



Fort Vermilion Reinvents Education, Setting New Standard in Vocational Training

Situation

Fort Vermilion School Division was awarded a grant to support career-aligned training programs, enabling investment in a simulation training system to enhance its offerings.

Solution

The school division decided to establish the Building Futures Collegiate to offer vocational training to connect students with career pathways. The Building Futures Collegiate strives to offer safe, realistic training for heavy equipment operation, which it has been able to accomplish through CM Labs' simulation training solutions.

Why CM Labs

Fort Vermilion chose CM Labs because it provides superior simulation training with exceptional realism and quality, surpassing other options on the market.

Benefits

With the help of simulation-based training solutions, Fort Vermilion accelerated training by creating a safe environment for learning through mistakes, producing jobready operators more quickly.

A Transformative Vision for Education

Fort Vermilion is a school division in Alberta, operating 16 K–12 and K–9 schools with a staff of 600 people and annual budget of \$59 million CAD. Determined to overhaul the educational model in his division, Mike McMann, Superintendent of Fort Vermilion school division, began his career in education with the commitment to help every student succeed. He explained, "I absolutely hated school. When I became a teacher, I did everything in my power to make it different, so that every kid can find success."

Now serving as Superintendent, McMann champions a student-first approach rooted in passion-based learning. He believes that by broadening students' exposure to diverse career paths, educators can help them uncover the skills they're truly meant to master. McMann framed his mission as a question, "How do we give kids the ability to pick something they're really great at and just do it with all of their heart, intellect, and power?"

The opportunity to realize this vision came when Fort Vermilion applied for a large government grant to purchase equipment supporting career-aligned training programs. This enabled McMann to invest in simulation technology and establish the Building Futures Collegiate, a revolutionary educational program linking students directly to viable, in-demand career paths.

The Building Futures Collegiate

The Building Futures Collegiate serves 4,000 students across 16 schools and offers 11 career streams, including nursing, teaching, forestry, and heavy equipment operation. Students can enroll in a career stream and accelerate their entry into post-secondary education and local employment.

Each career stream is well-resourced and robust. Novice heavy equipment operators learn using 11 high-fidelity CM Labs simulators. Their performance on the simulator is tested under various conditions with a passing score of 80% or greater. This enables students to safely complete foundational training before completing post-secondary certifications at the local Olds College. Through this program, students can transition directly into entry-level industry roles.

New Careers and More Profitable Heavy Equipment Operators

In the first year of its official launch, the Building Futures Collegiate is already a success, with graduating operators quickly securing roles with local companies.

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Simulation Supports Students and Local Industry

The Building Futures Collegiate is designed to support both students and local industry. Beyond teaching the next generation, the Building Futures Collegiate also offers opportunities for adults to learn new skills. If student seats remain unfilled in specific programs, Fort Vermilion offers them to adult learners. In addition, McMann consults with local companies to determine their needs and align Fort Vermilion's educational mission with them. McMann said, "We go to them and say, 'If I hand you an employee tomorrow, what do they need to do?'"



Likewise, Fort Vermilion recruits instructors for heavy equipment operation from local companies. This brings real-world expertise into the classroom while giving students a connection in the industry. This back and forth with local companies allows the Building Futures Collegiate to tailor its curriculum to focus on the key skills and exercises most needed in the field.



Local companies also make use of the simulators to validate new employees. McMann said, "Whenever they hire a new employee, they're put through the paces on our simulation." This gives the operators a chance to demonstrate their skills in total safety, ensuring that the new operator will not be putting their coworkers at risk.

A board of trustees guides the program's development and operations, while an engaged parent group brings valuable community insight. Together, they actively shape and support this innovative initiative. Students launch into meaningful careers faster. Local companies hire capable, qualified operators. And parents watch their children succeed with purpose.

Industry Leaders Prefer Simulation-Trained Operators

Industry leaders reported that the new simulation-trained operators reached profitability faster, requiring shorter ramp-up times in the role. "Before we started this program, especially with CM Labs, it would take six months to a year to start to see results," said McMann. Now, it only takes two to four weeks to offset the training costs.

Training in Safety Inspires Confidence

Simulation training remains the key to the program's success. It gives novice operators a low-risk environment to build confidence. McMann explained, "The biggest thing for us is to be a safe place for them to fail rather than in industry." That ability to safely fail, restart, and try again, paired with the exceptional realism of CM Labs simulators, dramatically accelerates the required training time. When simulation training is supported by an educational administration focused on creating opportunities, it truly revolutionizes the training process.

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Why CM Labs Simulations

Fort Vermilion evaluated multiple simulation training systems, ultimately selecting CM Labs for its heavy equipment operator career path. The reason for the selection was simple: CM Labs offered the superior system. McMann explained that when compared to other simulation options, "The moving platform is not the same. The depth of the graphics are not the same. It's much more real." He went on to further stress the difference in quality, saying, "One's a Kia, one's a Cadillac Escalade. That's the difference."

With the help of simulation training solutions from CM Labs, the Building Futures Collegiate is up and running. Over time, this simulation-powered program will connect hundreds and even thousands of students with productive, lucrative careers in heavy equipment operation.











