

Oil & Gas Inquirer

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to outsource across Canada
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A high-tech solution to
industry training challenges

Brian McCready,
VP, Alberta division,
Canadian Manufacturers
& Exporters

E-LEARNING

A high-tech
solution to industry
training challenges

by Godfrey Budd

WHEN CONTROL ROOM and facility staff for a new oilsands upgrader required training to run it, management decided to sidestep traditional in-class instruction and opted instead for a web-based e-learning system, supplied by dominKnow of Perth, Ont.

The majority of staff hired to operate and run the control systems for the new facility were either engineering technologists or had plenty of other qualifications and/or oil and gas experience, often in processing environments. "Many were

panel operators with experience in computerized control systems, but not necessarily experience of the control room of an upgrader," says Chris Van Wingerden, VP of learning solutions at dominKnow.

The vendor of the system had offered in-class training for the new employees, but vendor training involved flying more than 100 staff to the United States for three days of in-class instruction and training. Including flight, accommodations, and other expenses, the cost per person would be about \$6,000. And that

doesn't cover the additional costs associated with the absence of key staff from the plant for the better part of a week, once travel time is added.

An estimated 95 per cent of the facility's operators had industry experience; however, their situation "was akin to hiring experienced 747 pilots who suddenly had to qualify to fly an Airbus 340," a press release from dominKnow says.

DominKnow's e-learning system also largely avoided the need for traditional on-site, instructor-led classes, where >

Photo: dominKnow



Chris Van Wingerden, VP of learning solutions at dominKnow

per-person costs can run \$500 per day. By cutting classroom time in half and enrolling 180 people in a single course, there were instant savings of \$90,000 on a single training course.

The oilsands company realized further return on investment gains by using a customized e-learning course to train staff on the facility's distributed control system (DCS), which, like the rest of the facility, was brand new. The e-learning-based technology training course for the DCS used dominKnow's Learning Content Management System (LCMS) software. "For the DCS course, we worked with the operator's training group to develop learning modules. We have been working with oilsands operators for about six years. An operator can use the LCMS software to develop their own training module," says Van Wingerden.

Besides saving travel time that would be involved in training at the vendor's facility, the training itself—based on requirements set by the oilsands company's engineers and training experts, and using LCMS e-learning software—is fully tailored to the control system's actual use at the facility.

Also, like many of the growing number of e-learning courses, the students/staff at the oilsands facility train at their own pace, and can thus mesh training time with regular work schedules—rather than spend time away. "The result of using LCMS was that the oilsands operator saved more than \$500,000," says Van Wingerden.

E-learning systems like the one supplied by dominKnow can save a company thousands of hours in training time—and time is a critical factor when the oil patch is facing acute skilled labour shortages.

When staff are absent on training courses, there might not be sufficient replacements to fill their places. Van Wingerden comments, "This kind of training offers flexibility that a class doesn't have. In a highly competitive race for the best people, oil and gas workers can use the self-paced courseware rather than sit in a classroom sometimes just learning what they already know."

Also, if an operator needs to look something up or take a refresher course on a particular topic, the information is right at his or her fingertips—not a three-hour flight away. "Everything on the training modules is referenced in database, like the index at the back of a book. So anyone can get a refresher on anything they need," says Van Wingerden.

All training modules for the upgrader include tests and can be updated when required to address new or additional systems, equipment, or technologies. Van Wingerden says the modules are "very easy to use," and the software can be used to create additional courses when they are needed.

A growing number of companies are using web-based e-learning systems and software. DominKnow e-learning products have been assisting Canadian aerospace companies like Pratt and Whitney, as well as U.S. clients, including the banking sector, police agencies, and federal and state government departments.

But the benefits of e-learning are not solely restricted to large organizations, says Van Wingerden. "E-learning has a role for [independent] providers to facilities. It can be used by a small company—say a small software company with a product for other outside users or clients.

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Or a manufacturer of gas detection equipment could use it to train clients on the use of hand-held H₂S sniffers. There are lots of ways to use it—and because of the Internet, it's available anywhere, any time." He believes e-learning safety training could have an increasing presence in the oil patch.

Across the continent—and indeed, across the world—e-learning and training is growing. In terms of total numbers, the United States is the country with the most e-learning providers, followed by Canada, the United Kingdom, Germany, India, Australia, and Singapore. On a per-capita basis, however, Canada has the highest concentration of e-learning providers. Gary Woodill, of Brandon Hall Research of California, writes in a recent overview of the sector that there are about 350 e-learning providers based in Canada. Of these, approximately 300 are companies. Woodhill, the former chief learning officer of Peterborough, Ont.-based Operitel Corporation, writes that, "In addition, there are approximately 50 in the [Canadian e-learning] directory that are associated with universities and government agencies."

In Canada, the province with the most e-learning providers is Ontario, with an estimated 120 providers, followed by British Columbia, and then Quebec, Alberta, Nova Scotia, and New Brunswick. Each of the four other provinces has fewer than 10 providers.

Woodill believes that Canada's e-learning sector is in a good position to grow. At the same time, both in Canada and worldwide, an increasing number of companies in the oil and gas industry are inking deals with e-learning providers. ●