EASYBOARD® Interactive Whiteboard Serves as Training Tool to Save Fire Fighters' Lives

By Ellen Kollie

In the United States, 100 fire fighters are killed each year in the line of duty. Since data started being consistently collected in the late 1970s, the total number of fires has gone down (thanks to stronger building codes and improved fire safety), as has the total number of fire fighter deaths. However, the number of fire fighter deaths per incident has gone up, perhaps because fire fighters are experiencing fewer real life emergencies.

An effective way to reduce fire fighter loss of life is from training, both pre- and post-incident. That's where Chris Miller, training commander of Florence Fire/EMS Department in Florence, KY, comes in. For the past five years, he has been responsible for training the department's 75 personnel — 50 careers and 25 volunteers (24 are paramedics, 37 are EMT's) — to serve the public in as safe a manner as possible. Specifically, the Department's training allows them to safely serve their population of 45,000 people in 20 square miles that includes a mix of residential, commercial/retail, and industrial properties, as well as a nine-mile stretch of Interstate 75.

Ongoing Training
Training is ongoing for the Department, which operates on three 24-hour shifts (one shift on, two shifts off). With each training session covered three times (once per shift), and depending on how many weeks there are in a month, Miller teaches 12 to 16 sessions per month. He accomplishes all this training with the help of a 77-inch EASYBOARD (E-Board), manufactured by Montgomeryville, PA-based Numonics Corporation.

The E-Board, a digital interactive whiteboard, connects with a computer, projector and electronic pen to improve professional and classroom education for adult students. It starts with the ability to control computer applications and display computer images on the board, which can be done with a mouse at the instructor's desk. However, the instructor can use the multimedia pen to control all the computer applications on the board in real-time remaining in front of the classroom. Specifically, all computer functions are transferred to the multimedia pen, such as opening files, running digital video clips, accessing direct video feed from a fire site or launching websites to download content from the Internet.

Additionally, an instructor can choose a softkey to change the multimedia pen from a mouse to a pen, and thus write and draw on projected images, annotate in color, highlight, and cut-and-paste images in order to improve students' retention. Note-taking software automatically saves the notations, which is ideal for later picking up where a lesson left off or reviewing before a test. Notations can also be electronically distributed during or after the session.

Training in Action
The Florence Fire/EMS Department uses the EASYBOARD for both state and federally mandated training and post-incident review. "And, while we use it in a number of ways," says Miller, "first and foremost, we do a lot of interactive video- and presentation-based training."

For example, with mandated training, Miller may show a video of a specific type of fire. With the E-Board, he will often pause the video and use the pen to circle specific portions of an image, such as pointing out how the fire is behaving. He does the same thing with PowerPoint presentations. "We pause and have discussion," he says, "writing notes directly on the E-Board as we move along. And I am able to save the notes from the first shift to build upon and use with the second and third shifts."

Post-incident training also keeps the E-Board actively engaged. The Florence Fire/EMS Department provides fire, rescue, hazardous materials and emergency medical services to the citizens of the City of Florence and the Florence Fire Protection District, in addition to providing mutual and automatic aid with surrounding communities. Because the Department has so many responsibilities to the community, it's imperative that, after an incident, they take a hard look at how it was handled.

"Incident review helps us determine where we need additional training or where we need to add or change policies," Miller confirms. "It is important for incidents we don't experience very often, such as aircraft crashes or train derailments, simply because they are few and far between. It is also important for incidents we experience regularly, such as automobile accidents, because we can become complacent on those."

A post-incident analysis often includes presenting on the EASYBOARD a GIS image of the area where the incident occurred. Miller uses the pen to draw details on the map, such as the area where the incident occurred, where the emergency vehicles were placed, and where hose lines were deployed. "A fire fighter may have been assigned a specific task that was just a small part of the overall incident," he says. "Drawing on the map gives everyone a view of the overall scene. It provides perspective of what other fire fighters and other fire companies were doing. It helps develop the fire fighters and their decision making."

Miller also uses photographic images for post-incident review. For example, after a vehicle entrapment incident, he may display on the E-Board an image of the same type of vehicle involved in the incident and use the pen's highlighter to indicate airbag placement and high-strength steel that had to be cut.

EASYBOARD Benefits
Miller sees two great advantages that the E-Board has brought to the Department's training — ease of use and efficiency.

Ease of Use: In the past, if the Department was reviewing a video and needed to pause it for discussion and note taking, Miller would have to stop the VHS or DVD player, raise the projector screen, and write on a dry erase board. To continue the video, he would have to lower the projector screen and restart the VHS or DVD player. "The interactive whiteboard has streamlined that process a lot," he observes. "I just tap a soft key on the side of the E-Board, make notes, tap another key, and return to the presentation."

Efficiency: "I think the biggest improvement the E-Board has provided is streamlined and more efficient training," Miller continues. "I don't have to use an easel with a flip chart where, once a page is full, I tear it off, tape it to a wall, and continue on the next page. Also, I don't have to stop to clean off a full dry erase board before continuing note taking. I simply fill up a screen with notes, save it, and go to a new page."

A Hands-On Approach
Miller isn't the only one in the Department who uses the EASYBOARD. "By virtue of how the fire service works," explains Miller, "we have quite a few instructors in the department who have to teach so many hours per year in order to maintain their certifications. Therefore, many people on our team use this powerful interactive tool."

And the team, including both instructors and students, has adapted well to the use of the E-Board. "Initially, there's always a little push back with anything new," Miller admits. "But now it's widely accepted. On the whole, we're a young department. Because our guys are more from the Millennial Generation, it is a natural tool for them to use."

With the help of the EASYBOARD by Numonics, the Florence Fire/EMS Department conducted 10,142.75 man-hours of training in 2010, in the areas of fire, rescue, hazardous materials, and emergency medical services. This training supported the Department's response to 8,590 situations — 2,599 fire/rescue and 5,991 emergency medical — in the same year. Clearly, the E-Board and the team work together to improve safety and hone critical skills necessary to reduce fire fighters' loss of life.

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