



cio

OFFICE OF THE
CHIEF INFORMATION OFFICER
BOWLING GREEN STATE UNIVERSITY
Annual Report 2002-2003

This annual report provides highlights of accomplishments achieved between July 1, 2002 and June 30, 2003. Information is categorized for convenience in viewing this report, however it is possible the impact of a project may be realized in more than one category.



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about us



The Office of the CIO

The Office of the Chief Information Officer (CIO) provides information technology leadership for BGSU. The office works with the campus community in support of the University vision and core values to further the teaching, learning, research and administrative goals of BGSU.

Role of the Office of the CIO:

- > to be a campus advocate regarding the role of information technology
- > to work with the University community and its leaders to define a vision for the role of information technology at BGSU; to make specific proposals and advocate for resources, to realize that vision
- > to facilitate the effective coordination, implementation and ongoing support of information technology-related activity throughout the campus community
- > to represent the campus at the state and national levels on relevant issues

The CIO will provide the leadership to plan, integrate and optimize BGSU's use of technology services and technology infrastructure for the University community.

On July 1, 2002 the Office of the CIO announced the creation of the Office of Web Development and welcomed Instructional Media Services as a part of the Office of the CIO.

The Office of the CIO is comprised of:

- > Information Technology Services (ITS)
- > Instructional Media Services (IMS)
- > Student Technology Center
- > Office of Web Development



academic initiatives

Technology Education Consultation Specialist Program

The Technology Education Consultation Specialist (TECS) Program was launched during the Fall 2002 semester. Under this program, undergraduate and graduate students with backgrounds and skills in technology are paired with faculty members on semester-long projects designed to improve classroom instruction. In addition to the benefit to the instructors and those in classes, the TECS students are receiving unique real world work experience.

During 2002-2003, 11 TECS projects involving 15 faculty, 6 undergraduate TECS, 3 graduate assistant TECS and 2 IMS staff were completed. Activities in projects included: image scanning to create a class digital database; digital video editing and production; preparation of brochures and posters; training students to create and deliver digital presentations; setting up online class testing; and creating a digital class resource of links to international broadcast sites. The School of Art, Theatre, Biology, Telecommunications, and Human Movement, Sport & Leisure students were among the departments involved in projects. There were 618 students enrolled in classes involving TECS projects during 2002-2003.

Student Technology Center

Student Tech is a learning facility that promotes campus technologies and helps BGSU students use technology to their academic advantage. From August 2002 through May 2003, 6,210 customers sought assistance from Student Tech.

A grand opening celebration was held on April 15, 2003 and was attended by an estimated 1,100 students, faculty and staff. Those attending enjoyed music and food on the patio. Students were eligible for prizes that were raffled throughout the day. The grand prize of an IBM R series laptop computer was won by Sarah Kollsmith.

Programs offered by Student Tech include:

- > *Technology Skill Development in One Hour (or less)*—tutoring sessions on software packages including Microsoft, Adobe and Macromedia.
- > *Digital Video Checkout*—program by which students may check out digital video cameras, external firewire hard drives, tripods and lighting kits. From September 2002 through May 2003, 874 students were served by this program.
- > *Large and Small Group Workshops*—workshops on various topics were provided at the request of BGSU instructors. Thirty four workshops serving 632 students were held from December 2002-May 2003.
- > *Personal Technology Trainer (PTT)*—a long-term tutoring program in which students can obtain a thorough knowledge of several software programs.
- > *Financial Aid Laptop Program*—Students receiving financial aid can apply to receive a laptop computer to use free of charge for one academic year. Seventy five laptops were awarded during 2002-2003.
- > *Monthly Special Events*—a program to host a unique technology demonstration, Webcast, or interactive presentation on a monthly basis.
- > *Task-based Online Tutorials*—thirty online tutorials are now available “24 x 7” on the Student Tech Web site.
- > *Tech Fair*—an annual event designed for students, faculty, staff and the general public to bring in various vendors to show the latest in technological developments.

The Student Technology Center programs, services and collaborative efforts with other areas on campus have a direct positive impact on the recruitment and retention efforts of the University.

Classroom Technology Working Group

The Classroom Technology Working Group (CTWG) has presented a plan to upgrade and expand current classroom technology equipment in support of the improvement of instructional capabilities throughout campus. This will expand the pool of “master classrooms” from 91 to 160 over a four-year cycle. Each master classroom will be equipped with a computer, data/video projector, DVSS Set-top box (STB), document camera, VHS/DVD player, projection screen, sound equipment and “smart pad” remote technology control module all housed in a locking technology equipment cabinet. Implementation of this plan will begin during the second half of 2003.

Classroom technology support

In order to provide prompt response to classroom technology needs, Technology Support Specialists (TSS) devised a mechanism to efficiently resolve technology issues in classrooms. A program was implemented to inspect 278 classrooms for any technology related problems on a weekly basis and also to provide an immediate response mechanism for classroom issues. This program is a collaborative effort by ITS, IMS and Facilities.



administrative system initiatives

Mainframe installation

A new IBM Z800 model 2066-001 mainframe was installed in January, replacing a four-year old system. The new mainframe is 60% faster, has more redundancy, faster fiber to connect devices and runs a 64 bit operating system. Installation allows for savings on software and maintenance costs.

Evaluating administrative systems

The process of assessing the status and functionality of the administrative computing systems for human resources (AHRS), finance (AFIN) and student information systems (SIS) was initiated. During the spring 2003 semester, 257 individuals participated in 23 training sessions on using a Web-based tool called Decision Director by Advantiv. Participants then provided valuable input and detail about the requirements of our administrative system. Information gathered will be used to craft an RFP (Request for Proposal) for presentation to vendors and to plan the next steps of the project.

Administrative system applications

The following administrative system applications were written or enhanced:

- > BGSU Firelands move to SIS for scheduling and registration
- > LRS (Levi, Ray, & Shoup) print management system implementation started with transcript printing in the Office of Registration and Records
- > Direct loan payment disbursement notification process
- > Automation of Ohio Academic Scholarship process
- > Math placement process
- > Population of the LDAP (Lightweight Directory Access Protocol) database for currently enrolled students, active employees and retirees, identification of accounts eligible for deletion
- > Applicant copy process for Equity, Diversity and Immigration Services
- > COD (Common Origination Disbursement) process for Financial Aid for Department of Education standardization of loan and grant processing
- > Salary Sheet information distribution and automatic AHRS update
- > Caremark prescription drug program interface for Benefits Office
- > IVR (Interactive Voice Response) payment process for Bursar's Office



system support initiatives

Implementation of email anti-virus protection

The University's central email system was protected with anti-virus protections. From January 1, 2003 until June 30, 2003 this software blocked 229,383 email messages infected with viruses. It is now blocking over 10,000 virus infected email messages per week.

Implementation of a shared disk system

An IBM Storage Area Network (SAN) was implemented and is being utilized by many of the IBM, Unix and Windows central servers. This acquisition has allowed for the disk space on the SAN to be shared by many servers, reducing the overall acquisition of disk for individual systems.

Migration and consolidation of servers to centrally supported site

Continued efforts have been made to migrate servers from client areas to the central site within ITS. This allows client offices to receive the benefits associated with a centrally supported server. During the past year, seven new file servers and eight new application servers have been installed in Hayes Hall for client offices. This brings the total servers administered in the System Support area to 45 Windows, 7 Macintosh and 48 Unix machines.

Implementation of consolidated Oracle database server

An Oracle database server was installed and the various applications using Oracle were migrated to this server. By consolidating the Oracle server licensing costs and administration costs have been reduced. Nine different applications use the Oracle database server.

Installation of E-portfolio system

A server was installed for the E-portfolio project and the initial pilot testing was begun. Work on this system will continue into the 2003/2004 year culminating in an electronic portfolio system available to the campus community.

web-based initiatives



Development of the Office of Web Development

The Office of Web Development was created in July 2002. This office's mission involves the University's Web presence and Web technologies to support teaching, learning, research and administration.

Content management system

The foundation for a new look and design for the BGSU Web was put into place. A Web developer was hired, a content management system was purchased, installed and configured. A steering committee and Web operational committee were created for input into the new look and design of the BGSU Web site.

Web registration

An interactive Web registration system was developed allowing students to register for classes on the Web. Additionally, a waiting list on the Web was created, allowing students to place themselves on a waiting list for a class via the Web. The Student Class Schedule application was reworked to run in a more effective manner.

Web parking

Registration for employee parking as a Web-based application was placed into production.

eHire

The paper process to hire student employees was replaced with a Web-based process.

eTime for Students

eTime for Students is an ongoing collaborative project by which student employees will begin to track and report hours worked electronically.

Web applications written or enhanced

As more services are available via the Web, the following Web applications were created or enhanced to support this delivery method:

- > My Room and Meals
- > New Resident Housing Preference Request
- > Degree audit implemented
- > Orientation & Registration—involves all Orientation & Registration components including the ability to pay via the Web, allowing for changes to college and / or major and modifications to the math placement test
- > Faculty and staff bursar statement distribution
- > Account Management Utility upgrade—provides TSC with the ability to reset passwords to a default password, to synchronize the BGSU password, and the ability to add server accounts for a user
- > Web resource authorization
- > Web scholarship guide—Phase I
- > Financial aid award letters
- > Student schedule grid version generation
- > Tracking and reporting of distance education course sections
- > Perkins loan promissory note reprints

- > Tuition and scholarship information specifically for Hope and Lifelong Learning Tax Credit
- > Student grade reports modified to include student name which coincided with the decision to distribute grade reports via the Web only
- > Enhanced features of the searchable schedule of classes Web application

service and support initiatives

Technology Support Center

The Technology Support Center (TSC) continues to serve as the primary point of contact for Information Technology Services. The open hours were expanded to cover all hours classes are in session - a total of 67.5 hours a week. During the last year TSC responded to 38,911 phone calls, 8,623 e-mails for assistance, and recovered 420 damaged floppy or zip disks for clients. A total of 13,004 Remedy case tickets were resolved by ITS staff members.

Instructional Media Services (IMS)

IMS is comprised of Multimedia Production Services, Technology Education Consultation, Classroom Technology Services and Technical Services.

The Multimedia Production Services consists of Photographic Services, Instructional Graphics and the Materials Production Laboratory. This area produced nearly 34,000 slides and more than 2,000 digital images for research and instruction during 2002-2003. Over 3,000 posters, pamphlets, programs, flyers and brochures for groups and departments throughout campus were designed and produced.

The Classroom Technology area covers the scheduling and delivery of classroom technical equipment in support of classes, conferences and University events. The addition of digital streaming video brought the greatest change to this area throughout the past year. During the year, 18,122 orders for classroom equipment were received. Thirty nine percent of the requests were for computers and video projectors— a 15% increase from the previous year.

The IMS Technical Services area handles the installation, maintenance and repair of classroom technology equipment and audio and video editing and duplication.

Meeting Maker implementation

Interested faculty and staff were provided the opportunity to obtain Meeting Maker accounts on a centralized ITS Meeting Maker server. An appropriate number of licenses were secured to cover currently supported desktop systems. The Meeting Maker implementation involved the migration of several departmental Meeting Maker servers and the installation of Meeting Maker for over 900 clients across campus.

Desktop upgrades

Over 700 new computers were installed as a part of the Desktop Replacement Project. A Web application allowing individuals receiving new machines to view the status of their upgrade was implemented. Machines replaced by new computers were strategically placed on campus to keep equipment as up to date as possible.

Lab availability

Throughout the past year, 933 reservations were scheduled in ITS labs. The reservation process has moved to Resource 25 and an application developed to allow the campus community to view more information regarding the times labs are reserved. Also created was a Web-based application that provides a listing of software available in each lab allowing clients to view the applications available in each facility.

Lab upgrades

Hardware in the East Hall and Psychology Labs was upgraded during this year. A plan for the future of campus labs was created and reviewed for implementation.

Digital video

Support was provided for over 250 set top digital video boxes in classrooms. IMS, ITS and WBGU collaborated to provide the customization of software in labs and offices allowing streaming video on demand.

Temporary ID card process

A temporary ID card process was implemented to allow an affiliated person to register for a BGNet account. Once the affiliated person has a BGNet account, they may complete the registration process online and use their BGNet e-mail account and access the student services available on the Blackboard Web portal.

Expansion of wireless network

The wireless access on campus was expanded. Current buildings with full wireless coverage are Jerome Library, Union, Kohl Hall, Hayes Hall, College Park and the Cedar Point Building. Partial wireless coverage is available in ten other buildings throughout campus.

Telephone billing software

Pinnacle was identified as the system to replace the telephone billing system. Student telephone billing will once again be handled at BGSU rather than by an outside vendor. The process of implementing the new system has begun.

Communication

The Office of the CIO expanded services to communicate information to the campus community. Information distribution was enhanced by the implementation of the Connect newsletter and the creation of Web pages for the Office of the CIO. The Web pages include a Headlines section for referencing current information and a Projects and Strategic Initiatives section to provide details regarding ongoing initiatives.

Involvement in Capital Improvement Projects

Data and communications infrastructure is key to all areas of campus. ITS staff have been involved in the design, planning and implementation of projects including:

- > Cedar Point Center at Firelands
- > Fiber repair at Firelands campus
- > Additional voice and data for the Union Building
- > Installation of new elevator in Saddlemire Student Services Building
- > Renovation of RCC area in Saddlemire Student Services Building
- > Renovation of 2nd floor in Saddlemire Student Services Building to accommodate Student Tech Center
- > Renovation of language lab in University Hall
- > Phi Delta Theta House renovation
- > Replacement of cooling tower for Administration Building and for Overman Hall
- > Installation of voice and data to lounge areas in residence halls used for overflow housing
- > Renovation of Offenhauer East and Kohl Hall
- > Replacement of all cabinet locks on IMS and ITS cabinets
- > Installation of outdoor cameras in various parking lots on campus
- > Study of power needs as related to the Disaster Recovery Plan
- > Widening of Wooster Street
- > Review of University's master plan to determine impact for current installations and future needs

security and disaster recovery initiatives

Incidents

Network reconnaissance from external sources presents ongoing challenges for security. The security officers dealt with the following types of incidents throughout the year:

- > Spam and virus complaints
- > System compromises
- > Policy violations
- > System or network attacks
- > Copyright violations/piracy
- > Vulnerable systems
- > Civil/Criminal investigations
- > Complaints to BGSU from outside organizations
- > Information exposure

Establishment of InfraGard chapter

Due to security staff efforts, the development of a Toledo area InfraGard chapter was completed during 2002-2003. InfraGard is an information sharing and analysis effort established to facilitate the exchange of information critical to the protection of the Nation's infrastructure. Organizations involved include the U.S. Government (led by the FBI) and an association of businesses, academic institutions, state and local law enforcement agencies, and other participants.

Security awareness

Via presentations to various groups, participation in panel discussions, committee participation, articles written for the CIO newsletter, and information presented via the Web, the security team continued to increase awareness for security issues across campus. Security staff continued to increase their awareness by attendance at various conferences and training sessions. Wireless security training was emphasized throughout the year.

Disaster recovery

A department-wide Disaster Recovery Plan was identified. Based on type of emergency/disaster, the steps to be taken for different levels of disasters were identified, key contacts for each area were outlined, backup/off-storage site storage processes were created, the setup of a command center in case of an emergency/disaster was developed, and a contract with an emergency equipment vendor was negotiated. Implementation and testing of this plan will be an ongoing project.

Information security and legal compliance

Legislation requiring the implementation of comprehensive information security standards is a factor affecting technology use and information management at BGSU. In addition to continued efforts to evaluate information security practices against the Federal Privacy Act, the Family Educational Rights and Privacy Act (FERPA), and the Digital Millennium Copyright Act, the security staff has begun to develop plans for assisting the University in complying with the Health Insurance Portability and Accountability Act (HIPAA) Security Rule, and the Gramm-Leach-Bliley Act. The security staff is also evaluating the impact of California Senate Bill 1386 on incident reporting procedures, and monitoring progress of recently proposed federal legislation such as the Database Security Breach Notification Act, the Social Security Number Misuse Prevention Act and the Identity Theft Prevention Act.



partnerships and collaboration

The focus of the work completed within the CIO's area is in support of the University vision and core values to further the teaching, learning, research and administrative goals of BGSU. Partnership and collaboration with numerous areas throughout the campus community is a necessity to meeting this goal. Selected initiatives for partnership and collaboration are outlined here.

Internet2

The Internet2 Steering Committee provided guidance for expanded knowledge about Internet2 at BGSU. In addition to regularly scheduled meetings, the committee sponsored an Internet2 forum. The forum was an opportunity to gain knowledge about Internet2 and to encourage collaboration on Internet2 projects at BGSU.

OLN Learning Institute

A collaborative effort by the Office of the CIO and the Center for Teaching, Learning, and Technology to sponsor a two-day Learning Institute at Bowling Green in January 2003.

Residential Computing Connection

Residential Computing Connection and ITS have collaborated on a number of projects for technology support and development. These include the extension of the University network to on-campus student rooms which were not re-wired as part of the BG Supernet infrastructure project, development of wireless network connectivity as residence hall are renovated, access to University-licensed software and sharing of resources for a Technology Support Specialist (TSS).

Student Technology Center

During the past year the staff of the Student Technology Center has worked collaboratively on projects with AIMS, Admissions, Athletics, CTLT, College of Education and Human Development, Film Studies, GradSTEP, Orientation & Registration, Registration and Records, and Residential Computing Connection to develop strategies and programs to expand the success of students in their technological endeavors.

Center for Teaching, Learning and Training

Center for Teaching, Learning and Training (CTLT) and the CIO's office collaborated on several projects including content development grants, support for a new learning community, WebCT/Blackboard transition and a Media 100 system donated to Student Tech.

information technology committee

BGSU Strategic Plan for Information Technology

The Strategic Plan developed by Information Technology Committee (ITC) was presented to the Faculty Senate in November 2002. The plan is a guide to the activities of ITS and the activities of other campus entities that implement information technology, to address the interests of the entire University.

The strategic plan consists of three principal areas of focus: Information Technology System, Support and Training, and Primary System Operational Services.

The Information Technology System focus addresses the issues of University-wide information technology importance - infrastructure usage, services, staffing, budgeting, information privacy, system security and protection. The Support and Training focus recognizes the responsibility of ITS and the collective campus to meet University information technology performance demands. The Primary System Operation Services focuses on Instructional Technology Systems, Administrative Information Systems, Student Computing environment and Research Computing environment.

Each section provides short term, mid-range and long term goals to be targeted throughout the next two to five years. Implementation of the plan is ongoing.

Committee meetings

The Chief Information Officer and Executive Director of Information Technology Services participated in the regularly scheduled committee meetings.

external committees

Third Frontier Strategic Working Group

The Third Frontier Network (previously known as the Ohio Dark Fiber Initiative) was created to provide advanced networking services to support higher education and research in the state of Ohio. The goal of this project is to create a premier network that will enhance research, education and economic development that will help expand Ohio's role and reputation in networking technology. *BGSU representative: Bruce Petryshak*

OARnet Steering Committee

The OARnet Steering Committee (OSTEER) is charged with the responsibility of interpreting the networking needs of its members to OARnet management. And in doing so, to insure that the policies and the financial structure of OARnet are consistent with member needs and to reflect the ability and willingness of each institution to share the cost of a statewide network. *BGSU representative: Bruce Petryshak*

Third Frontier Pricing Strategies Committee

This committee is developing new pricing models for the Third Frontier Network and presented its findings to the OSTEER Finance Committee on March 17, 2003. The Finance Committee distributed the findings to the OARnet Steering Committee

(OSTEER) on April 1 for consideration at the Spring OSTEER Committee meeting.
BGSU representative: Bruce Petryshak

IUC Campus Information Technology Committee

IUC is a voluntary educational association of Ohio's public universities that currently represents Ohio's 13 public universities and two freestanding medical colleges. The Information Technology Committee is a standing committee of Information Technology Officers with common interests and concerns for sustaining and improving the quality of information technology in public higher education.
BGSU representative: Bruce Petryshak

IUC - SLCC Microsoft Negotiation Subcommittee

The current Microsoft software agreement between Microsoft and 15 four-year institutions in the Inter-University Council of Ohio (IUC) will expire on September 30, 2003. Statewide negotiations are continuing with Microsoft for an agreement that will begin on October 1. *BGSU representative: Dale Schroeder*

IUC - CITC Security Subcommittee

The basis for the establishment of a Statewide Security Group has been made during 2002-2003. This security subcommittee of IUC will be created to: gather information on current campus IT security challenges, resources, practices and policies; develop or acquire model campus security policies; recommend and prioritize security practices for implementation that are appropriate considering the openness of a university environment and the limited availability of resources. This group will form and begin regular meetings throughout the next year. *BGSU representative: Kent Strickland*

OARtech

OARtech is a technical advisory committee which is a liaison between the State of Ohio internetwork service provider, OARnet and the provost level steering committee, OSTEER. OARtech was formed to help bridge the high level input from OSTEER with pragmatic advice and experience from in-house technology staff of the member institutions. OARnet is Ohio's internetwork service provider, serving higher education, K-12 schools, government and commercial business. By charter, OARtech is focused on assuring that OARnet addresses the needs of higher education members.
BGSU representative: Mike Smith

Interuniversity Council of Media Directors (IUCMD)

The Ohio IUCMD is an organization composed of the directors and assistant directors of campus wide instructional technology support centers at all of the public four year institutions in Ohio. The group meets at least once per quarter to share concerns, innovations and solutions to instructional technology management challenges. Annually the IUCMD sponsors an equipment showcase during which vendors present the latest in technology equipment. The IUCMD has been a national leader in publishing equipment life / amortization schedules based on data from the member institutions. *BGSU representative: Kevin Work*



budgeting

CIO budgets

Changes in the reporting structure within the CIO's area brought about the creation of operating and personnel budgets for Instructional Media Services and Student Technology. Telecommunications was moved from its status as an auxiliary budget. The BGSU Learning Institute grant and the Internet2 grant were tracked for expenses throughout the year.

Purchases

Several new purchases were made in 2002-2003 for software programs, hardware upgrades and services. These included: telephone billing software from Pinnacle, a student time collection system from Kronos, a Web content program from Percussion, a disaster recovery process from SunGard and an IBM mainframe upgrade.

Agreements

The CIO area worked with Legal Counsel for reviewing terms and conditions of license agreements. The agreements reviewed included: Percussion, SunGard, Mainline (IBM), Vitel, Emerson (Liebert), Blackboard, LRS (Levi, Ray, & Shoup), Microsoft Campus and Select agreements, Apple, Network Associates, Bearing Point and DARwin.

Microsoft software agreement

Much in the way of planning for the transition from the current Microsoft agreement to new Campus and Select agreements occurred in 2002-2003. BGSU was represented on the IUC subcommittee that planned the transition and RFP requirements for a reseller. On-campus coordination included keeping the University Bookstore (for resale to students), the Libraries (for sign-out of CDs for home use) and Continuing Education (seminars) informed of transition plans.

Other budgeting highlights

2002-2003 was the last year of working with Telesoft for handling the student long distance billing. The student long distance billing process was brought back into BGSU. A related item is the ending of the AT&T long distance contract in association with the switch to Qwest under the state contract. A move from the SGI platform to Sun Solaris for BGSU provided some interactions with new vendors and obtaining appropriate licensing. The Apple resale program moved from ITS to the University Bookstore.



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