Video as Process and Product

Video self-modeling—part of the Russ Berrie Sales Institute curriculum is captured, edited, and reused in student e-portfolios demonstrating their sales skills

By Sandra L. Miller

n January 2003, as the director of Instruction and Research Technology (IRT) at William Paterson University of New Jersey, I was called into a meeting concerning an interesting proposal-to develop a new school called the Russ Berrie Sales Institute. A sales institute helps students develop powerful communication skills to meet the goal of establishing successful careers in professional selling.1 Sales institutes had been implemented at only nine other universities across the nation at the time.² Russ Berrie, a devotee of the art of sales, donated to William Paterson University enough money to found a sales institute, with one caveat-it had to offer a credit curriculum in sales using the latest in instructional technology.

A sales institute often employs the concept of video self-modeling to teach the finer points of salesmanship (see the sidebar). After traveling to and conferring with faculty and staff at other sales institutes, the founders of the Russ Berrie Sales Institute noted that the technology most often used was the traditional VHS camera and recording equipment. Replicating this approach made no sense given the availability of digital technology. We needed to provide cutting-edge technology in the Russ Berrie Sales Institute. Still, curriculum programming always guides the use of technology, so the IRT team sat down with Russ Berrie Sales Institute Executive Director Jim Brown and asked him, "What do you want?"

Unfortunately, faculty had not yet been hired to develop the curriculum



that should drive the technology. Instead, we had to ask questions aimed at developing a wide variety of possible scenarios and interactions that we expected would take place between the instructors and students. The IRT team deduced a number of different types of interactions that could occur between teachers and students, a pair or groups of students, students and material, students and outside experts, and students and the global interface.

After many iterations of questions and answers, we resolved to provide the

technology needed for a unique educational experience. We wanted to give students a simulated corporate environment in which to practice sales techniques, but we also wanted to provide an environment that would enhance the sales institute's stature and help it maintain a leadership position. This required two key elements—flexibility and the ability to grow.

Using Jim Brown's sales expertise and experience as a starting point, we designed five sales labs emulating different corporate settings that a salesperson would typically experience. A large conference room doubled as the main classroom. A control room allowed supervision of the lab and classroom technology and the entire video selfmodeling process, and an edit room enabled final production of the video. See Figure 1 for the basic floor plan.

The main control room is located in the center of the five sales labs, with the conference room to one side, beyond the labs. From the control room a technician can control and route all video and audio sources. A floor-to-ceiling command console is equipped with video and audio monitoring equipment, DVD recorders, CD-R recorders, VHS recorders, DVC-Pro recorders, robotic camera controls, and a 64×64 Matrix video and audio router. Two 15-inch Crestron touch panels are custom programmed to control every piece of equipment in all five labs, the conference room, and the control room.

In addition, the lab technician in the control room routes video and audio over a digital fiber network to a video server located in an IT server room 300 feet down the hall. Here the digital video and audio information is stored in a 4 terabyte Raid 5 Fiber Channel Storage Array. Each camera from the sales labs and conference room has a dedicated Macintosh G4 computer that feeds information into the array, enabling simultaneous recording from every camera. The array can easily store a full semester of recordings.

Each sales lab contains two singlechip robotic cameras placed to capture the "buyer" and the "seller." The cameras are controlled from either the main control room or a wall-mounted, 6.4-inch Crestron touch-panel control in each lab. This control panel lets students in the sales lab record to and play from DVD devices located in the main control room, as well as the hard-drive space of the video server.

In addition, each sales lab is equipped with a 32-inch plasma screen, Beyerdynamic flush-mounted table micro-

Video Self-Modeling

Reflective video self-modeling is not an unusual technique in educating practitioners of particular skills, having been successfully used with preservice teachers,¹ practicing teachers,² medical students developing consultation skills,³ and theater students.⁴ Universities around the country use video self-modeling to improve their students' sales skills.

In 2003, Baird, Griffin, and Henderson defined a Learning Options Framework that crossed time and space, thus reframing the training and development agenda of sales institutes everywhere.⁵ You can look back at the past, in front at the present, or ahead at the future. That is what students and instructors using video self-modeling can accomplish through preserving the moment on video and learning from the past, critiquing in the present, or simulating for the future. No longer limited by space, they can reach out to others in the same space or to those in other spaces. So, too, with students at the Russ Berrie Institute.

Endnotes

- R. J. Beck, A. King, and S. K. Marshall, "Effects of Videocase Construction on Preservice Teachers' Observations of Teaching," *The Journal of Experimental Education*, Vol. 70, No. 4, 2002, pp. 345–361; and M. Holsapple, "Technology Helps Student Teachers Make the Grade," *Purdue News*, May 3, 2004, http://news.uns.purdue.edu/UNS/html4ever/2004/040503.Fox.student.html (retrieved June 3, 2004).
- L. Finn, "Using Video to Reflect on Curriculum," *Educational Leadership*, March 2002, pp. 72–74; and J. R. Frederiksen et al., "Video Portfolio Assessment: Creating a Framework for Viewing the Functions of Teaching," *Educational Assessment*, Vol. 5, No. 4, 1998, pp. 225–297.
- 3. J. Dent and P. Preece, "What Is the Impact on Participating Students of Real-Time Video Monitoring of Their Consultation Skills?" *British Journal of Educational Technology*, Vol. 33, No. 3, 2002, pp. 349–351.
- 4. W. Y. Lan and J. Morgan, "Videotaping as a Means of Self-Monitoring to Improve Theater Students' Performance," *The Journal of Experimental Education*, Vol. 71, No. 4, 2003, pp. 371–381.
- 5. L. Baird, G. Griffin, and J. Henderson, "Time and Space: Reframing the Training and Development Agenda," *Human Resource Management*, Vol. 42, No. 1, 2003, pp. 39–52.

phones, JBL ceiling speakers, and VGA inputs for computer presentation. A single plasma screen enables the seller to use digital presentations and applications in the selling process. Everything is captured and recorded to DVC-pro tape. One sales lab is a little larger than the others and can house a stand-in as a "gatekeeper," to help students practice routines that would get them past organizational hurdles—such as secretaries, receptionists, or personal assistants—that might keep them from their targeted decision maker. A telephone system was also set up to let students practice techniques for cold calling and getting through to decision makers.

If the instructor wanted the flexibility of routing sales labs 2 and 5 to the conference room, for example, it could be done. If labs 3 and 4 should be on and routed, but lab 2 just on, not routed, so be it, and so on and so forth. If the instructor wanted the students to discuss the art of selling with Exxon's vice president of sales in Taiwan, they could hold a conversation with him while sitting comfortably in the conference



center. Later, the session's recording could be played back for review or makeup work for those who had missed it (with the VP's permission, of course!).

These types of scenarios and interactions influenced what we designed into the spaces and built into the infrastructure. We planned the technological infrastructure to support these possible interactions and tried to build in as much flexibility as possible to support any unforeseen scenarios that might occur. In addition, we built a system that, although it did not support video streaming, could easily grow into one that did when the Russ Berrie Sales Institute is ready for that step.

Teaching and Learning with Video

The instructor can monitor all activities in the labs and conference room. The instructor is the guide—we didn't want to weigh instructors down with responsibility for the technical aspects of recording, saving, and sending video sessions to the conference room for reviewing or other training use. With five labs going at the same time, handling the data could become quite complicated. We designed the system so that the instructor could operate it alone using the Crestron touch panel if educational activities were kept simple. Otherwise, the lab technician could handle everything, and the instructor in the control room could observe students through the one-way windows built into the interior of each sales lab.

The conference room is equipped with three broadcast-quality, threechip cameras mounted on quiet pan/tilt robotic heads and outfitted with 20x zoom lenses. All three cameras can be controlled from the conference room or the main control room. The conference room has an automated audio system consisting of 16 Beyerdynamic flushmounted table microphones and 16 JBL ceiling speakers. The room features two 61-inch plasma screens, a high-resolution document camera, DVD player, and multiple VGA inputs for laptops and tablet PCs.

Once back in the conference room after their practice time in the labs, students can view each other's selling sessions. The professor can use the Creston control system to request each student's "daily" DVC-pro tape for playback on the big plasma screens. Several pages of user-friendly interfaces assist the instructor with tasks ranging from basic presentation to advanced video conferencing.

While replaying the student scenarios, the professor points out when and where a student could have taken a different direction or applied a different technique. "Aha" moments and insights abound with such intense scrutiny and feedback.

The added dimension of space beyond the immediate room is offered through the conference room, which also serves as a distance-learning classroom. If so desired, the class can share their video footage with another class, from Germany for instance, and compare how they would conduct buying and selling in their two countries.

Teleconferencing is done with a Tandberg videoconferencing IP codec. William Paterson University has a private video network connecting all IP codecs to its cable and satellite head-end. This enables the Russ Berrie Sales Institute to connect anywhere in the world via the Internet and traditional ISDN lines. In addition, we can up-link transmissions from the conference room and sales labs to both domestic and international satellites with our seven-meter KU band earth station. Locally, live presentations from the conference room or sales labs can be routed to our on- and off-campus cable channels for immediate broadcast.

The split-screen images captured of buyer and seller are raw, not necessarily something that either professor or student would want to keep beyond class. However, as the class progresses, the student might want to add a video clip or two to his or her portfolio for future reference—especially when hitting the job market. That's where the edit room comes in.

The Video Product

The digital edit suite is fully integrated into the overall design. Here, an editor can access the video footage from the server and author DVDs using both Final Cut Pro and DVD Studio Pro editing and authoring software. Mastered DVDs can be duplicated at 4x speed. Color graphics can be created and printed directly onto the DVDs. The edit suite has a 12-inch Crestron touch panel to control routing from the control room to local equipment. It is a full postproduction edit suite with DVC-Pro record decks, DVD-R recorders, a high-resolution document camera, and various other recording and play-back equipment.

In the edit room, the lab technician can pull together those video clips designated by the graduating student for his or her pièce de résistance. The final presentation can include, for example, a résumé, PowerPoint presentations created during the student's career, and those premium video clips that aptly display the student's selling skills in all their glory. Using a Final Cut Pro workstation, the lab technician can copy and paste together bits and pieces of the "best of the best" within a formalized template that truly showcases the student.

The resulting e-portfolio can distinguish the graduate from the thousands of other applicants in a potential employer's office. We deliberately

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designed the edit suite to produce the finest of what Gary Greenberg called "showcase e-portfolios."³

Conclusion

This past fall semester was the first full semester that the Russ Berrie Sales Institute offered a credit curriculum. The Russ Berrie Sales Institute showcases a convergence of analog and digital, theoretical and practical, supporting entering students by providing advanced communications and video self-modeling technology. It has been an exciting design and installation experience for IRT staff at William Paterson University. Clearly, video as both process and product has just begun to reach its potential. \boldsymbol{C}

Endnotes

- T. W. Loe and L. B. Chonko, "Promoting Sales Programs: The National Collegiate Sales Competition," *The Journal of Personal Selling & Sales Management*, Vol. 20, No. 1, 2000, pp. 11–13.
- 2. The list of others consisted of Ball State University, Baylor University, Illinois State University, Kennesaw State University, Northern Illinois University, Ohio University, University of Akron, University of Houston, and University of Toledo.
- 3. G. Greenberg, "The Digital Convergence: Extending the Portfolio Model," *EDU-CAUSE Review*, Vol. 39, No. 4, 2004, pp. 28–36, http://www.educause.edu/apps/er/erm04/erm04/41.asp.

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