

How Immersive Training is Shaping Future Elevator Constructors







The Canadian Elevator Industry Educational Program (CEIEP) is Canada's top elevator education and training program for elevator apprentices and mechanics. CEIEP delivers a rigorous four-year program to certify elevator apprentices into licensed mechanics who can safely install, repair, and maintain elevators of all classes across Canada.

The Introduction

Elevators play a crucial role in enhancing the efficiency, safety, and quality of vertical transportation and urban living. However, due to their complex nature, their installation, maintenance, and repair require specialized expertise and skill. To ensure optimal safety and regulatory compliance, elevator manufacturers and contractors rely on training organizations like CEIEP to deliver safe, consistent and effective training for apprentices and continuing education for mechanics across Canada.

The Challenge

With ever-advancing elevator technology and an aging workforce of skilled mechanics, CEIEP was determined to modernize its training solutions to prepare for the new generation of elevator mechanics and to reduce safety incidents that occurred on the job. Instructors wanted to provide elevator apprentices with effective, efficient, and realistic hands-on learning experiences - a result that had not previously been possible to achieve without compromising safety and delaying time to work readiness. To accomplish this, CEIEP partnered with LogicalDox to understand their workforce development challenges and determine the right solutions and technology.

It's Time to Prepare for the New Generation of Workers

Alarming new data reveals that only a jaw-dropping 11 percent of postsecondary students report feeling prepared to enter the workforce.

Source: eCampus News (2022)



The Solution

Collaboration Was Essential

CEIEP partnered to collaborate with on-the-ground subject matter experts – the CEIEP training directors – to understand the problem that demanded a solution. Successful solutions require constant dialogue and partnership.

Thinking Beyond Software

Understanding CEIEP's vision allowed LogicalDox to take a comprehensive approach when assessing its challenges and how they impacted the elevator industry at large.

Power of Choice

LogicalDox evaluated various XR training technologies and ultimately recommended a Virtual Reality (VR) solution. An initial proof of concept was developed to validate the potential of CEIEP's vision in VR.

The Benefits to Modernizing

Traditional Training

- Not immersive
- Passive learning
- Lower retention
- Difficult to simulate realistic scenarios
- Basic data
- Challenges measuring effectiveness
- Days in training

A recent study found that 40% of VR learners were more confident in applying what they've been taught and 150% more engaged. In addition, VR was found to be 400% faster than classroombased learning.

Source: PWC (2022)

Immersive Training

- Fully immersive
- Active learning
- Greater retention
- Safe environment for trial and error
- Trackable data and insights
- · Visibility on effectiveness
- Minutes in training

VR-trained personnel were up to four times more focused during training than their e-learning peers and 1.5 times more focused than their classroom colleagues.

Source: PWC (2022)



The Outcome

CEIEP and LogicalDox collaborated to define student personas and key learning objectives. The Outcome? Hands-on curriculum training, including hazard awareness, job site familiarity and mandatory safety procedures.

The CEIEP VR training will deliver heightened engagement and effectiveness, while also measuring performance against a range of essential metrics that set the benchmark for success.



Completion rate measures engagement and effectiveness of the training.



Retention rate measures learners' ability to remember critical information.



Time to competency measures the amount of time it takes for learners to reach a specific level of competency.



Performance evaluation measures how well learners perform specific tasks on the job.

For decades, the construction industry has experienced a steady decline in its workforce. The lack of appeal to young people, recessions, and the pandemic have shrunk the available labour pool. A long-term solution is challenging and will take time to achieve."

Source: For Construction Pros (2022)

View the Initative



The Impact

Starting in 2025, thanks to this initiative, every new elevator pre-apprentice in Canada will undergo practical VR training, prior to being admitted into the CEIEP program. This will ensure that the elevator professionals that CEIEP prepares are further equipped with the skills and knowledge required to succeed safely within the industry.



Improved Safety and Confidence In-Field



Accelerated Time to Being Work-Ready



Reduced Turnover and Cost

