CONSIGLIO NAZIONALE DEGLI INGEGNERI

ORDINE DEGLI INGEGNERI DELLA PROVINCIA DI TORINO



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12ª GIORNATA
NAZIONALE
DELL'**INGEGNERIA**
DELLA**SICUREZZA**

TECNOLOGIA E INNOVAZIONE:
SCENARI FUTURI DELL'INGEGNERIA
DELLA SICUREZZA

Formazione e sviluppo della cultura della sicurezza nelle economie emergenti

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Evento organizzato con la collaborazione della:
FONDAZIONE CONSIGLIO NAZIONALE INGEGNERI





ITC ILO
International Training Centre

In over half a century, the Centre has trained government officials, workers, employers, and students from all over the world, navigating the major transformations in the world of work and pioneering innovative teaching methodologies and cutting-edge courses. With an ever-inclusive approach, the Centre has evolved to complement in-person training in Torino and ILO Member States with online programs, including virtual reality experiences, and embracing the new challenges posed by artificial intelligence.

Qatar and ILO launch virtual reality training course for labour inspectors

•Qatar's Ministry of Labour and the ILO are rolling out a **virtual reality training** for labour inspectors.
•During the VR experience, which simulates a construction site, inspectors identify irregularities and **answer questions** about the most common occupational accidents.
•Virtual reality experiences and gamified learning is a proven way to help people **remember and internalize** new knowledge.
•This is an example of how **technology** can support Qatar's efforts to strengthen safety and health at work.

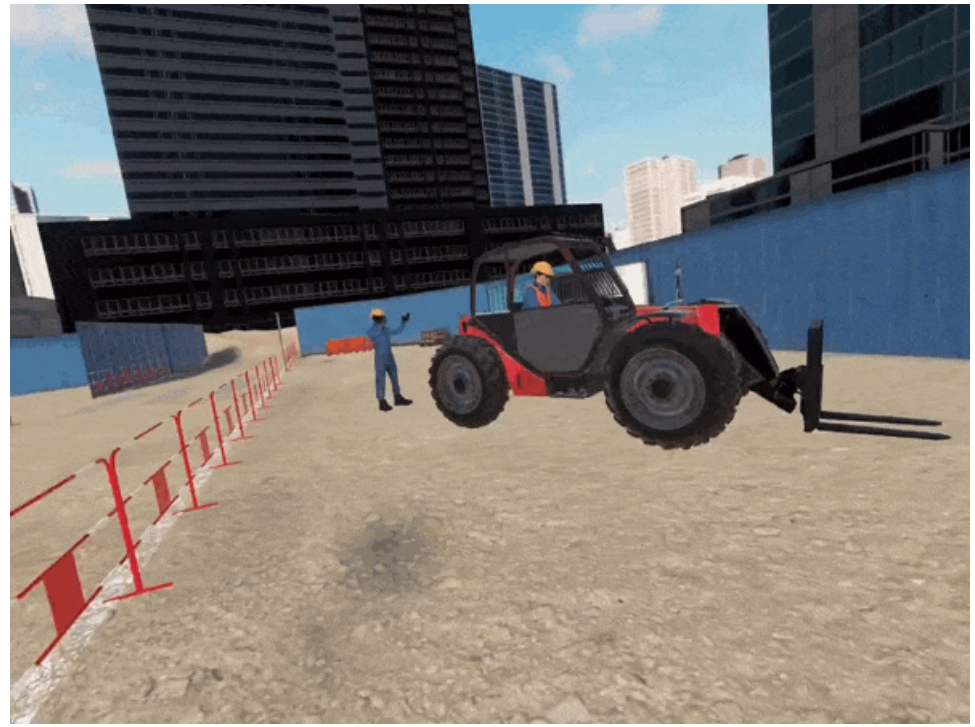
Virtual reality is a powerful learning and training tool. It provides opportunities for **active learning** – a proven way to prepare for risky or dangerous situations, in particular. In fact, studies show that people remember more of what they learn in VR environments, compared with traditional training.



Realism

The VR module simulates an **accurate replica** of a typical construction site in Qatar. Everything – the sounds, the sun, the machines, the virtual characters – are customized according to participants' needs and local realities.





Guidance

Before the training starts, the VR module guides participants through a **quick tutorial** on how to navigate the virtual environment. For example, participants learn how to use the camera to capture the irregularities, dangers, and risks that they identify.



Quizzes

During the training, participants walk around the environment and search for anything irregular or unsafe. When they find something, they document it by taking a picture and then **test their knowledge** by completing a short quiz. The questions are created by ILO Qatar and experts in the field.

ILO launches VR course against sexual harassment in the garment sector

Virtual reality can be a powerful learning and training tool to increase empathy and learn how to handle delicate situations.



With VR, people have the opportunity to actively learn by putting their skills to the test while at the same time developing a deeper emotional connection to the content.

"Today I joined the training that's really really interesting training. This is the first time for me to have the training method using Virtual Reality. Which is quite interesting because we can focus, and I can get many learning from this training today and also, the thing is, I'm very happy with the coach. Thay can deliver the messages that really straightfully and I can bring to my factory. Which is now it's not only talking about the sexual harassment, but also about the violence and harassment that we need to be established in our factory. I want to recommend it, this training, to all of the new participants. You can enjoy and happy during this training."

Dikimore Sari - Talent Acquisition and Compensation & Benefit Manager, Avery Dennison RBIS Indonesia

Learner reflections

Through an informal conversation with the virtual coaches, participants are asked to decide what constitutes unacceptable conduct through a gamified activity. While participants provide their opinions, they are also able to reflect on their own level of understanding and their assessment of complex and challenging situations.



Learners are then shown a conversation between Dewi and Linh, two sewing machine operators talking about their recent interactions with some of their male colleagues. During the exercise, participants need to identify whether an action is likely to be sexual harassment using the legal definition provided earlier by the coaches.

The 5D approach

After a debrief on the previous activity by the coaches, participants are transported to a scene where a male coworker of Linh's behaves inappropriately. The exercise then allows the participants to play out the 5 different approaches to being an active bystander. This helps them plan to step up when and where they can.



Swapping bodies

During the final exercise, participants demonstrate the direct approach by speaking directly to the perpetrator about their behaviour. As best as possible, participants use their own voices and bodies to communicate the key messages they want to deliver. Once performed, participants swap their bodies with the perpetrator to see and learn from visualising their own delivery. Lastly, they are presented with the opportunity to play out an ideal interaction as well as view an AI-generated assessment of their performance.

Exploring the new frontiers of Virtual Reality

The First Emergency Logistics Full-Scale Simulation Training

The Global Logistics Cluster made history on 7 March, 2021 for the first time 28 people gathered in a virtual reality training simulation from the comfort of their own homes in countries spread across 11 countries, from Thailand to Panama, Lebanon, Sierra Leone and many in between.



Exploring the new frontiers of Virtual Reality

The Global Logistics Cluster set out on a new frontier of learning, working closely with the team at the International Training Centre of the International Labour Organisation (ITCILO) to create an e-simulation that is redefining how to prepare humanitarians for emergencies.
“Nothing normally beats the excitement of an LRT delivered in person,” says Andre Hermann, Global Logistics Cluster Training Lead. “We knew that in order to keep building these skills in the humanitarian community we needed to work quickly to develop a virtual world that would resemble that environment and a real life emergency environment, including a dusty basecamp where a generator hums all day long and the participants can meet face to face (via VR technology) with a variety of stakeholders in a dim tent.”

Through the training, participants navigate their way through a full simulation that represents the early, non-stop days of a sudden onset emergency, including long days and short nights, to meet the ever-increasing deliverables.
“The Global Logistic Cluster team has been an early innovation adopter of running simulations in immersive VR environments. Through this project they delivered an important building block to re-think and enrich hybrid learning events in the humanitarian sector”, says Tom Wambeke, Chief of Learning Innovation, ITC-ILO.