

TECHNOLOGY REPORT

2013

College of Education and Human Sciences



**College of
Education and
Human Sciences**

Technology Report

April 2013

Table of Contents

I. Introduction	3
A. Mission Statement	
B. Statement of Purpose	
II. Key Questions	4
III. IT Support Goals	6
A. Internal Goals	
B. External Goals	
IV. Functions & Services	7
A. Technology-Enhanced Facilities	
B. Web & Content Development	
C. Instructional Technology, Research, Training, and Support	
D. Technical Support	
E. Server Administration	
F. Consultation and Support for Technology-based Projects	
G. Specialized Technology Support	
V. Personnel	11
A. Organization Chart	
B. Job descriptions	
VI. Resources	32
A. Computer-related costs for CEHS faculty & staff	
B. Personnel Costs	
C. Student Technology Fees	
VII. Major Accomplishments	34
VIII. Challenges	35
IX. Vision for the Future	37
X. Appendices	
A. CEHS Technology Committee Strategic Plan FY 2013/2014	
B. CEHS Tech Services Survey Results and Report	
C. Technology-Enhanced Facilities	
D. Student Technology Fees Reports	
E. Assets by CEHS IT Support Area	
F. Web Help Desk Reports	
G. Types of Technology Owned by CEHS Students	
H. Operations Analysis IT Audit Report	
I. UNL Information Technology Cost Reducing Task Force Report	
J. Review of IT Services in Comparable Colleges within Big 10 Schools	

Our Mission: To offer excellent professional IT support and to foster innovative IT solutions for teaching, research, and administration for CEHS.



3200

Undergraduate Students



1100

Graduate Students



300

Faculty and Staff



Introduction

The College of Education and Human Sciences (CEHS) is the second largest college at UNL. CEHS has a current enrollment of approximately 3200 undergraduate students, 1100 graduate students, and 300 faculty and staff. We are located in 9 buildings across two campuses.

The college comprises seven academic departments: Educational Administration (EDAD); Educational Psychology (EDPS); Child, Youth, and Family Studies (CYAF), Nutrition and Health Sciences (NHS); Special Education and Communication Disorders (SECD); Teaching, Learning, and Teacher Education (TLTE); and Textiles, Merchandising and Fashion Design (TMFD). College-wide administrative units are located on both city and east campus, and college-wide administrative units are located on both city and east campus.

In addition, the college has four Service Units: Instructional Design Center,

Business Team, Undergraduate Student Services Center, CEHS IT Support and fifteen research and outreach centers. CEHS IT Support is charged with developing, implementing, and maintaining information technology solutions for teaching, research, and administration

We support students, faculty and staff in seven academic departments, spread across 9 buildings on two campuses.

across the seven academic departments and most of the research and outreach centers.

There are two technology support personnel housed in the Barkley Center, two support staff housed in the Home Economics building, both on east campus, and five housed in Mabel Lee Hall on city campus.

Mission statement:

To offer excellent professional IT support and to foster innovative IT solutions for teaching, research, and administration for CEHS.

Purpose for review:

The purpose of this review is to gain a more objective view of CEHS IT Support, its strengths and challenges, the functions and systems under which the IT Support unit operates, and ways the IT Support unit can improve service to the college and its customers.

Key Questions

In order to function more efficiently, we are seeking answers to the following questions.

What **functions and services** of IT support should a college like ours provide?

1. Are there functions and services we do not cover but should?
2. Are there functions and services we cover that should be reduced or delegated?
3. How can we improve the functions and services we do provide?
4. Are there some functions and services that should be standardized across the college?
5. How can we best distribute functions and services across buildings to support CEHS?

How do we make the best use of **CEHS IT support personnel**?

1. Is the CEHS IT support unit optimally organized?
2. Are we staffed appropriately with the right skill sets?
3. How can we best utilize the current skill sets of our staff?
4. How can we enhance our skills to help us prepare for future IT support needs in CEHS?
5. How can the CEHS IT support personnel collaborate and share expertise and resources in ways we are not doing now?
6. How can we improve communication between CEHS IT support personnel and between us and CEHS customers and stakeholders (students, staff, faculty, and administration)?
7. How do we optimize our relationship with Information Services IT units?

Are we leveraging our **resources** effectively?

8. Can we improve the allocation of our present resources?
9. If we had more resources, where could they best be allocated?

How can we best conceptualize the **location and function of IT space**?

IT space is defined as our offices, computer labs, equipment checkout, and tech support work areas.

10. How could we use space to help us improve our quality and distribution of technology services and support across buildings?
11. What type of spaces should we provide for our students?
12. How can we best organize our current space to provide better support for our customers?

What is the next **cutting edge teaching and learning technology** that we should anticipate and how do we prepare for it?

IT Support Goals

Internal Goals

1. Improve communication among CEHS IT support staff.
2. Increase opportunities to grow expertise and skills for each CEHS IT support staff member.
3. Create and implement more efficient processes and procedures within CEHS IT support, such as managing and organizing equipment.
4. Identify and implement best IT practices.

External Goals

1. Improve communication and a sense of partnership with our customers in CEHS (i.e., faculty, staff, students, and administrators).
2. Collaborate with campus IT support units in areas of enterprise systems, instructional technology support, and innovative projects.
3. Learn ways to improve services we provide from other IT support units at UNL and at other Big 10 universities.

Our Functions & Services

Technical Support

Andy Agena and Mathew Bentz provide IT support for the Barkley Center. Larry Wichman and Tracy Leifert provide support for the HECO-LEV Complex. Stephen Panarelli and Seamus Cotter provide support for the City Campus Complex. Each IT support area uses Web Help Desk to manage asset information and customer requests for help.

- Advise customers on technology solutions
- Purchase, set up, and installation of technology solutions
- Maintain and repair equipment and software
- Provide basic software training
- Manage tech student assistants (city campus mainly)

Server Administration

Each of the three areas of IT support is responsible for managing servers in support of their local customers. We are in the process of adding server information to our SRI database. Stephen Panarelli manages server-based applications used college-wide.

- Setup, update, and maintain servers
- Provide security and data classification
- Manage server-based applications (e.g. Web Help Desk, Resource Scheduler)

Technology-Enhanced Facilities and Checkout Equipment

In the city complex of CEHS buildings, we have different staff performing different services related to computer labs, classrooms, etc. Kathrine Schwartzman is responsible for scheduling the two Mabel Lee Hall computer labs and checkout equipment. Mike Dempsey and Mary Sutton share the responsibility of identifying customer technology needs and managing student assistants. Student assistants provide regularly scheduled updates to computers in college rooms with equipment. Dave Merriman oversees the technical support needed for the equipment. Mary Sutton, Dave Merriman, and Stephen Panarelli participate in the design and installation of new equipment in CEHS classrooms and conference rooms.

In the Home Economics – Ruth Leverton Hall complex of buildings, Melanie Kellogg (assistant to the Dean) is responsible for scheduling the two computer labs in HECO. Larry Wichman and Tracy Leifert are responsible for updates, technical support, design and installation for the HECO-LEV rooms with equipment. Larry and Tracy participate in the design and installation of new equipment in CEHS classrooms and conference rooms. In the Barkley Center, Mimi Mann is responsible for scheduling the Resource Room. Andy Agena and Mathew Bentz are responsible for updates, technical support, design and installation for the Barkley Center rooms with equipment.

- Perform daily, weekly, and semester update and maintenance or equipment and software
- Identify faculty, student, and staff needs
- Manage student assistants (mainly on city campus)
- Solve problems related to equipment
- Schedule and organize the use of resources
- Participate in design and installation process
- Provide equipment for checkout (primarily on city campus)

Web and Content Development

Dave Merriman manages the college web site. Dave is specifically responsible for the web sites of the units reporting directly to the Dean (e.g. Student Services or Business Team). Each academic department has a designated staff member who is responsible for the content and design for their departments' web site. Dave trains and supports the staff in managing their sites. Dave has created a CMS for managing grants' or special projects' web sites. However, grants and special projects can work either with their department staff, Dave Merriman, or with the UNL CMS group. Dave also maintains web-based payment service via Paypal. Dave Merriman also provides web programming for special administrative projects (e.g. CEHS Award System, TLTE Grad Student Reports).

Mike Dempsey writes news articles for the college news page and he works with Dave to post appropriate content for CEHS web sites. Also, Mike works with faculty to develop travel blogs for their students to use during international trips.

Stephen Panarelli provides web programming for special administrative projects such as the scheduling system for Buros and programs third party software.

- Program for the web
- Provide upkeep and maintenance of college web site
- Develop innovative appearances and uses for web sites within the limits of the UNL template
- Train and support department staff to maintain their pages
- Develop original content for the college web site
- Program third party software (e.g. FileMaker Pro)

Instructional Technology Support

Currently, we provide limited instructional technology training and support due to staffing limitations. The Online & Distance Education group provides support for online and distance education classes. The New Media Center provides some general workshops for faculty and staff.

- Provide classroom technology support
- Use student assistants to support Mabel Lee Hall computer labs
- Provide technology conference support (e.g. TechEDGE)
 - e.g. provide equipment, student help

Consultation and Support for Technology-based Projects

We recommend faculty and staff discuss technology-based projects with us during the design stage. We provide advice on appropriate technologies, the infrastructure needed to support it, and the support and resources available in the college and within the university for the project.

- Advise on the appropriate technology for the project
- Research new technology solutions
- Provide development, implementation, and maintenance, depending on the resources available from the project and from the college

Specialized Technology

In addition to the common hardware and software found in most faculty and staff offices, research labs, computer labs, and classrooms, each of the three areas of IT support is responsible for specialized hardware and software.

Barkley Center

- Augmentative Communication Devices – such as Dynavox Tablets
- Audiology Devices – such as TeleView Otoscope, AudioScan Verifit and Audiometer networking/software (NOAH)
- Speech Perception Devices – such as Audio/Video conversion labs
- Video Observation Control Room

HECO-LEV Complex

- TMFD pattern printer / cutter
- Digitizer
- Specialized software for TMFD
- Specialized software for NHS
- FRC Observation system
- Hillstead Art Gallery

City Campus Complex

- EDPS Clinic's observation system
- Digital Signs – currently in three buildings across the two campuses

Faculty & staff supported in each IT Support Area:

Barkley Center: 63

City Campus: 163

HECO/Leverton: 87



In the last 7 years:

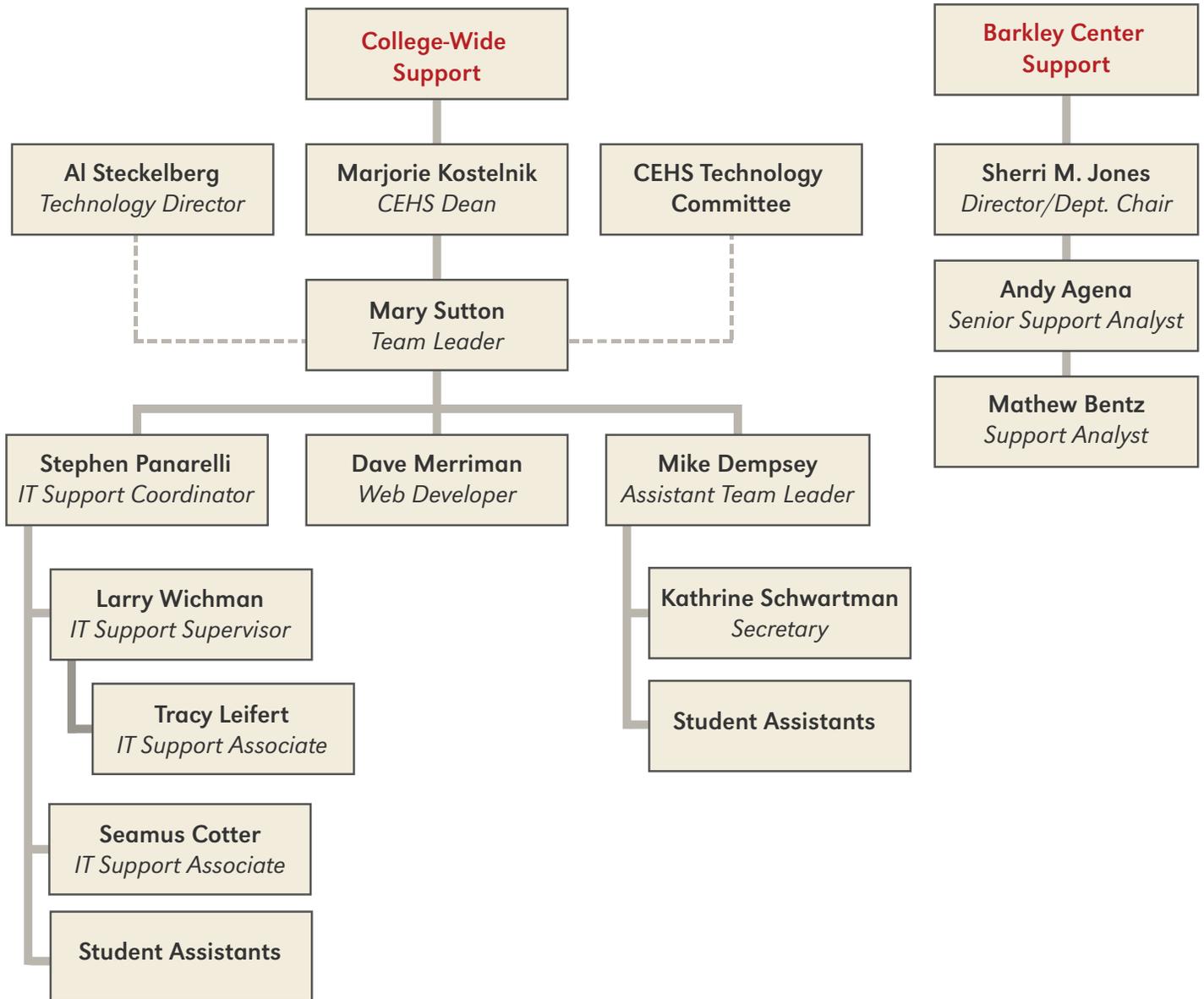
↑ 15

Increase in faculty & staff supported

↓ - 1

Decrease in number of CEHS IT staff

CEHS IT SUPPORT ORGANIZATIONAL STRUCTURE



Personnel

Andy Agena

Senior Computer Support Analyst

Official job description

Design, implement, and administer departmental servers with the following services: file (Mac, Windows, SSH), web, print, LDAP, Kerberos, pf, and streaming video for 250+ users and 300+ computers. Supervise technical assistance to faculty, staff, and students. Oversee backup, security, and software / operating systems upgrades. Propose purchases and policies to director. Decision-making and implementation is mission critical to the department; provide leadership in all areas of technology.

Official Duties and Responsibilities	Percent of Time
Server System Administration (LDAP, file, print, web, video, user accounts, backups, security (including HIPAA compliance))	50%
Manage acquisition / updating of systems and software	10%
Training for faculty, staff, students; preparing on-line documentation	10%
Supervise technology support to users	20%
Develop educational and scientific applications for faculty (high-level programming)	10%

Education / Training

B.A. in Political Science

Coursework in GIS analysis

Mac OS X Advanced Server Administration Class (2008)

Skills

Server Administration: (Mac OS X, Windows)

High skill level with Macintosh, PC, and *nix support

How the position has changed

This position has grown in areas of server administration, HIPAA network design and deployment, clinic observation system support, conference / classroom support, and supporting specialized devices and embedded systems.

Actual Duties and Responsibilities	Percent of Time
Server System Administration (LDAP, file, print, web, video, user accounts, backups, security (including HIPAA compliance))	45%
Manage acquisition / updating of systems and software	5%
Training for faculty, staff, students; preparing on-line documentation	5%
Supervise technology support to users	15%
Lab and classroom support	10%
Manage Clinic Observation System	10%
Support for specialized systems	10%

Mathew Bentz

Computer Support Analyst

Official job description

Provide system-level support of multi-user, multi-operating systems, hardware and software tools, including installation, configuration, maintenance, and support of these systems. Systems include technologies used in offices, research laboratories, clinical laboratories and student laboratories. Responsible for server administration and associated subsystems. Identify and recommend alternatives for optimizing computer resources. Coordinates problem solving processes and ensures that the business standards and requirements are met. Support required for approximately 300 devices.

Official Duties and Responsibilities	Percent of Time
Provide client support and technical issue resolution via E-Mail, phone or in person.	35%
Research problems, plan solutions, recommend software and systems and coordinate development.	30%
Server administration, printer administration and maintain various specialized devices.	15%
Maintain historical records by documenting hardware and software changes and revisions.	10%
Develop training materials and procedures, and/or train users in the proper use of hardware and software	5%
Manage and monitor data security and controls, strategic computing, and disaster recovery	5%

Education

Associate of Applied Science Computer / Electronic Engineering

Associate of Applied Science Printing / Visual Media

Masters of Business Administration

A+ and CCNA certifications, working toward DBA certification

Skills

Hardware and OS: Discrete component circuit design and assembly. High skill level Macintosh, PC and *nix support.

Applications: Adobe Creative and Web Suites (Graphic Design/Web Development), Quark Xpress, Bryce, Labview, MatLab, Arduino.

Server administration: Mac OSX server, Ubuntu server and HP Web Jetadmin.

Languages: JAVA, Processing, C, JavaScript, Actionscript3, Php, Assembly, PostScript, HTML/CSS, MySQL and AdobeScripting for PDFs.

Relevant Graduate Course Work: Data Visualization, Decision Support Systems, Data Analysis, Systems Architecture and Design, Object Oriented Database Design and Procedural Database Design.

Embedded Systems: Distributed sampling and cross-compiling for embedded systems Hitachi H8/3292, and Atmel AVR chip family.

How the position has changed

This position has grown in areas of server and printer administration, oversight of clinic observation system, conference / classroom technology support, and support for specialized devices and embedded systems.

Official Duties and Responsibilities	Percent of Time
Provide client support and technical issue resolution via E-Mail, phone or in person.	35%
Research problems, plan solutions, recommend software and systems and coordinate development.	30%
Server administration, printer administration and maintain various specialized devices.	15%
Maintain historical records by documenting hardware and software changes and revisions.	10%
Develop training materials and procedures, and/or train users in the proper use of hardware and software	5%
Manage and monitor data security and controls, strategic computing, and disaster recovery	5%

Seamus Cotter

IT Associate/Computer Specialist

Official job description

Provide technical support for labs, classrooms, and offices in CEHS.

Official Duties and Responsibilities	Percent of Time
Respond to and repair trouble reports	75%
Set up and maintain computers for labs and classrooms	10%
Install new systems and new software	10%
Attend weekly and monthly meetings	5%

Education

B. S. in Electronics & Engineering Technology

Skills

Seventeen years in the computer industry.

Can quickly troubleshoot and fix a variety of hardware and software issues on both Macs and PCs.

Strong understanding of Active Directory, networking, operating systems, and computer hardware.

How the position has changed

As the number of computers and printers increased in the City Campus Complex, Seamus dedicates more time to installation of new computers and software and responding to requests for technical help regarding faculty and staff computers and printers. We moved the majority of the responsibility for providing technical support for labs and classrooms to Dave Merriman.

Official Duties and Responsibilities	Percent of Time
Respond to and repair trouble reports	60%
Set up and maintain computers for labs and classrooms	5%
Install new systems and new software	30%
Attend weekly and monthly meetings	5%

Michael Dempsey

ALTC Assistant Team Leader

Official job description

This position assists in team management, is directly responsible for the management of technology in CEHS labs and classrooms, managing student workers who directly support CEHS labs and classrooms, providing web content and print continuity for the college, and researches new information technology and supporting use of these within the college.

Official Duties and Responsibilities	Percent of Time
Labs and classroom management	30%
Personnel and team management	30%
Technology exploration and implementation	20%
Web & Print	20%

Education

BA English, BA Philosophy, MA English, MA Curriculum and Instruction
 PhD Cognition and Learning (expected Dec 2013)

Skills

Analytical, goal-oriented, excellent writer

How the position has changed

Prior to the official job description above, Mike provided instructional technology support and managed a US Dept of Education PT3 grant. Then as grants ended, people left, and priorities changed, Mike's role added lab and classroom management, as well as web content creation. Recent years has seen a greater demand for digital content, which has fallen to Mike because he was doing some of this work already and because he writes well for a digital audience. The importance of digital content for the college in terms of recruitment, communication, and forms and information has grown to the point that at least 50% of Mike's time is taken up with digital content.

Official Duties and Responsibilities	Percent of Time
Labs and classroom management	20%
Personnel and team management	20%
Technology exploration and implementation	5%
Web & Print	55%

Tracy Leifiert

IT Associate/Workstation Support Associate

Official job description

This position is responsible for a) providing and coordinating the technical support for CEHS computer labs, classrooms, and checkout equipment; b) providing technical support for CEHS faculty, staff, and administrative offices; c) develop IT support strategies; d) research, administer, and provide training for administrative software applications (e.g. Web Event).

Official Duties and Responsibilities	Percent of Time
Coordinate technical support for CEHS labs, classrooms, and checkout equipment. Investigate, recommend, install new technologies to support teaching and learning in a classroom and in a distributed environment	40%
Provide technical support for CEHS faculty, staff, and administrative offices	40%
Server administration, printer administration and maintain various specialized devices.	10%
Create, review and revise IT support strategies, and managing work flow to complete these tasks	10%
Manage and monitor data security and controls, strategic computing, and disaster recovery	5%

Education

Associate of Applied Science in Microcomputer Technology / Focus in Network Management & Computer Support, 2005

Skills

Server administration

Mac and PC problem solving skills

Installation, support, and troubleshooting for computers, mobile devices, and AV equipment

How the position has changed

When the above job description was approved, Dave Merriman had been promoted from technical support in city campus complex (.5 FTE) and web programming (.5 FTE) to 100% web design, development, management and web programming. Tracy's new position was written to provide support across both campuses. Prior to this, Tracy was 100% in the HECO-LEV complex of buildings. But, as the amount of computing devices increased throughout the college, it became clear that the HECO-LEV complex required two full-time technical support personnel.

Official Duties and Responsibilities	Percent of Time
Provide technical support for computer labs, classrooms, and videoconference rooms in East Campus buildings (exclude Barkley Center)	30%
Provide technical support for CEHS faculty, staff, and administrative offices. This includes set up and installation of new systems and the maintenance and troubleshooting of computers, mobile devices, and AV equipment for faculty and staff in five separate buildings on east campus	35%
Create, review and revise IT support strategies, and managing work flow to complete these tasks	5%
Research administer, and provide training for administrative software applications such as WebEvent	5%
Assist with HECO-LEV system administration for servers in support of faculty, staff, and students.	15%
Research, consult, plan, design, and order equipment and software using eSHOP and/or third party vendors	10%
Manage and monitor data security and controls, strategic computing, and disaster recovery	5%

Dave Merriman

Web Developer

Official job description

This position is responsible for managing the CEHS web site, which includes guiding and implementing its design to communicate the message of the college while meeting the template requirement of the university. This position coordinates and trains the department staff responsible for department web sites. In addition, this position is responsible for the development of web-based projects that support the administrative and academic functions of the college.

Official Duties and Responsibilities	Percent of Time
Manage CEHS web site – design, implement, publish college web sites, web pages, PDF files, data input and content management components	35%
Develop web-based application – consult with customers, develop databases, and design web interfaces	30%
Coordinate and train department staff responsible for departmental web sites. Supervise student assistants	10%
Consult with CEHS technical support staff regarding support strategies, solutions, and training	10%
Participate in college and campus-wide technology groups	5%
Research, install, test, and maintain 3rd party web-based products	5%
Assist CEHS server admin in the management of college servers	5%

Education

B. S. in Computer Science
 MCSE and MCSA certified for Windows Server 2003
 MCTS certified for SQL Server 2005
 MCP certified

Skills

Web design and structure
 Web development training
 Web programming (PHP, MySQL, JavaScript, CSS, HTML)
 Window / Linux / Mac Server Administration
 Hardware and software support for computers and mobile devices

How the position has changed

Prior to this position, Dave Merriman provided technical support for city campus complex (.5 FTE) and provided web programming (.5 FTE). When the CEHS “web master” at the time left to work for Apple, we moved Dave to 100% web design, development, management and web programming. When Tracy was not able to provide technical support for the city campus labs and classrooms, Dave assumed that responsibility. In addition, Dave participates in planning and support for videoconference rooms. And he now manages the digital sign content management system for the college.

Official Duties and Responsibilities	Percent of Time
Design and maintain college web sites, develop and maintain content management system	35%
Develop web-based application – consult with customers, develop databases, and design web interfaces	30%
Train and consult with department staff responsible for departmental web sites	10%
Consult with CEHS technical support staff regarding support strategies, solutions, and training. Provide backup for tech support, participate in planning and support for computer labs, video conference rooms, and checkout equipment for CEHS city complex	10%
Digital signs – participate in planning and design, manage signage software, develop content management system for posting images	5%
Assist CEHS server admin in the management of college servers	5%

Stephen Panarelli

IT Associate/Manager, Customer Support Services

Official job description

Ensure all College constituents have access to up-to-date, reliable technology equipment and software. This involves consulting with faculty and staff to discuss their technology needs, researching and purchasing appropriate equipment and software, and overseeing the set up and installation.

Official Duties and Responsibilities	Percent of Time
Supervise technical support personnel, research and recommend equipment and software, design and implement procedures for repair, update, and maintenance of technology equipment and software	40%
Administer multiple college servers	35%
Lead the development of web-based projects	25%

Education

B. S. in Electrical Engineering

Skills

Server Administration:

Linux, Mac and Windows server administration
 Database administration with postgresql and Filemaker
 Web server administration with Apache and IIS
 File services administration on Mac and Windows

Web Design:

HTML and javaScript

Programming:

PHP, C, Java scripting, Filemaker scripting, SQL

Hardware and Software:

High level problem solving skills for Macs and PCs.

How the position has changed

As the number of faculty members and staff increases, and the number of devices per individual increases, Stephen is required to spend more time with research, purchase and installation of hardware and software. The number of servers Stephen manages have increased to 16. Security and network issues have become more of an issue for us and Stephen's responsibilities to oversee these issues have grown as well.

Official Duties and Responsibilities	Percent of Time
Supervise technical support personnel, design and implement procedures for installation, repair, update, and maintenance of technology equipment and software.	20%
Research, recommend, purchase and installation of equipment and software using eSHOP and/or third-party vendors	30%
Administer multiple college servers	30%
Development of web-based projects	10%
Oversee security and network issues	10%

Kathrine Schwartzman

Secretary

Official job description

This position collects, enters, and updates information critical to the operation of technology support services in CEHS, and it tracks, schedules, and sets up equipment used by faculty, staff, and students in the college. This position also provides low-level technology support to customers in CEHS.

Official Duties and Responsibilities	Percent of Time
Gather, maintain, and process technical support information, budgets, and databases. Contact customers based on this information. Provide this data in a form appropriate for reporting	45%
Provide low-level technical support. Answer telephones and provide information / technical support to callers. Go to customers and provide quick technical support (e.g. connecting a laptop to a projection unit)	30%
Track equipment in labs, classrooms, conference rooms, and mobile equipment carts and assist in ensuring this equipment is maintained according to schedules established by technology support team. Check out equipment and maintain associated paperwork and databases	15%
Make arrangements for meetings / workshops / conferences / video conferences (e.g. Polycom system) and ensure technology is present and working	5%
Provide clerical and administrative support to ALTC team (e.g., ordering supplies)	5%

Education

B. A. in Human Relations

Skills

Liaison between customers and support personnel

Strong customer support skills

Good understanding of technology

Able to identify problems in processes and design check lists or tables to assist in solution

How the position has changed

Kathrine is the contact person for faculty/staff technology support, reservation, and equipment needs in CEHS city complex of buildings. Kathrine now acts as an interface between the colleges' customers and their needs and CEHS IT technology support in the city campus complex. Student workers provide most of the technical support, so Kathrine spends little time on this duty as listed in her original job description. Kathrine is also more involved with equipment management than she had been in the past. Software and hardware changes have eliminated the need for Kathrine to schedule meetings and videoconferences.

Official Duties and Responsibilities	Percent of Time
Customer support – assist customers via phone or walk-in, enter trouble tickets, provide solutions when possible, identify urgency of problems and contact appropriate technology support personnel	40%
Management of checkout equipment – reservations, demonstrate, set up equipment, provide support in use of equipment	30%
Schedule checkout equipment and Mabel Lee computer labs for meetings, workshops, conferences, and classes	15%
Attend and participate in CEHS Technology Committee and ALTC tech support meetings, record and write meeting notes	10%
Provide clerical and administrative support to ALTC team (e.g., ordering supplies)	5%

Mary Sutton

ALTC Team Leader / IT Manager

Official Job Description

This position directly supervises seven full-time staff members, including managerial staff, technology specialists, and a staff secretary. This position oversees the supervision of the development and maintenance of all labs, training support, conference rooms and classrooms, servers, technology project development, college web development, and computer technology repair and replacement. A significant role of this position is to gather data and create reports for use in making decisions about technology use and expenditures in the college. This position also provides significant input for development of pedagogical applications of computer technology for use by college faculty, staff, and students. Additionally, this position has a permanent chair on the CEHS Technology Committee and acts as liaison between the CEHS and K-12 institutions in the State.

Official Duties and Responsibilities	Percent of Time
Establish overall direction, planning, and administration for CEHS IT	50%
Contribute to CEHS organizational goals and programs related to IT	40%
Contribute to the educational technology field in CEHS and the state	10%

Education / Training

B.S. Natural Sciences

Teacher Certification (not active)

Educational Computing Certificate

M.S. in Curriculum and Instruction (emphasis in Instructional Technology)

Coursework in educational psychology

Skills

Teaching

Leadership

Analytical / problem solving skills

Customer-oriented

How the position has changed

In the first decade of this position, a large part of our focus was to help students and faculty learn how to use instructional technology. Through a variety of grants, the unit had a larger staff that enabled them to provide a variety of instructional training. As the grants ended, the team became smaller. As the college became larger and the amount of technology per faculty member increased, it was determined that technical support was a higher priority. When the person who was in charge of managing computer labs and classrooms on city campus left, the position was changed to a tech support position for east campus.

With the loss of the person mentioned above, this position oversees the purchase and installation of hardware and software for videoconference rooms, digital signs, and computer labs in the CEHS City Complex. The ALTC Team Leader / IT Manager also collaborates in the design and content for college web site and digital signs. However, this may change with the creation of an external relations position in the Dean's office. This position has also been more involved in the managing of student workers and the secretary.

Official Duties and Responsibilities	Percent of Time
Establish overall direction, planning, and administration for CEHS IT	45%
Contribute to CEHS organizational goals and programs related to IT	10%
Supervisor for 7 FTEs and 7 student workers	20%
Oversee purchase and installation of hardware / software for CEHS City Complex computer labs, videoconference rooms, and digital signs	20%

Larry Wichman

IT Specialist/Technical Support Supervisor

Official job description

This position is responsible for coordinating technical support for CEHS faculty and staff offices, classrooms, and labs. This requires the person to have a good understanding of the College and its technical support needs, good interpersonal skills, and the ability to supervise other team members to accomplish effective and timely technical support.

Official Duties and Responsibilities	Percent of Time
Oversee technical support services in CEHS, excluding Barkley Center	30%
Consult, analyze, plan, design, set up and install new personal computer systems for faculty and staff in HECO and LEV buildings	30%
Systems administrator for servers in support of faculty staff and students in Home Economics and Ruth Leverton buildings	30%
Supervise 2.5 fte technical support specialists	10%

Education

On-the-job-training based on 50 years of experience in the Air Force, private companies, and UNL.

Skills

Server Administration

Mac and PC problem solving skills

Domain administration

Interfacing with third party software and hardware vendors

How the position has changed

At the time the above description, Dave was still .5 FTE tech support. We moved Larry into a position of overseeing technical support services across the college, excluding Barkley. Larry supervised, Seamus, Tracy, and Dave. It seemed a good idea but difficult to implement. The increase in quantity of technologies requires two FTEs dedicated to the HECO-LEV complex of buildings.

Official Duties and Responsibilities	Percent of Time
Oversee technical support services in HECO-LEV complex of buildings	20%
Consult, analyze, plan, design, set up and install hardware and software for faculty and staff using eSHOP and/or third-party vendors	30%
Systems administrator for servers in support of faculty staff and students in Home Economics and Ruth Leverton buildings	30%
Supervise 1.0 fte technical support specialist	10%
Participate in the design and support of videoconference rooms	10%

Resources

Income

CEHS technology is funded through multiple sources: college, individual academic departments, student technology fees, and grants.

CEHS and department funds are state funds. The amount of student technology fees allocated to CEHS is a percentage of the CEHS average student credit hours and an annual base of \$25,000. This report addresses all of these funding sources except grants.

IT Support personnel salaries are funded primarily by state funds, though two positions are at least partially funded by the Barkley Trust (Agena, Bentz). Seven of the full-time positions have a permanently funded status, while three positions are unfunded for 45% to 100% of their salary. Unfunding indicates the position lacks a dedicated funding line for the position, although the position is still considered permanent.

Income Type	FY 2009/2010	FY 2010/2011	FY 2011/2012
IT Support Salaries	445,852.00	446,913.00	460,022.00
CEHS Funds	40,299.74	83,369.41	98,428.12
Department Funds	114,416.45	169,688.93	136,572.57
Student Tech Fees	158,386.48	164,886.46	154,654.99
Total	\$758,954.67	\$864,857.80	\$849,677.68

Our student technology fees come from both UNL and UNO because the college has faculty and courses at both institutions. The table below shows the breakdown of student technology fees by college.

Institution	FY 2009/2010	FY 2010/2011	FY 2011/2012
UNL	146,761.65	152,757.56	143,200.00
UNO	11,624.83	12,128.90	11,454.99
Total	\$158,386.48	\$164,886.46	\$154,654.99

Expenses

The college technology-related expenses are comprised of salaries for IT support personnel, technology resources for faculty and staff, and technology resources for students. Therefore the income and expenses for salaries, college and department funds are the same. Only student technology fees may differ from income to expenses.

Expense Type	FY 2009/2010	FY 2010/2011	FY 2011/2012
IT Support Salaries	445,852.00	446,913.00	460,022.00
CEHS Funds	40,299.74	83,369.41	98,428.12
Department Funds	114,416.45	169,688.93	136,572.57
Student Tech Fees	91,994.32	150,757.60	168,783.26
Total	\$692,562.51	\$850,728.94	\$863,805.95

IT Support Personnel

There are 10 full-time IT support personnel in the college. The organizational structure and job responsibilities are described in the Personnel section. This year we also have two student workers providing technical support. One student is funded by the college, and the other is funded by student technology fees based on the type of support they provide.

CEHS Faculty & Staff Technology Resources

The majority of funding for faculty and staff hardware and software comes from the CEHS General Equipment fund and the individual's home academic department's budget.

Based on the computer replacement policy, qualifying faculty and staff are eligible for up to \$1800 every four years to purchase new hardware and software. The CEHS General Equipment fund provides 2/3 of the cost up to \$1200, and the academic department pays for the other 1/3 up to \$600. If it is necessary to go over \$1800, the individual must request the additional money from their department's budget.

The college also provides funding for technology purchases that are not part of the computer-replacement program and that are not the academic departments' responsibilities, such as laptops for checkout by faculty.

Student Technology Resources

Hardware and software for computer labs, classrooms, seminar rooms, mobile labs, etc. are funded with student technology fees. Student technology fees are also used to pay for student workers, for networking expenses, and for furniture in computer labs. Additionally, in the last two years we have funded several Technology Innovation Projects. Appendix E includes a copy of the student technology fees expenditures for the past four fiscal years.

Major Accomplishments

in the past three years

Technical Consultation and Support

- Migrated CEHS faculty and staff to Office 365
- Migrated from Sophos to Symantec
- Supported Student Technology Fees mini-grants
- Researched and implemented iPad initiative for elementary education and iPad learning cart
- Purchase and install an average of 50 computers per year through the faculty and staff computer replacement program
- Transitioned to eSHOP purchasing system

Web and content development

- Researched, tested, and implemented digital signage
- Developed content management system (cms) for specific sections of college web site
- Developed cms for digital signs
- Initiated student travel abroad blogs and made available to the public via home page
- Created practicum evaluation system for TLTE, a graduate student reporting system for TLTE
- Updated college web site content and navigation

Servers

- Set up, administer, and maintain 28 servers
- Completed IT Audit by Operations Analysis

Technology-enhanced facilities

- Increased number of classrooms, conference rooms, and video conference rooms
- Supported college-sponsored conferences with equipment and personnel before, during, and after
- Installed and maintain three clinical video observation systems

Instructional technology research, training, and support

- Supported CEHS Staff Council Technology workshop each year

Challenges

Increase in Demands

- The number of technology supported rooms and the amount of equipment to be maintained has grown in the past six years, but the number of support staff has remained the same.
- More than 300 faculty and staff in nine buildings across two campuses
- Equipment – increase in number of devices per customer (laptops, tablets, smartphones), increase in video conferencing rooms, more classrooms with multimedia equipment, and the addition of digital signs, clinical observation equipment (Barkley Center, Family Resource Center, Teachers College Hall)

Physical space

- HECO-LEV and Barkley do not have tech support space for setting up new computers and fixing existing computers
- City Campus Support is distant from customers in Henzlik and Mabel Lee, difficult for customers to contact and pick up checkout equipment

Technical Support

- Systems and processes – not standard across units
- Keeping asset information is difficult to keep up-to-date in WHD
- Purchasing – eSHOP has tasked all IT Support units and is time consuming
- Printers—personal vs. networked
- How should we support other customers with specialized equipment (e.g. Yiqi Yang's scientific instruments)
- Faculty and staff privacy concerns over programs such as KACE versus time savings

Web and content development

- Keeping information fresh, up-to-date, and interesting is time consuming
- Keeping web site consistent across academic departments is very difficult due to ownership issues
- Security of data (e.g., conference registration information)
- Keeping up with new technologies and trends

Server administration

- Security (e.g., student data, HIPPA)
- Need a replacement plan for servers
- Legacy database on legacy hardware (e.g. 6E—a program for managing graduate student data)

Technology-Enhanced Facilities

- College-run conferences needing checkout equipment put strain on our resources
- Keeping checkout equipment for faculty and staff up to date and new is difficult without a dedicated budget
- Difficult to meet specialized needs for checkout (e.g., transcribers)
- Do we continue to invest in traditional labs?

Instructional technology research, training, and support

- How can we provide support with current resources?

Technology-based project consultation and support

- How can we expand our support with current resources?

Communication

- Need to improve communication between IT support staff in three different locations
- Need to improve communication between IT support staff and customers

Professional development for IT support staff

- Need to develop a professional development plan

Vision for the Future

Our vision for the future is of a highly trained IT staff who are efficient and effective in their jobs and who provide excellent customer service through close interaction and communication.

This team of professionals will keep abreast of technology innovations and be able to adapt functions and services to meet the changing needs of the college.





It is the policy of the University of Nebraska-Lincoln not to discriminate based upon age, race, ethnicity, color, national origin, gender, sex, pregnancy, disability, sexual orientation, genetic information, veteran's status, marital status, religion or political affiliation.