

DSMC, San Diego Conduct Technology-Based Education and Training Trial Run

Video TeleTeaching (VTT) Link-up Offers Opportunities, Challenges, Cost Savings

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Sixteen months ago, when Army Brig. Gen. Richard A. Black first became the Commandant of the Defense Systems Management College (DSMC), it didn't take long for the staff and faculty to realize that one of his foremost priorities was an educational method of instruction called *distance learning*, now referred to as *Technology-Based Education and Training*.

Technology-Based Education and Training was a natural spin-off from the video conferencing technology of recent years. If conferences could be conducted via two-way audio-video, then certainly this same technology could be applied to education. Black had seen the method work marvelously well at other facilities, with substantial savings in time and money. Under his management and direction, DSMC subsequently adopted Technology-Based Education and Training [distance learning] as Strategic Goal No. 2 in its 1997 Corporate Plan.¹

The Defense Acquisition University (DAU) was also keen to exploit the use of technology in course delivery, such that it included as part of its management strategy, a goal of at least 10 percent of DAU courses converted to the use of information age technologies before the end of FY 97. On June 5, 1997, DAU published its *Technology-Based Education and Training Plan*,² a



CONSISTING OF TWO-WAY AUDIO AND TWO-WAY VIDEO COVERAGE, DSMC'S NEW VIDEO TELETEACHING (VTT) SYSTEM CALLED *PICTURE-TEL*, LINKED AIR FORCE LT. COL. DAVE SCHMITZ, MANUFACTURING MANAGEMENT DEPARTMENT, FACULTY DIVISION, TO AN ACQ-201 CLASS IN SAN DIEGO

detailed curriculum transition strategy that will result in a dramatic increase in classes and courses delivered via distance learning and continuing edu-

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cation throughout the DAU consortium schools.

Trial Run

Following DAU's lead, on June 16, 1997, DSMC completed a trial run of the use of Video TeleTeaching (VTT) at its main Fort Belvoir, Va., campus. Speaking from the College's Management Deliberation Center, Air Force Lt. Col. Dave Schmitz, Manufacturing Management Department, taught a series of three lessons on manufacturing management objectives, six hours in all, marking DSMC's first DAU

lessons to be offered under the auspices of Technology-Based Education and Training.

From Belvoir to San Diego

Consisting of two-way audio and two-way video coverage, DSMC's new VTT system linked Schmitz to an ACQ-201 class in San Diego, Calif. As part of the instruction, the class of 51 students, located at San Diego's Space and Naval Warfare Systems Command (SPAWAR), participated in two-way, question-and-answer dialogue over the VTT link. DSMC's Western Region Director, Bob Tate, acted as the in-class facilitator. Under his guidance, the class also completed several in-class, practical exercises.

Pulling It Together

For some time now, DSMC has been doing cooperative VTT work with the University of Texas at Austin (UT-Austin), using equipment provided by UT-Austin. Recognizing the need for its own equipment, the College recently purchased a *Picture-Tel* video conferencing system that allows two-way audio and video over switched digital phone networks for little more than the cost of an ordinary telephone call.

Bringing DSMC on-board with Technology-Based Education and Training was a College cooperative effort. Unofficially labeled the Integrated Product Team for Supporting the College's Technology-Based Education and Training, several staff and faculty members blended their talents to develop the curriculum, coordinate the class sessions, resolve any automation difficulties, produce the final lesson plans, and manage the technical aspects of the VTT link-up:

Faculty Division

Rich Reed, Dean

Bill Motley, Director, Manufacturing Management Department

Air Force Lt. Col. Dave Schmitz, Professor of Manufacturing Management

Dr. Tony Scafati, Director, Education Department

DSMC'S WESTERN REGION DIRECTOR, BOB TATE, ACTS AS FACILITATOR FOR THE ACQ-201 CLASS ON THE RECEIVING END OF SCHMITZ' INSTRUCTION. THE CLASS OF 51 STUDENTS, LOCATED AT SAN DIEGO'S SPACE AND NAVAL WARFARE SYSTEMS COMMAND (SPAWAR), PARTICIPATED IN TWO-WAY, QUESTION-AND-ANSWER DIALOGUE OVER THE VTT LINK. UNDER HIS GUIDANCE, THE CLASS ALSO COMPLETED SEVERAL IN-CLASS, PRACTICAL EXERCISES.



Stan Crognale, Director for Technology-Based Education and Training
Jim Leaf, Technical Advisor and Scheduler
Carolyn Miller, Course Design and Educational Specialist
Jeanne Elmore, Course Design and Educational Specialist

(The College situated the IPT in the Faculty Division, Education Department, to provide assistance and support for faculty members and course directors who wish to experiment with Technology-Based Education and Training. Crognale succeeded Dr. Bob Ainsley, who established the original Distance Learning Office at DSMC in 1988. Leaf advised the Faculty Division on the technical aspects of video teleconferencing and scheduled the VTT courses. Miller and Elmore conducted the internal training necessary to prepare DSMC faculty for teaching in the VTT format.)

School of Program Management Division

Dr. Craig Lush, Associate Dean
Air Force Lt. Col. Bob Traube, Director, Intermediate Acquisition Management Department

Video Services Department

John Garnish, Director
Army Sgt. 1st Class James Buffin, Production Technician
Air Force Tech. Sgt. Mike Bustamante, Maintenance Technician
Army Staff Sgt. Martha Haygood, Production Technician
Petty Officer 2nd Class John Miller, Maintenance Technician
Petty Officer 1st Class Ken Rector, Maintenance Technician
Army Sgt. Tyree Stanford, Production Technician
Army Sgt. Eric Whitted, Production Technician

Other important players in coordinating and supporting the College's first Technology-Based Education and Training initiative were Navy Rear Adm. George Wagner, Commander, SPAWAR; Lisa Brown, who operated the equipment in San Diego; and

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Navy Lt. Mark Burget, SPAWAR, who ensured the equipment was configured for not only the VTT, but several dry runs and training sessions. (On June 24, Wagner visited the College to offer his thanks and future support of DSMC's VTT initiative. Participating in the Acquisition Research Symposium the following day, he also took advantage of the opportunity to view firsthand, a breakout session demo of VTT.)

And finally, Lisa George, DSMC's Western Region Management Support Assistant, worked tirelessly with Bob Tate, the Western Region Director and San Diego facilitator, to arrange stu-

dent transportation to the VTT site and manage other critical aspects of the trial run.

Student Feedback

Overall, the event was very well received by the students. A survey conducted revealed that 40 percent of the students said that technology-based education and training was at least as good as in-class presentation that would "require them to be away from work and home (i.e., TDY) for the duration of the class." Based on many constructive comments from the students, DSMC was able to pinpoint areas requiring increased attention or improvement.

Moreover, the San Diego trial run, long anticipated and worked toward, represented a huge leap for the College; instead of talking about it, they jumped in, got their feet wet, and are now ready for the next step. And that next step, hopefully will be a quick and successful transition to a more universal application of this form of Technology-Based Education and Training.

Cost Savings

Early on, DSMC determined that its efforts to institutionalize Technology-Based Education and Training would not be at the expense of quality instruction. The benefits of resident or on-site instruction had to be carefully weighed and evaluated against the advantages/disadvantages of the newcomer.

The trial run and subsequent student surveys showed the College that Technology-Based Education and Training could, indeed serve as another cost-effective method of conveying quality instruction to the acquisition workforce.

What does this mean in the area of cost savings? Consider this. Those 51 students did not have to leave their homes, families, and work sites for resident instruction at another facility, nor did the government incur the cost of sending them on extended TDY for

training. Conversely, DSMC did not have to send the instructor, Dave Schmitz, TDY to San Diego.

Normally, Schmitz would have traveled to San Diego to teach the class on-site, costing the faculty 32 hours of effort – two travel days and two teaching days, to instruct six hours of material. In this case, Schmitz' time to provide six hours of training was approximately 12 hours – six hours of rehearsal and six hours of teaching – saving the College a total of 20 faculty hours of effort.

The math speaks for itself. Technology-Based Education and Training is a "win-win" situation – for the instruc-

tor, the students, and lest we forget, the U.S. taxpayer.

Where Do We Go From Here?

DSMC's next opportunity to implement lessons learned from the San Diego trial run, will be its ACQ-201 offering at Patuxent River, Md. Meanwhile, the College is exploring options that will facilitate VTT instruction in other subject areas.

As DSMC evaluates VTT, determining what works and what doesn't work, it expects to smooth out any rough edges or bumps along the road. Eventually, the College hopes to expand VTT's capabilities and deliver not merely isolated classes, but whole

courses. Combined with computer-based instruction, the College views VTT as a vitally important, powerful method of delivering critically needed, quality instruction to the acquisition workforce.

END NOTES

1. "Strategic Initiative #2 – Implement Distance Learning Techniques," *Defense Systems Management College Corporate Plan*, FY 1997, Part III, p. 20.
2. DAU's *Technology-Based Education and Training Plan*, updated June 5, 1997, may be accessed and printed from <http://www.acq.osd.mil/dau> – DAU's Home Page on the World Wide Web.

YESTERDAY'S STATE-OF-THE-ART C² SYSTEM, TODAY'S SMITHSONIAN ARTIFACT

A terminal once part of the World Wide Military Command and Control (C²) system was added July 16, 1997, to the Smithsonian Institution's historical collection here.

Army Lt. Gen. David J. Kelley, Director of the Defense Information Systems Agency, presented the terminal to officials of the National Museum of American History for inclusion in the armed forces history collection.

The first of its kind, the C² system went on line in 1972 at Strategic Air Command Headquarters, Offutt Air Force Base, Nebraska. It gathered information using an automated data processing network of communications links and satellites. Delivering that information quickly, it improved military leaders' ability to coordinate personnel and intelligence.

The network was first used to plan military and support operations in response to the 1978 mass suicide of the Jim Jones cult in Jonestown, Guyana. It was also used to help plan operations Desert Shield and Desert Storm in 1990-91. The system was replaced last year by the Global Command and Control System.

Editor's Note: Excerpt of a July 16, 1997, Smithsonian Press Release.

