



'Videodidact' with the eyes of a student

Computerized Classroom Scenario

It is the first full day of class lecture and the students file into the computerized classroom and sit at their PCs. Dr. Brian Reithel, Associate Professor of MIS at the University of Mississippi, starts his hour and fifteen-minute lecture. About twenty minutes into the lecture, it is obvious that some students are no longer following his instructions to work on a practice assignment on their computers.

Being in an MBA program that requires computers (which we connect to the net via the plugs in our classroom desks), I know the look of someone who is surfing the net or chatting with friends on ICQ.

Deftly, Dr. Reithel reaches for this multi-keyed keypad located on the top of his podium and punches one button. Instantly a game of solitaire appears on his screen. He strikes another key and an e-mail message appears on the screen as it is being written. Next, Dr. Reithel hits a button that blanks the screen of every student in the room. This gets their attention immediately. Most students look confused. Some look surprised and embarrassed. Yet, Dr. Reithel has the attention of them all.

As an observer in the class, I ask, "How did you do that?" Dr. Reithel responds, "Videodidact." Video what?

Dr. Reithel knows, and the rest of us quickly learn that Videodidact, along with the rest of this new high-tech business building, helps Ole Miss faculty teach in this nationally competitive MIS program with greater efficiency and effectiveness.

What does it do?

Videodidact Select is a multi-featured hardware-based video network system that enables an instructor to monitor, assist, and control each student computer in the classroom. This can be done from a keypad that sits on the instructor's podium. The keypad has one key for each student computer station and nine function keys. Using certain combinations of keys, the instructor can:

- Monitor the progress of each student by viewing their screens through the instructor's computer
- Share his/her screen with one student, a group, or all students
- Enable students to share screens among themselves
- Take control of any or all student computer screens and keyboards.
- Blank any, a group, or all student computers to gain students attention
- Project his or her screen or any student screen through an LCD projector

Benefits: No more walking around

With Videodidact Select, an instructor can more effectively use class time and ensure more students' questions are being answered. Dr. Reithel says, "A classroom with Videodidact leaves fewer unanswered questions." Students can ask for help without raising their hand. A help button feature allows the student to get the instructor's attention. Then, the instructor will look at the student's screen, and if necessary, override his keyboard and mouse to give them the answer to their question. This ensures that even those timid students unwilling to ask that "stupid" question in front of the class can have their questions answered while maintaining their anonymity.

Not only does the help button feature ensure that more student questions are answered, it alleviates the need for the professor to walk from student-to-student to answer these questions. No longer will instructors have to spend nearly half of a class period moving from student to student.

With Videodidact the instructor can cover far more material in a class session than without it. Also, students won't have idle time to kill while the instructor answers questions, and will be less likely to surf the Internet or play solitaire—which probably never happens in your classroom, right?

The monitoring feature identifies slower students, class leaders, and slackers to the instructor. By viewing their work in progress, common problem areas will be identified. The screen of a particular student can be anonymously projected on a screen through an LCD projector and solved in front of the entire class. Sharing the problem screen with the other students on their screens is another way to accomplish this.

Additionally, the monitoring feature will identify unique problems. These can be remedied by enabling the student experiencing the problem to view the screen of a student who is keeping pace with the class. The student with the problem can toggle back and forth between his or her computer and the other student's screen. Once the instructor decides they have had enough time to get up to speed he or she can remove that ability with the push of a button.

The features of Videodidact make it a powerful educational tool that takes classroom instruction to a higher qualitative level. Dr. Reithel has observed that his students appear to retain more class material than they did prior to the installation of the Videodidact Select system, since students are more actively involved in the learning process.

Operation

Videodidact is simple to use. Many of the functions can be performed by punching just one key. These include:

- Sending the instructor's screen to all students
- Viewing a student's screen
- Blanking all student screens
- Sending the instructor's screen through an LCD projector

Most other operations can be accomplished with two keystrokes. These include:

- Sending one student's screen to all
- Sending the instructor's screen to one student
- Set Instructor's screen to receive a different student screen every three seconds
- Lock or take control of a student's keyboard and mouse
- Lock or take control of all student keyboards and mice
- Blanking one student's screen

Uses

Videodidact can be used in a computer programming or an MIS class. It can also be very effective in any classroom setting. With the use of computers for more and more aspects of our lives, Videodidact is becoming more essential to all classrooms.

In addition to college classroom use, Videodidact can be very effective in classrooms at any level of instruction. The academic classroom is not the only venue where the system is effective. Corporations have found using Videodidact in their training classrooms to be very effective. In Europe seventy percent of all Videodidact systems are installed in corporate classrooms. Some European customers include Oracle, BMW, Lufthansa, Siemens, and Mercedes Benz, just to name a few.

Another use for the Videodidact system is in testing centers. With more-and more standardized tests being administered on computers, test proctors, like instructors, face the problems that come with having to walk from student-to-student to answer questions. With Videodidact, they can answer questions without holding up the entire testing process.

History

Videodidact and its predecessor, Alphadidact, were designed and built in Germany by Educational & Business Systems (EBS), Inc. Instructors from schools and industrial organizations were consulted in the design phase to ensure it met the needs of computerized classrooms. After a successful start in Europe, Videodidact was brought to the United States. To date over 4000 systems have been installed in Europe, but it is still in the launch stage in the U.S. Dieter Beaugrand and his sons Wolfgang and Michael relocated to Port

Charlotte, Florida from Germany to be the U.S. representatives for Videodidact.

The University of Mississippi School of Business was the first academic institution in the U.S. to install a Videodidact Select system. Other departments at Ole Miss and other universities have also purchased systems.

Comparison

Other video network systems for computer classrooms are on the market. Some are hardware systems and others are software packages. The hardware systems operate much the same way as Videodidact. Videodidact, unlike all other hardware systems, uses a star topology. All other hardware systems use a bus topology. The Star topology provides consistent screen quality for every terminal on the system. In a bus system, if one computer goes down, the reaction of the computers beyond that point is uncertain. Also, a Star topology does not require electrical expanders or extenders, which can result in equipment damage in the event of a surge. Videodidact has no electricity running through its computer-to-computer lines.

Software alternatives require a considerably smaller initial investment. However, software requires extra memory in each computer, and therefore may cost as much or more overall than Videodidact.

Software solutions do not perform as well as hardware systems. Unlike Videodidact, a software system cannot display another computer's screen in real time. Also, compatibility is not a problem with Videodidact. It will work on any computer system, and does not require any extra memory or processing speed. For instance Videodidact could easily link a classroom that had new 500 MHz computers along with some old 386s, and each would share screens in real time.

Overall, Videodidact has been a very reliable system. Dr. Reithel states that Videodidact is "as steady as a rock." Such reliability is not available from software solutions or from hardware systems aligned in a bus topology.

Conclusion

Videodidact is a powerful tool that could revolutionize classroom instruction as much as the computer has. With all of the problems that come with a computerized classroom, a system must be in place to avoid these problems. Videodidact is that system.