UNITING FORCES

ORLANDO'S JOINT ADL CO-LAB IS MAKING IT EASIER FOR BRANCHES OF THE U.S. ARMED SERVICES TO SHARE INFORMATION.

By Rafaela Ellis

» Interoperability: For those in the computer business, it's become the watchword of the moment. Put simply, it means creating content that can be run at anytime on any type of hardware. And if Orlando's Joint Advanced Distributed Learning Collaboration Laboratory has anything to say about it, interoperability enabled by the World Wide Web is just the beginning.

Located in Central Florida Research Park near the University of Central Florida, the Joint ADL Co-Lab, as it is known, is part of a Department of Defense initiative undertaken in 1997. Its mission: to integrate military instruction and technology across the various service branches to improve training, increase efficiency, and thus save the taxpayer money.

"The premise was, the military was underutilizing technology for individual training," explains Dr. Robert Wisher, the Pentagon-based director of the nationwide initiative. "The bottom line was a lack of interoperability. Content developed for one computer system would not work on another system — so, if the Air Force had a system, they could not share it with the Navy."

As a result, each branch was spending tax dollars to independently create similar materials for its troops.

"For example, in the area of medical care, they were developing basically identical content for common tasks, such as [employing] a tourniquet," Wisher says. "But there was no reason why you just couldn't share content around the services and reduce cost by developing the content once and using it many times."

When it came to finding a location for the military co-lab, Orlando led the list, says Jean Burmester, its director.

"Central Florida is the hub of modeling, simulation and training systems for the military," she says. "There are also numerous defense-related industry partners [here] that support the Department of Defense in a variety of functions."

Add to that the presence of "Team Orlando" — the military's term for the confluence of armed services commands located here — and

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Orlando was the natural choice.

Today, the lab has 15 employees — a mix of Army, Navy and Air Force civilians and support contractors — and is funded in whole by the Office of the Secretary of Defense. The location in Central Florida Research Park includes not only offices but a game and simulation research laboratory, a plug-and-play lab where government contractors can test their content on numerous Learning Management Systems, and a National Guard classroom where local Guard units and military can connect with 300-plus training sites nationwide. The National

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Guard classroom is also available to government contractors to reach subject matter experts nationwide.

Future plans call for using the Joint ADL Co-Lab to conduct language and cultural distributed training research. The lab is also under review to support language proficiency testing of military, government civilians and reserve individuals in the Central Florida area. Language and cultural training is critical in all Military Services to ensure the troops deployed to war zones are as effective in the combat theater as possible.

"We're finalizing an agreement with the Defense Language Office to do more work with the Defense Language Institute," Burmester says. "So we're hoping to see some growth there."

For now, however, the Orlando co-lab concentrates mostly on helping Defense Services understand common standards for training, so that instructors in each armed services branch operate on the same wavelength.


Game and simulation research lab.

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While the concept of interoperability can sound heady, Burmester points out that the result is anything but complicated. In fact, the initiative's mission is to make life simpler — and safer — for the nation's war fighters on the battlefield.

Burmester gives the example of an Apache helicopter breaking down in a war zone.

"There are so many versions [of that aircraft] out there in the field," she says. "If someone in Kuwait needs to repair a particular aircraft, they can go online anytime, anywhere and find the right version of the repair manual."

With programmers back home constantly updating information, troops won't have to be trained on a particular piece of equipment in order to repair it quickly and safely.

The ADL Co-Lab is also responsible for developing tools that evaluate how well the military is educating its troops.

"Training is not training unless there's some level of assessment to show that the student did what the student was supposed to do," says Bill Pike, senior research engineer at the co-lab. "We say it's not training unless you capture that assessment data for use down the road."

Assessments will analyze not just immediate results but how long trainees retain information, as well as how easily they can access updated content to keep their skills current.

"The whole key is, [trainers] need to be able to know who's trained, who's ready, and what gaps there are," Burmester notes.

While the ADL initiative's original mandate was focused on the military, business and academia are also benefiting from the program. Two other ADL labs — the Workforce Co-Lab in Memphis, Tenn., and the Academic Co-Lab in Madison, Wis. — are working to help industry and higher education develop methods for integrating information across hardware platforms.

"The Academic Co-Lab has partnerships with more than seventy universities," Director Wisher says, noting that the co-lab also has formed alliances with regional educational organizations to create standards for sharing content.

And while businesses have been reluctant to share content for fear of undercutting their own bottom lines, Wisher says industry is beginning to identify non-compete areas, such as regulatory training, where working together can save everyone time and money.

Meanwhile, the Orlando Joint ADL Co-Lab continues to focus on military applications, creating methods for streamlining training both between services and within individual branches.

"This is a great idea for a military schoolhouse, even if they don't look at the possibility of others using it," says Pike. "There is a lot of commonality between training, whether it's offered to captains, lieutenants or in non-commissioned officer schools, so they can reuse [content] within their own schoolhouses."

With a budget of only $14 million per year — $5 million of which is allocated for the Orlando facility — the ADL Initiative has the potential to save Americans millions more than it costs them. And that, says Wisher, is the real bottom line.

"It's not a matter of how [the services] should train," he says. "It's that if they decide to use online instruction, they should allow another service to use what the taxpayer has paid for."