to KU faculty, staff, enrolled students, and [approved affiliates](#) with a [KU Online ID](#).

The focus has been for “novice” users and not technical training, however there are currently several courses maintained that provide information for techs. These titles include: Oracle, Linux, JavaScript., Basic IT concepts, Network Protocols, DHTML, Advanced Web Authoring (CGI & Perl, Java, JavaScript, SSI), Setting up a web server, and Visual Basic

This is an inexpensive and effective way to help IT staff. Currently ACS licenses are limited to 100 course titles. This is extremely restrictive and hopefully as they move forward, they can renegotiate the contract and/or switch vendors so that additional technical courses can be added/revise.

Approximately 250 people have accessed and/or completed a course in SmartForce since mid-year; most of these appear to be IT professionals. There has not been a lot of publicity on the CBTs since the courses need to be changed. So far the service has been advertised in discussions with internal IS groups and at some workshops.

Sponsored Programs

Additionally, ACS sponsors on-campus commercial vendor programs at reduced pricing. This year we have sponsored two workshops taught by commercial trainers: XML and Windows XP. The following describes each of these offerings in detail.

Windows XP: August 6-7, \$375 per person for 2 days (14 people attended)

XML: Sept. 25, 26 and Oct 9, 10; \$460 per person for 4 days (21 attended)

In both cases, prices if taken directly from a commercial vendor would be much higher, ~\$600-\$1500. ACS has sponsored similar training for other topics including Novell and Active Directory. In the case of Novell, they brought a commercial company on-site and then, when they realized that it would be too expensive and time-consuming for most IT members, they developed their own in-house training for university support staff. (Not only was the training expensive at the time, but ACS felt that they could teach the commercial company's 4 day class in 2 days and customize the content to the KU environment.)

Consultation Services

ACS also provides individualized consultation accessed via the campus Help desk. For example: LSS Manager Travis Berkley is an expert in Novell Netware, storage and backup systems, and LAN administration and can assist campus IT professionals upon request.

The current ACS application consultant list used by the Help Desk for problem referral is found at www.ku.edu/acs/intranet. This will tell you the information about ACS staff's areas of expertise.

Security Training programs

Information Services Security training is currently under development, and is expected to begin in the summer 2003.

KU Security Officer, Chuck Crawford, is designing a course for "Technical Liaisons". It is being planned (subject to change) as a weeklong training session of 4 hours a day. It will start with basic terminology, concepts, signatures, Intrusions Detection System's (IDS's), system hardening. Then they will be using the Security tools that he will be providing them free of charge to assist them in securing and mapping their network. The course will give them some hands on experience in using these security tools. The course will outline the KU incident response procedures and go through several examples of incidents. Finally, on the last day will be a short exam.

Chuck along with Jenny Mehmedovic is also working on creating Security Awareness sessions and conferences to be held on campus as well. The Security Policy when it is adopted in its final form will provide basic information. Other ongoing projects include the security website (www.security.ku.edu) which will be tailored to several different levels of technical expertise. They are also working to create some "best practices" documents that will provide general guidance on security, and will soon be scheduling presentations to administrative and student groups on campus.

Additionally, Gary Minden, professor of electrical engineering and computer science at the University of Kansas School of Engineering, has developed two Internet security courses that examine what the threats are, how great the risk is and what tools and techniques are available to help ensure security. This is yet another opportunity for KU IT professional staff to improve their knowledge and expertise. More information about his courses can be found in the University Relations article on their web page at <http://www.ur.ku.edu/News/01N/OctNews/Oct26/security.html>

KUNA support

Information Services has made a commitment to work with the KUNA group. Mary Zanoni is the official IS representative to that group. IS has initiated several presentations to the KUNA group to aid in their understanding and answer questions about campus initiatives and changes. Presentations have been given over the last year on subjects such as the proposed new Security Policy, Networking's progress toward implementing a campus-wide DHCP and LDAP, moving away from the IPX protocol and disallowing Net Bios at the campus edge, the Exchange 2000 migration, and proposed campus security initiatives. Additionally, Information Services staff actively participate on KUNA e-mail list, providing expertise and information as the subjects arise.

Status of departmental training opportunities for KUNA members

When surveyed, KUNA members report a wide range of training support from their departments. Some have spent \$5,000 or more for training and attendance at technical conferences this year. Some have not had any training at all. Others use a combination of on-campus ACS offerings and off-campus training facilities such as New Horizons, and Centriq. These classes are in the \$1,300 to \$1,800 range. There is no consistency seen in how much is spent annually per employee and how each department approaches the training of their technical staff. Information Services' goal is to budget \$1,500 per employee per year for technical training for its own IT staff.

KUNA members did not attend a great many of the ACS standard fare of classes, though these classes are well attended in general. KUNA members were much more interested in attending the specialized sponsored classes that ACS has offered. These sponsored classes tend to be of a more technical nature, and therefore of greater relevance to them. KUNA advocates strongly for additional sponsored technical classes, as they are much more cost effective and more convenient. They state that their number one interest is in security, followed by vendor-based Operating System training, Novell and general network training, and achieving (and retaining) certifications, such as CNE (Certified Novell Engineer, MCSE (Microsoft Certified Systems Engineer), etc.

KUNA members expressed some interest in attending technical conferences for a "much needed perspective and inspiration". Conferences attended this year ranged from the O'Reilly Open Source Software Convention to AEC Systems 2002 (architectural and engineering IT issues) to Novell's Brainshare to SANS (SysAdmin, Audit, Networking and Security) conferences.

Other suggestions from KUNA members include KU sponsoring a regional or national IT conference, and KU becoming a CTEC (Certified Technical Education Center) to offer Novell, Cisco or Microsoft certification training. They felt that this could be done by hiring a few certified instructors and that it could be managed by Information Services or by Continuing Education if it was thought to be a viable offering.

Budgetary support

\$1,500 IS-wide per person allocation

Recommendations for standards in the training of technical support personnel.

I believe that some stated guidelines regarding the training of technical personnel will help to create some uniformity. Recommendations for some basic guidelines are as follows:

- Minimum budget allocation of \$1,500 per technical support staff per year for technical training
- Required annual Security baseline training through the Technical Liaison certification program
- Supervisor support for staff that wish to attend available KU courses that are applicable (such as Gary Minden's Security courses)
- Minimum of one Information Services sponsored technical class per year to aid in bringing cost-effective quality technical training to campus.

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Conclusion

The pressured state of the KU budget, the high price of high-end training, and the actual time and personal effort it requires to take classes, especially for those support personnel who are a one-person shop, are issues that must be faced. The health and well-being of our technical resources and thus our educational viability are of great importance. The above recommendations represent a minimal commitment on the part of KU that could be enhanced by additional offerings or requirements coordinated at a campus level. Information Services is committed to providing basic training and in partnering with others in efforts toward enhancing training opportunities to improve and build on the knowledge and expertise of our technical staff.

Respectfully submitted by
Mary Zaroni
Director Information Technology Support Services and Human Resources
2/13/2003

Unit/department name	Main tech contact	Additional tech support		Supported						Staff Support Ratios		
		Staff	Student	Faculty/ Staff	Students/ GTAs	Servers	Desktop machines	Lab machines	Networked printers	Staff (with students)	Staff per system	Servers Supported
LAN Support Services												
Adminstrative Affairs	LSS			9		*	9	2	11			
AVP Donna Liss	LSS			4		*	5	2	7			
Budget	LSS					*	17	2	19			
Bursar	LSS					*	20	3	23			
CAPS	LSS					1	34	6	40			
Card Center	LSS					*	5	1	6			
CASPUR	LSS					*	25	5	30			
Comptroller's Office	LSS					*	32	8	40			
CTE	LSS					*	5	1	6			
Dole Institute of Politics	LSS					*	4	1	5			
Decision Support Services	LSS					*	3	1	4			
Env Health and Safety	LSS					1	3	0	3			
Equal Opportunity	LSS					*	8	1	9			
EPSCoR	LSS					*	5	0	5			
Facilities Operations	LSS					2	79	9	88			
General Counsel	LSS					*	6	1	7			
Graduate School/Intl Programs	LSS					*	16	3	19			
HBC	LSS					*	59	6	65			
Hoch Auditorium	LSS					*	2	0	2			
Human Resources	LSS					*	25	15	40			
IDS	LSS					*	22	3	25			
Information Services	LSS					*	7	0	7			
Internal Audit	LSS					*	6	0	6			
Intl Student Support Serv	LSS					*	18	2	20			
KU Alumni	LSS					1	42	13	55			
KU Public Mgmt Center	LSS					1	7	2	9			
Lied Center	LSS					*	22	5	27			
NTS	LSS					1	103	7	110			
OIRP	LSS					*	16	3	19			
Office of Study Abroad	LSS					*	19	2	21			
Parking Dept	LSS					1	17	1	18			
Payroll	LSS					*	16	3	19			
Pharm Chem	LSS					*	13	6	19			
Pharmacy Practice	LSS					*	6	1	7			
Printing Services	LSS					1	33	3	36			
Provost Office	LSS					*	26	5	31			
Pharm & Tox	LSS					*	10	4	14			
Self Fellowship	LSS					*	6	1	7			
Chancellor's Office	LSS					*	9	1	10			
University Press	LSS					1	20	4	24			
University Relations	LSS					1	38	5	43			
EVC for Univ Rel	LSS					*	11	1	12			
TOTAL	LSS	11	3	13	0	11	829	139	968	15	129.07	11

* All of these departments are either on or being migrated to the LSS shared server, MAX

ACTC Meeting Minutes, 25 October 2002

Several issues were identified for discussion during the upcoming year:

- Uses of tuition enhancement revenue for academic computing
- Online course registration due to come online in March
- Security officer began on Monday
- Can we provide assistance for online voting (student)
- Online authentication
- Early email service coming online

Marilu Goodyear reported on the Digital Library project. This project is intended to:

1. Bring together electronic content that is now disparate. Federated search engine will look at all electronic resources available at KU (Nov/Dec '02)
2. Put current content into digital form – Research projects, class info, etc.
3. Serve as an institutional repository- put faculty content in that will allow for archival- Summer/Fall

Other issues discussed:

- Increased bandwidth for Blackboard –now costs \$800 K/year
- Authentication
- PeopleSoft implementation of online enrollment
- Major upgrade to Bb to increase response time
- \$300K to upgrade equipment in classrooms A/V, computing
- Science teaching equipment
- New PR person to get the word out about new services being provided by ACS

Attendees

John Charnes
Becky Schulte
Wes Hubert
Paul Atchley
Ryan Faulconer
Will Bohne
Jim Waegelein
Ross Black
Marilu Goodyear

MINUTES
ACTC Meeting
Tuesday, 3 December 2002
8:30-9:30 AM

I. Introductions

II. Discussion about Blackboard

Paul expressed some opposition to KU using Blackboard because Bb is expensive and not all of the features it offers are useful. Marilu responded by outlining some steps they are taking to address Paul's concerns. Information Services is currently upgrading to a new, faster system of Bb. There is also a collaborative effort with other Big 12 schools to develop an open source alternative to Bb.

III. Email accounts for visiting professors, post-docs, etc.

Information Services is implementing a new system to allow all KU employees to access an email account. This should help alleviate the problems visiting professors and post-docs have had with obtaining an email account in a timely manner.

IV. Security

Marilu gave some background about the growing concern of IT security. She highlighted some of the aspects of the new security procedure:

- Each unit will have a technical liason.
- A machine will be shut down more quickly if it is compromising the network.
- KU employees will need to sign a user agreement to have network access.
- Restitution of damages clause; this is now being handled on a case by case basis.

Marilu asked for feedback and communication from the committee members by the end of January. She requested philosophical comments, procedural comments, and input on what would be helpful.

Attendees: John Charnes, Ryan Faulconer, Marilu Goodyear, Donna Liss, Jenny Mehmedovic, Paul Johnson, Jim Waegelein, Becky Schulte, Sara Veit, Chris Cofle, Ross Black

MINUTES
ACTC Meeting
Thursday, 13 February 2003
2:00-3:00 PM

I. Process for new hires

John commented that this item has already been taken care of and a process is in place for email for new hires.

II. Report on training for technical support staff---Mary Zanoni

Mary gave a detailed account of the training available to technical support staff through ACS courses, Computer Based Training (CBT), sponsored programs, KUNA support, and regular KU courses.

The report ended with recommendations that the ACTC committee found to be reasonable. Nancy Baym suggested the addition of another recommendation that could create some uniformity or standardization to technical training at KU. Mary responded that each unit does not require the same degree of technical training, so standardization may not be the best answer. Mary recommended having each unit develop an individualized plan for technical training, and then keep units accountable to their plans. John will forward the report to Larry, who requested that the ACTC committee review training for technical support staff.

III. Registration and Enrollment

Nancy expressed concern about the upcoming switch to online enrollment beginning April 25. Staff, faculty, and students will be expected to use the new online system, but there has been very little training to teach people how it will work. Donna will find out what the plan is for training faculty, staff, and students on the new enrollment system.

IV. Ratio of technical support personnel to computers

Donna handed out a spreadsheet with data on the numbers of computers and support staff in different units of the University. The numbers gave a picture of how close KU is to reaching the goal of one support person for every 100 computers, but Donna added that there are some flaws with the data. The data does not take into account servers when calculating the support staff to computer ratio and perhaps weights student help too heavily by counting them as full time workers.

V. Security Breach

Donna gave an update on the security breach that happened earlier this year at KU. She commented that KU handled the situation well by disclosing all information as it became available. She hoped that the security breach would help people understand that everyone needs to be diligent about security.

Attendees: John Charnes, Donna Liss, Nancy Baym, Mary Zanoni, Sara Veit

MINUTES
ACTC Meeting
Thursday, 13 March 2003
3:00-4:00 PM

I. Appointing classified and unclassified staff to ACTC committee

In response to a letter sent to John Charnes, Nancy Baym moved to have classified and unclassified staff on the ACTC committee. Jim Waegelein seconded the motion, and it passed unanimously.

II. Update on online enrollment

Donna Liss gave an optimistic update on the online enrollment system. The system opened on March 10 for student use, and has plenty of excess capacity to handle the anticipated load once enrollment begins. It currently uses two logins, but this will eventually be streamlined to one. Staff, faculty, and student training is available.

Donna said that each department will need to decide whether faculty or staff will handle the special permissions for enrollment with the new system. She also mentioned that eventually faculty will input grades directly into the PeopleSoft system, but this will not be a concern until the Fall semester.

In response to requests from committee members, Donna will see if Blackboard will automatically drop students from the roster when students are no longer enrolled in a class. She will also see if there is some way to integrate the catalog description with the online timetable in the future.

III. Update on Security

Academic Computing is changing some of the off-campus connection methods in order to make the KU system more secure. The Security Awareness Program has been updated and is awaiting approval. Training for technical liaisons will begin shortly thereafter. ACS is still working on the effects from the security breach earlier this year, but KU is not currently vulnerable to an attack similar to the one that occurred recently at the University of Texas.

IV. Wireless Networks

A wireless policy is currently being written. It will likely include network cards registered to a specific user that will use encryption and allow the user to connect to the network. John asked if it would be possible to have an open network that anyone with a wireless connection could use. Donna said that is an issue that John Lewis could address.

V. Miscellaneous

Nancy asked that there be some sort of redundancy to the Exchange server that will guard against users being without email for extended periods of time. John asked about the computer instruction for students and staff. SmartForce is an online computer instruction available to faculty and staff. Courses will be advertised once they are updated in March.

Attendees: John Charnes, Donna Liss, Nancy Baym, Jim Waegelein, Becky Schulte, Ross Black, Ryan Faulconer, Sara Veit