

Optimizing training through innovative tools

At the wheel of a virtual off-highway truck

Sometimes the optimal tool becomes available to make real improvements on the job. Reinhard Weins, owner of R.W. Consulting and Training Services Limited, has seen major improvements to his training program since acquiring the Simlog Off-Highway Truck Simulator a couple of years ago.

In business for three years now, R.W. Consulting and Training Services Limited, of Sparwood, British Columbia, trains individuals for the open-pit mining industry. Since purchasing the Simlog software two years ago, they noticed a significant increase in trainee knowledge and performance, and a much-appreciated decrease in machinery damage. Weins noted that the trainees' performance has improved by about 70 to 80 per cent and less machinery is being damaged. Thanks to this software, trainees are much more prepared by the time they are operating real equipment on an actual site. Normally, it takes about a day or two practising on the simulator before continuing to real hands-on experience.

The Simlog Off-Highway Truck Simulator is a PC-based software designed to train open-pit mine workers on how to properly and safely use heavy-duty mine machinery. Complete with a chair, controls and joystick, the machinery simulator is, in essence, a sort of video game. On the screen in front of you is a view of the mine site and a partial shot of the equipment you are working on, designed to mimic the exact scene you would see looking out the window of a truck. When in training, the software records every move and therefore every error, and prepares a detailed report. This, in turn, can be used by the trainer to evaluate the trainee and his or her strengths or weaknesses, thereby focusing on the areas that may need more or less attention.

by Carolyn Hersey

Weins has been in the mining business for about 30 years now, and although this technology is not a new one, the fact that it is now PC-based makes it much more affordable and accessible for his training service company. The software runs on a regular computer, and since it can be used on overhead projection screens or laptops, it is very portable. An immersive software can run upwards of \$500,000, while Simlog's simulator is much more affordable at about \$10,000.

Before R.W. Consulting incorporated the technology, they weren't engaged in computer-based training. Trainers would operate the trucks with the trainees until they were deemed fit

A view from the cabin of Simlog's Off-Highway Truck simulation software as the student learns to drive mine haul roads.



and ready to run things on their own. Over the years, errors occurred, which in mining can lead to costly repairs.

One of Simlog's many benefits, as Weins pointed out, is not only are they saving money on the initial cost of the software, but they're saving in the long run as well. "I would much rather a trainee crash on the computer and be able to correct the error right then and there, than have them crash in a truck and have to pay thousands of dollars worth of damage."

In the future, R.W. Consulting aims to integrate the technology into their hiring process. The simulator could be used to test the skill level of potential employees. Weins also noted that although the simulator has immensely improved the company's training performance, it's equally important to understand that it is the trainers who simply cannot be replaced. R.W. Consulting owes most of its success to the fact that they strive to hire slightly older and very experienced trainers.

The Simlog simulator is an excellent tool for instructors to use during training, but it's important to remember that it is just that — a tool. "A machine can never replace a live human being, capable of making compassionate, applicable and sometimes crucial decisions that only a human can," said Weins.

As for improvements, Weins said there are very few to be made. He's constantly in contact with Simlog, staying on top of any progress the technology may make as time goes on. "The Simlog Off-Highway Truck Simulator is a great tool, and R.W. Consulting is more than proud to offer this level of sophisticated training and technology" he added. With reduced initial costs, reduced property damage and improved trainee performance, you can't go wrong. **CIM**