Distance learning in students’ future

By Deanna Hohler
Lantern staff writer

Students at universities across the country can learn everything—from beekeeping to plant biology—with technologically interactive distance learning.

Distance learning is the transporting of information from one point to another by technological means, such as video teleconference, two-way interactive video and fax machines.

This technology is a sign of what is in store for classrooms of the future, said Thomas McCain, OSU professor of communications, at a roundtable discussion sponsored by the Department of Communications Wednesday.

There is significant evidence that students prefer traditional classrooms. However, distance learning is a cost-efficient way to cater to continuing education students’ schedules, to capture and retain children’s attention and to share educational experience among schools, said Stephen Acker, professor of communications.

“We should be able to take people to different situations and educational environments and stop rote-type memorizational learning,” said Robert Tierney, OSU professor of education, policy and leadership.

Tierney works with Children’s Television Workshop’s show “Ghostwriter.”

“Distance education is used to share expertise across the country,” said Larry Whiting, an associate for public information in OSU agricultural administration and professor of agricultural education.

Acker said studies have incorrectly shown that there is no significant difference in the amount of learned information, as measured by test scores, between technological learning and traditional classroom learning.

The studies were not sophisticated enough to measure the difference because they did not take into account the number of students per classroom, the amount of study and preparation time, or students’ motivation levels, Acker said.

Ohio State has taught 60 hours of classes using technological means since 1987.

Interactivity between teacher and student was achieved in the two classes, agricultural education and beekeeping, which were taught for credit by a telephone teleconferencing system, in-class computers and a fax machine, Whiting said.

Two-way microwave communication is used between the OSU Columbus campus and Wooster, and faculty-in-service meetings are held via satellite to the branch campuses, Whiting said.

“The bottom line is students expect something of broadcast quality,” Whiting said. “Talking heads just don’t do it.”

The beekeeping class was offered to students at 12 universities in a PBS “This Old House” format which took students into the field to experience and understand the material, Whiting said.

It was very economical for Ohio State to carry a distance learning course in agricultural law, taught by a professor at Iowa State after OSU’s agricultural law professor retired and was not replaced because of budget cuts, Whiting said.

Other universities, such as North Carolina State and the University of Utah, also use this type of educational exchange.
Take classes in Cleveland without leaving OSU

Teleconferencing links students in far-flung locations

By Ken Frentz

Ohio State is continuing to expand its educational capabilities through a form of teaching called distance learning. With the technology of distance learning, it is possible that a student at Ohio State could attend a class on the west coast without ever leaving Columbus.

Distance learning, also referred to as teleconferencing, has been used before at Ohio State, but "in the past has been strictly limited to satellite hookups," said Wayne Cornell, chief audio video engineer for UNITS, the telecommunications portion of University Systems. "Now a digital telephone link between two parties is being evolved."

Cornell said that this type of teleconferencing does not involve satellites, but rather the telephone system. An incoming "call" or transmission to Ohio State from another university, however, is different than a normal telephone call because it requires UNITS to decode it into regular audio and visual messages. The transmission is then related to a specially renovated "teleconferencing room" in 101D Bolt Hall. It is here that students tune in.

Distance learning came to Ohio State in response to a request from NASA Lewis Research Center in Cleveland. NASA LeRC officials wanted their people to have access to graduate education. With support from former governor Richard Celeste, the teleconferencing project was funded by NASA LeRC and the Ohio Aerospace Institute (OAI), also in Cleveland.

The facility is currently linked to NASA LeRC, OAI and the University of Cincinnati. Plans are soon to link to Case Western Reserve, the University of Toledo and Cleveland State University.

In the Bolt Hall teleconferencing room, there are large TV screens so students see the professor's notes. Instead of an ordinary podium, there is a computer switchboard and audio equipment. Seats are equipped with microphones so that each student is able to listen and ask questions. Lastly, students won't find any chalkboards in this classroom because chalk dust could cause problems with the electronic equipment.

The distance learning project was launched at the beginning of winter quarter 1994. The College of Engineering is acting as the test site. According to Gerald Gregorcik, chairperson of the Department of Aeronautical and Astronautical Engineering, the initial cost of getting the project off the ground was a substantial one to include the electronic equipment. The electronic equipment cost $100,000, paid for through an OAI grant. Modifications to reduce noise in the Bolt Hall classroom cost $55,000. An initial connection charge added $12,000.

Gregorcik said that OAI courses have priority for use of the facility. Otherwise, the College of Engineering is free to use the classroom in the University's best interest.

Last quarter, there were two graduate classes being taught from the facility. John Lee, a professor in the Department of Aeronautical and Astronautical Engineering, taught "Introduction to Nuclear Power Plant Operations" to Ohio State and NASA LeRC students. Brian Hajek, a research scientist in the Department of Mechanical Engineering, taught "Introduction to Nuclear Power Plant Operations" to Ohio State and University of Cincinnati students. There were a total of about 12 students in each class, but the enrollment is expected to grow in the future.

Teaching distance learning classes requires a different type of approach, because actual person-to-person interaction is limited. "I like to walk around and be very interactive, but with distance learning I have to adapt new methods and ways to reach out," Hajek said.

Both Hajek and Gregorcik point out that even in its primitive stage, distance learning is very advantageous. "It is a tremendous opportunity for Ohio State to market our instructional capabilities within and beyond the state of Ohio," Hajek said.

'I think it's a tremendous opportunity for Ohio State to market our instructional capabilities within and beyond the state of Ohio.'

Brian Hajek

Hajek also said that his workload is cut down because he doesn't have to prepare every lecture. For example, a professor at Ohio State will alternate with faculty members from other schools in presenting material.

Gregorcik pointed out that at times courses can't be offered because not enough Ohio State students are interested in a particular specialized topic, but if there was similar interest at other Ohio schools or businesses, there would be a justification to offer the class. This is made possible through teleconferencing. Ohio State may have a more qualified professor than another school or vice versa. Distance learning opens up the opportunity to receive the most expert instruction when it may not have been available otherwise, Gregorcik said.

Last, distance learning classes are recorded, allowing the student who might have missed the lecture a chance to view it later. But with all that distance learning has to offer, the new facility at Ohio State hasn't been without its problems. Throughout the quarter, lectures were interrupted because of technical difficulties.

"We are still ironing out some problems, but we hope to have the entire system running error free a soon as possible," said Gregorcik. Hajek said he believes distance learning can be an effective system of teaching only if the technology is working effectively.

"If the equipment isn't working it can have a negative impact on learning," Hajek said.

The addition of new speakers and other revisions will help. Gregorcik also said that distance learning has already made a positive impact on Ohio State and that the program will continue to grow.

"I believe it has brought the technical community closer together," said Gregorcik. "I think this type of technology will soon expand, even as far as in the war place."

Kia Crenz is senior who will graduate this quarter with a bachelor's degree in journalism.
New Albany, OSU make info connection

By Christine Esposito
Lantern staff writer

Juniors and seniors at New Albany High School can gain early college experience and credit through the distance learning program between Ohio State and New Albany public schools.

"The idea of distance learning is not new," said Russell Morrison, senior design engineer for the Office of Information Technology. "The IP Video, which stands for Internet Protocol Video, that we use makes it much cheaper than the previous technology."

IP Video, or video over IP, is a way to transmit images from one site to another. All that is needed is a computer with internet access, a Polycom H323 camera and a television. Morrison said that this protocol costs a fraction of what previous methods cost.

Jon Stonebraker, technical coordinator for New Albany local schools, explained how to make a connection: The teacher at New Albany will dial up the IP address on the computer, much like making a phone call, and the two sites are connected, which allows transmission.

"The Polycom H323 camera captures the images in one classroom at about 30 frames per second," Stonebraker said. "Thirty frames per second is the same type of picture you would see on NBC or CBS. Older technology captures 15 to 20 frames."

After the camera captures the images they are translated into IP language. That language is then transferred through a connection to the Polycom H323 camera at OSU, where it is translated back to video. Audio is captured the same way by using a microphone.

"It's basically like having the OSU professor in a different corner of the room," Stonebraker said.

Now students in the fourth year Spanish class at New Albany High School are able to be part of a Spanish 104 class at OSU without leaving their classroom.

"Just to be a part of a distance learning class is a great opportunity for all students involved," said Linda Harlow, associate dean for the College of Humanities. "The OSU students in the Spanish 104 class were hand picked by the professor as students that want to participate in this type of technology class."

Students at New Albany receive more than an opportunity to experience college, they also receive college credit hours. Through the state of Ohio's post-secondary education law, high school students that have fulfilled all high school requirements are permitted to take college level courses for college credit before they graduate.

"There were a few kinks in the beginning, but we have worked them out," said Scott Stewart, principal for New Albany local schools. "Our students are now not only interacting with the professor, but with other college students."
June 29, 2001

Technology enhances Ohio State University’s outreach

Contact: Elizabeth Conlisk
(614) 292-3040

COLUMBUS -- Ohio State is striving to maximize the university’s potential by creating a university-wide technology enhanced learning strategy.

A Distance Education Committee appointed in April presented to the Board of Trustees Friday (6/29) an institutional vision to use learning technologies to enhance, support and expand the research, teaching and service mission of the University. Bob Moser, vice president for agricultural administration and university outreach, said that the bottom line is that Ohio State is doing a lot more with learning technologies than many people realize.

“What separates Ohio State from other schools is that we are working to blend technology with the University’s traditional mission,” Moser said. “We want to set the standard for the 21st Century land grant institution and maximize the intellectual capital of Ohio State by using learning technologies to enhance, support and expand our research, teaching and outreach missions.”

Many Ohio State colleges are involved in delivering on-line degrees and courses. For example, the College of Nursing offers a master’s degree in nursing administration and the College of Pharmacy provides a doctorate in Pharmacy. The College of Humanities has created a Web-based American history course, and the Fisher College of Business uses online course materials in the Executive MBA program. Trustees heard presentations from faculty involved in these on-line programs.

“What has emerged from the committee’s evaluations is that there are a lot of excellent initiatives at Ohio State using learning technologies,” said committee member Alice Stewart, director of strategic analysis and resource planning. “What we’re trying to create is an institution where technology enhanced learning becomes the norm. We’re working to find ways that the

- more -
university can support faculty and encourage the application of technology as a natural extension of other tools to disseminate knowledge.”

The presentation to trustees completed phase I of the committee’s work, which examined the status of technology enhanced learning and distance education at Ohio State, benchmarked against other institutions, and prepared a vision and conceptual model. The strategy being developed would:

- Place emphasis on faculty knowledge, the university’s core asset,
- Use technology to bring research and teaching closer together, and
- Provide faculty with tools that facilitate the teaching process, similar to the way e-mail has facilitated communication.

Phase II will consist of moving technology enhanced learning into a more prominent role that supports the goals of the Academic Plan, Stewart said. The committee will also help assess the market and identify way to effectively reach students on campus and beyond.

“If you think about what the technology support in the classroom was like 10 years ago, we’ve made a quantum leap at Ohio State,” she said. “Technology is evolving in ways that enable us to dramatically change how we provide instruction.”

Chief Information Officer Ilee Rhimes said that approximately 80 percent of the colleges currently use basic communication technology such as e-mail, threaded discussions and live chat rooms and use the Web to post announcements and course syllabi.

Rhimes said Ohio State will benefit tremendously from the expanded use of information technology to enhance learning. Besides supporting the goals of the Academic Plan, the model will align faculty goals with new opportunities and distinguish Ohio State with its “knowledge first” approach.

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Date: Mon, 18 Aug 2003 16:20:22 -0400
From: Joe Branin <branin.1@osu.edu>
Subject: Knowledge Bank Project
Sender: owner-liball@lists.acs.ohio-state.edu
X-Sender: mwillhof@pop.service.ohio-state.edu
To: liball@lists.acs.ohio-state.edu
Reply-to: branin.1@osu.edu
X-Mailer: QUALCOMM Windows Eudora Version 4.3.2
X-Original-To: liball@lists.acs.ohio-state.edu

Subject: University Supports Knowledge Bank Project with Manager and Funding

As you know, the Libraries has been planning an exciting new project called the "Knowledge Bank" over the last year. The Knowledge Bank was first proposed to the Libraries in the fall of 2001 by the University's Distance Learning Committee when it recommended that the Libraries take the lead in identifying, organizing, sharing, and preserving important, but unpublished, academic digital assets being produced at the University. We took up this challenge, and over the last year the Libraries -- in partnership with the University's Chief Information Officer, OhioLINK, OCLC, and Chemical Abstracts -- has prepared several position papers and presentations on the Knowledge Bank concept, compiled an online inventory of selective University digital projects, and established pilot projects using MIT's DSpace to test this digital repository's potential. More information about the Knowledge Bank can be found at http://www.lib.ohio-state.edu/KBinfo/

I am pleased to announce that our preliminary work on the Knowledge Bank has garnered significant resource support from the University's Office of Academic Affairs and Office of Research that will enable us to move forward more quickly and with more concentration in the next two years. The OhioLINK consortium has also become very interested in our work, and we are anticipating broader support and effort from OhioLINK to create a statewide Knowledge Bank or digital repository program that will complement our project.

The University's Office of Research has awarded the Libraries a $400,000 Board of Regents Research challenge grant to support the further implementation of the Knowledge Bank project. These are one-time funds that must be expended by the summer of 2005.

In addition, the Provost is providing the Libraries with funding to hire Thomas Cetwinski who will become the Program Manager for the Knowledge Bank. Mr. Cetwinski was recruited to the Libraries through a spousal hire: he is the husband of University President Karen Holbrook's new Chief of Staff Pearl Bigfeather. Mr. Cetwinski is a professional librarian with more than twenty-five years of experience in public services, human resource management, and administration in special and academic libraries in the United States and abroad. He has held positions at the Newberry Library, the University of Illinois at Chicago, the University of Florida, and the University of Georgia, as well as consulting positions in Saudi Arabia and Egypt. Mr. Cetwinski will join the Libraries and become the Manager for the Knowledge Bank project on September 1, 2003.

With full-time project management, generous research funding, and talent and partnerships that no other library can match, I believe we will see significant progress in the Knowledge Bank
project over the coming years. Add this project to our Main Library Renovation and Science and Engineering Library Digital Union projects, and you can see that we are certainly fully engaged in giving the Ohio State University the very best library facilities, collections, and digital information services.

Joe Branin
Director of Libraries
Title: Interview
Creators: Boyce, Robert M.
Contributors: Sterret, Steve
Keywords: Ohio State University. Office of Communications
Issue Date: 2005
Publisher: Ohio State University Archives
Series/Report No: Ohio State University Oral History Program
Abstract: As an undergraduate student at Ohio State in the late 1930's Robert Boyce abandoned an earlier interest in engineering and enrolled in the School of Journalism. His studies were interrupted suddenly by Pearl Harbor. He spent four years in the Army Signal Corps, and returned to Ohio State in January 1946, this time as a geology major. Boyce discovered, however, that the advanced mathematics courses required for geology were difficult, and his graduation could be delayed. Recalling at the time his earlier
He proved to be an excellent source for science stories. Boyce’s best source for information on Antarctica and other polar areas was Richard Goldthwait, professor of geology, and the first Director of the Institute of Polar Studies.

**URI:** http://hdl.handle.net/1811/466

**Other Identifiers:** 41.v

**Appears in Collections:** The Ohio State University Oral History Project

**Files in This Item:**

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Show full item record

All items in Knowledge Bank are protected by copyright, with all rights reserved.
Benefits for The Ohio State University

The Knowledge Bank offers an opportunity to store, share, and preserve important digital content in a professionally managed repository that represents OSU’s scholarship, and showcases the international prominence of the faculty, both individually and collectively. The ability to control access or to distribute research results quickly will emphasize the value and cutting-edge nature of Ohio State’s research.

Benefits for the User

The Knowledge Bank enables controlled or wide remote access to Ohio State’s research and scholarly materials from the Internet.

More detailed information on the Knowledge Bank:
https://kb.osu.edu
The work of faculty members, creating research, teaching material and scholarly publications in a world of increasingly complex digital formats, requires the ability to collect, preserve, index and deliver this growing body of digital research. The Ohio State University set out to develop a system that met these growing needs. The result is the Knowledge Bank.

The Knowledge Bank can manage digital resources in a professionally maintained archive, giving researchers increased control, visibility and accessibility to their knowledge assets over time.

**Benefits for Contributors**

The Knowledge Bank solves a problem faculty members have struggled with for the past decade: how best to manage their growing collection of digital materials. The Knowledge Bank builds on new standards for storing and preserving digital assets and on new discovery tools for controlling and sharing these assets.

Benefits of contributing content to the Knowledge Bank include:

- The long-term preservation of an array of digital formats, including text, audio, video, images, datasets and more

- Rapid distribution of research results

- A long-term, stable URL that can be used in citations to link to items stored in the Knowledge Bank

- Organized access to the body of a researcher's work for students and others

- A worldwide audience or controlled access.

**Benefits for Participating Communities**

"Communities," such as colleges, departments, labs or interdisciplinary research centers, can modify the Knowledge Bank to manage the submission process and meet their individual needs.

Communities can create as many collections as they need. Each collection can be established with unique specific contributors, access and workflow options.

The Knowledge Bank showcases the work of the community to researchers around the globe. The interdisciplinary content of the archive will attract a wider audience than a repository dedicated to one individual discipline.

The Knowledge Bank relieves the community's staff of the time-consuming burden of maintaining a publications presence on the web. The University Libraries provides guidance in establishing new Knowledge Bank communities, and provides assistance in organizing, sharing and preserving digital assets over time.
Dear All,

Please note that we now have a Knowledge Bank promotional video available from the home page of the Knowledge Bank - [https://kb.osu.edu/dspace/](https://kb.osu.edu/dspace/)

Spread the word about the benefits KB has to offer faculty, students and staff.

Just follow the link video presentation to learn more about the Knowledge Bank. Alternatively, save the following permanent link for use when it is no longer featured in the News box on the KB homepage:

[http://hdl.handle.net/1811/34035](http://hdl.handle.net/1811/34035)

Best wishes,

Ruth

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Ruth Gallegos Samuels  
Scholarly Resources Integration Department  
Ohio State University Libraries  
Columbus, OH 43210  
phone: 614-292-7522

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Spam  
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Forget previous vote
Hi Tamar,

We are about to launch a new user interface for the KB. One of the features of the new interface is a different 'view' for image collections that includes a 'gallery'-type view for browsing, and the ability to look at the image on the item page itself (rather than having to download it). I would like to apply this new view to the University Archives photographs (current view: https://kb.osu.edu/dspace/handle/1811/37314). You can see what it would look like here:

The collection home page: https://kb.osu.edu/preview-xmliui/handle/1811/37314
A browse screen: https://kb.osu.edu/preview-xmliui/handle/1811/37314/browse?type=title
An item page: https://kb.osu.edu/preview-xmliui/handle/1811/37323

We should be launching the new interface next week. Let me know if you have any questions or concerns about the image view (or the new design in general). If not, we will go ahead and apply the new 'view' to the Archives photographs.

Thanks!
Melanie

Melanie Schlosser
Metadata Librarian
Scholarly Resources Integration
The Ohio State University Libraries
614-688-5877

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Next week, the Knowledge Bank team will be putting a new face on the KB - a brand-new user interface that changes the look and feel of the site and improves the user experience. You are invited to preview the new interface by following this URL:

https://kb.osu.edu/preview-xmlij/

Some noteworthy changes:

- more dynamic content on the home page, including top downloads and a featured collection or community
- a new 'view' for images that consists of a gallery-type browse (https://kb.osu.edu/preview-xmlij/handle/1811/37118/browse?type=title), and large images that display on the item page (https://kb.osu.edu/preview-xmlij/handle/1811/39404)

We welcome your feedback on the new site, and any questions you might have!

Help us test! The new interface is still in 'beta,' so if you notice any problems, please email libkbhelp@osu.edu. Be sure to let us know where the problem is, as well as what Web browser you were using when you found it.

Melanie Schlosser
Metadata Librarian
Scholarly Resources Integration
The Ohio State University Libraries
614-688-5877

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Content-Type: image/jpeg; name="KnowledgeBank-LOGO_small.jpg"
Content-ID: <ii_12dce17103d6ef0a>
X-Attachment-id: ii_12dce17103d6ef0a
Content-Disposition: inline
The email address to report problems with the new interface is libkbhelp@lists.acs.ohio-state.edu.

Thanks, and sorry for any confusion!

Melanie Schlosser
Metadata Librarian
Scholarly Resources Integration
The Ohio State University Libraries
614-688-5877

On Fri, Jan 28, 2011 at 5:42 PM, Melanie Schlosser <schlosser.40@osu.edu> wrote:

Next week, the Knowledge Bank team will be putting a new face on the KB - a brand-new user interface that changes the look and feel of the site and improves the user experience. You are invited to preview the new interface by following this URL:

https://kb.osu.edu/preview-xmlui/

Some noteworthy changes:
• more dynamic content on the home page, including top downloads and a featured collection or community
• a new 'view' for images that consists of a gallery-type browse (https://kb.osu.edu/preview-xmlui/handle/1811/37118/browse?type=title), and large images that display on the item page (https://kb.osu.edu/preview-xmlui/handle/1811/39404)

We welcome your feedback on the new site, and any questions you might have!

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Melanie Schlosser
Metadata Librarian
Scholarly Resources Integration
The Ohio State University Libraries
614-688-5877

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Forget previous vote
Content-Type: image/jpeg; name="kbLogo.jpg"
Content-ID: <i1_12dcec9c04f575bd>
X-Attachment-Id: i1_12dcec9c04f575bd
Content-Disposition: inline