

DEOSNEWS Vol. 5 No.3, ISSN 1062-9416.
Copyright 1995 DEOS.

Director of ACSDE and Editor of AJDE: Dr. Michael G. Moore.
DEOSNEWS Editor: Melody M. Thompson

DEOS was established with a grant from the Annenberg/CPB Project.

=====

EDITORIAL

This issue of DEOSNEWS presents a description of a Master of Business Administration (MBA) program offered by Ball State University via a voice-video-data network to distant students. An increasing number of "mainstream" colleges and universities are, like Ball State, integrating distance education courses and programs into their traditional curricula. Two recent publications, The Oryx Guide to Distance Learning (Burgess, W.E. 1994. Phoenix, AZ: Oryx Press) and The Electronic University (1993. Princeton, NJ: Peterson's Guides) provide useful information on other institutions offering undergraduate and graduate courses and degree programs via telecommunication technologies. Complete reviews of these two books will appear in Volume 9 No. 1 of The American Journal of Distance Education. For ordering or subscription information, please contact AJDE at the above address or telephone number.

- - - - -

THE MBA DEGREE ON TELEVISION: DISTANCE EDUCATION FOR THE UPWARDLY MOBILE

Arnold Cirtin, CPA, Ph.D.
Professor of Accounting
Ball State University
Muncie, Indiana 47306
Internet: 00alcirtin@bsu.edu

INTRODUCTION

TIME Magazine stated, in its April 13, 1992 issue, that a crystal ball is not required to envision the university of the twenty-first century; it is taking shape right now at dozens of universities. In a cover story entitled "Campus of the Future," it pointed out that Ball State University is one of those. About 200 classrooms and laboratories have been wired with a fiber-optics video information system with color monitors. The system enables professors to tap into the library's inventory of videos, films, laser disks, and other media. This is a result of a partnership between the university and American Telephone and Telegraph Corporation (AT&T), which developed the Teaching Environment Model of the Campus of the Future. This is an integrated voice-data-video network available to faculty, staff, and students for the transmission of instructional information.

Ball State has been instrumental in spreading the technology beyond its campus. The January 11, 1993, issue of U.S. News &

World Report discusses a partnership between GTE Corporation, other technology companies, and Ball State in which a rural Indiana school system is equipped with a fiber-optic network which brings knowledge from around the world into every classroom.

In addition, the university has applied the concept of "distance learning" in using television to provide classes for students in special TV classrooms over the Indiana Higher Education Television System. This is a closed circuit statewide television network. The TIME article showed a Ball State professor in a TV studio-classroom writing on a stack of light blue paper with a felt tip pen under an overhead camera. His hand and the writing appears on the classroom monitors as well as on TV screens in classrooms throughout the state. This picture accurately reflects the excitement of television teaching. From its inception this has been a one-way video and two-way audio network. In the Business Week Special 1993 Bonus Issue, ENTERPRISE, Andrew Wallenstein stated that Ball State students ask questions from miles away through interactive TV programs which offer classes in entrepreneurship.

THE KEY WORD IS INTERACTIVE

Classes are taught in a state-of-the-art television studio. It is also a classroom attended by on-campus students. Students at the TV sites not only get to see and hear the class discussion, but they also can participate by using a digital tele-responder, a telephone handset with a push button which, when depressed, sends the question or discussion into the studio-classroom and out over the entire system so that every member of the class can hear both the student input and the professor's response. The students receive live instruction rather than pre-recorded one-way lectures, and their ability to communicate with the professor during class is an important feature. This interactivity allows students to react to the presentation, ask questions, and spontaneously contribute to class discussions.

The Indiana Higher Education Telecommunication System uses digital compression technology to program channels which transmit the signal to the TV sites. A television signal is sent to Indianapolis through fiber optic circuits to be transmitted from a satellite uplink antenna. The satellite receives the signals and retransmits them to receiving antennas at TV sites throughout Indiana in corporations, hospitals, military bases, vocational schools, and some public and private schools. The cost of equipment for a receiving location ranges from \$6,900 to \$8,500 for a single-channel system.

During the 1993-1994 academic year, courses in accounting, biology, business information systems, calculus, Chinese, economics, English, finance, genetics, history, management, marketing, nursing, physics, psychology, real estate, Russian, and theater were offered on television. A truly valuable service to Indiana is the opportunity for registered nurses without baccalaureate degrees to take the courses necessary to complete their educations. But the area in which Ball State University is revolutionary is the program in which the Master of Business Administration degree can be earned completely on television. That is how the author became involved in television teaching.

The MBA program is accredited by the American Assembly of Collegiate Schools of Business, and this accreditation applies to degrees earned via television as well. Courses are offered at over sixty corporate sites in Indiana and one in Louisville, Kentucky, to more than 330 graduate students. This program serves as a model for the entire nation.

THE CHALLENGES AND JOYS OF TEACHING ON TELEVISION

Television brings the classroom to the student rather than requiring the student to come to the classroom. Many working professionals are unable to attend traditional classes on college campuses because of time and distance constraints. Television makes the MBA degree accessible to such students. Interactive television simulates the traditional classroom as closely as possible. For the professor, however, there are many differences.

For the graduate student with a baccalaureate degree in a discipline other than business, several Common Body of Knowledge courses must be completed before beginning the twelve-course core curriculum, which are also taught on television. Financial Accounting, taught by the author, is a prerequisite course for those who have never studied accounting. Let's explore the special challenges and pleasures of teaching accounting on television in contrast to teaching in the traditional college classroom.

When teaching on television you can't use a chalkboard; there is no chalkboard and if there were it couldn't be seen on the screen. There is not enough contrast on a green, brown, or black board for the characters to be seen clearly. Further, the characters are far too small to be picked up by the camera. If the writing is large enough for the camera, the area is too small for sufficient information to be shown. An overhead projector cannot be used, for similar reasons. Further, most overhead transparencies are long, or in portrait orientation, while the television screen is wide, or in landscape orientation. There is not a good fit between the two. A related problem is presentation of subject matter. The worst thing that can be done in television teaching is to point a camera at the professor and let him talk. What could be more boring? We can conclude, then, that traditional teaching methods don't work on television.

This sounds like a great disadvantage, but it is not. There are many wonderful techniques available for television teaching which are far superior to traditional methods. Below we will discuss a few of them.

A television classroom is like any other TV studio; it has a control room presided over by a director whose job is to make the professor look good. The studio is loaded with equipment which allows the use of a variety of teaching media. Screen graphics, video tape, music, still pictures, and computer presentations are examples of ways to enhance learning. There are few traditional college classrooms which can equal this capability.

Let's be specific. Every financial accounting and principles text contains a history of accounting, usually mentioning Fra Luca Pacioli, the Italian monk who, in 1494, wrote a book containing a description of double-entry accounting. I present this historical account by showing an excellent video, "Luca Pacioli, the Unsung Hero of the Renaissance." It is difficult to imagine a more

interesting historical presentation than this.

In order to illustrate important points I designed TV graphics by drawing stick figures in pencil with messages relevant to the subject, and a graphic designer turned them into cartoons which the director calls up on the monitor in response to a cue. The possibilities for this sort of presentation are limited only by the imagination of the instructor.

Providing feedback for assigned homework problems posed an interesting challenge. Solutions for such problems have taken the form of journal entries, financial statements, and financial analysis. In the beginning I had the designer prepare graphics to be shown on monitors. However, only a small portion of any solution could be shown at a time, and the students could never see the whole picture. A balance sheet or an income statement in four pieces is not very enlightening. This difficulty was inadvertently solved by the publisher of the textbook. The earlier edition of the text had typewritten solutions in the instructor's manual, while the current edition was printed in large bold-face type that shows up very well on the overhead camera. The perforated pages are torn out and placed under the overhead camera, and the result is a solution on the TV screen similar to what an overhead projector can show. This provides a more complete solution for both the in-class and TV students to see.

For some problems it is beneficial to develop a solution line by line, and in a traditional classroom this is done on the chalk board. On television the overhead camera is ideal for this purpose. A stack of light blue paper is positioned under the camera in a frame, and writing on the paper with a felt tip pen fills the TV screen.

The professor, of course, does have to talk on camera. But interspersing the lecture with videos, graphics, pictures, and problem solutions adds interest to a presentation which otherwise might be quite dull. Even when lecturing, it is not necessary for the instructor to remain stationary. Gesturing is highly desirable and moving about the set avoids monotony. The lavalier microphone has a long chord, and the director has no trouble following the professor with the camera. Students appreciate a sense of humor, and the professor should smile a lot. Glumness has no educational value. One should strive to be loose and informal. The students watching a TV monitor 100 miles away will be appreciative.

All of this is important, but the most brilliant contribution to my teaching success is a software package from WordPerfect Corporation. Accountants are not known for their artistic creativity. It should not be a surprise to anyone that, as an accountant, my artistic ability is limited. It seems like a miracle, but WordPerfect Presentations 2.0 has allowed even me to be innovative.

AN ACCOUNTANT'S APPROACH TO COMPUTER GRAPHICS

WP Presentations is the upgraded version of DrawPerfect. Shortly after its release DrawPerfect 1.1 was made available. Version 1.1 contains many important improvements, and six fonts were added to the original nineteen. It has a figure library, and additional clip art for business and holidays can be purchased. With twenty-five

fonts, about 400 clip art figures, 256 colors, 64 fill patterns, and drawing capability, it is truly remarkable what DrawPerfect can do. One can determine the sizes of the fonts and figures, and position them at any angle and location. All of these can be combined in making signs, posters, and transparencies.

More important than any of these for the purpose of television teaching is the slide show. First, several slides are made relating to any topic, and they are linked together in the desired order to form a slide show. Please note that in DrawPerfect language, anything placed on the computer monitor is a drawing, even though no freehand drawing is involved. The time interval between slides can be set, and the slides will change automatically, or they can be changed manually by pressing the right mouse button or the space bar. The latter is the better choice when the slide show is used as an illustration for a lecture, because the slides can be changed at exactly the right moment. There are about twenty different screen wipes which make the transition between slides more interesting, and they give a very professional appearance.

A good example is my lecture on internal control of cash, a very important topic for all businesses. The presentation consists of six slides using a variety of fonts in various sizes, colors, and fill patterns illustrated with drawings from the figure library. Together, they provide a visual backdrop for the following important points in the lecture:

1. Internal control requires a separation of duties between custody of cash and accounting for cash.
2. All cash receipts must be deposited in the bank.
3. All bills must be paid by check.
4. A petty cash fund is required for small expenditures for which checks are impractical.
5. Petty cash expenditures are eventually paid by check when the fund is replenished.

In the TV classroom, there is a computer in the TV classroom on which DrawPerfect is installed, and I just insert a 3.5" disk containing the slide show files. I bring the first slide up on my monitor, and when hearing a pre-arranged cue, the director puts it on the studio monitors and the monitors at the television sites. As the lecture progresses, I touch the space bar and each successive slide appears in living color.

There is an interesting additional benefit from all of this. I printed the slides on a dot matrix printer, copied them on overhead transparencies, and used them in my Intermediate Accounting classes, which are taught in a regular classroom. Ink jet and laser printers can print slides and drawings directly on transparencies designed for that purpose. My next project is to make transparencies with an ink jet color printer. Color transparencies will be even more interesting to the students.

As good as DrawPerfect is, WordPerfect Presentations is even better for designing presentations. For example, making slide shows is much easier. WP Presentations contains a gallery of 70

slide show masters, and each one can produce a title slide, a bullet chart, a text slide, an organization chart, a graph chart with many choices of graphs, and a combination chart containing two graphs. The backgrounds are of interesting designs containing their own fonts and colors. For example, for my lecture on productive assets, I chose a master which contains a picture of a farm in brilliant color. I placed the lecture points on a title slide, a bullet chart, and a text slide, and they all appeared on the same farm scene background.

WP Presentations has about 1,000 clip art figures which can be placed in the slides for additional illustration. Those who have the artistic talent can draw their own graphics, and words can be formed in a curve or a half circle in any font, size, color, and pattern. There are 256 colors and 32 patterns. There is no limit to the creativity that is available with WP Presentations. (On the negative side, WP Presentations can be quite slow. However, the lack of speed may be more of a function of the power of the computer being used than the software program.) Other excellent programs which can be used for this purpose include Lotus Freelance Graphics, Microsoft Powerpoint, and Aldus Persuasion.

CONCLUSIONS AND RECOMMENDATIONS

Television teaching is very productive in that it provides educational opportunities for people far from a university campus, and extremely interesting challenges for those who engage in it. This form of teaching is a lot of fun, especially when non-artistic types like me can use technological innovation to become creative.

NOTE: DrawPerfect, WordPerfect Presentations, and WP Presentations are registered trademarks of WordPerfect Corporation. Freelance Graphics is a trademark of Lotus Corporation. Microsoft and Powerpoint are trademarks of Microsoft Corporation. Persuasion is a trademark of Aldus Corporation.

=====

Top of Page