

e-Learning Korea 2017: Conference

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HOW VIRTUAL AND AUGMENTED REALITY CAN IMPROVE ATTENTION IN THE CLASSROOM AND AWAKEN A STUDENT'S CURIOSITY FOR LEARNING

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EON Reality is the world leader in Virtual Reality (VR) and Augmented Reality (AR) based knowledge transfer for industry and education. EON Reality believes that knowledge is a human right and should be available, accessible, and affordable for every human on the planet. To carry this out, EON Reality, since 1999, has developed the de-facto standard for Augmented Reality and Virtual Reality based knowledge transfer software that supports devices from mobile phones to large immersive domes.

It is proven that using Virtual Reality (VR) and Augmented Reality (AR) is more efficient for training than traditional teaching for example based on reading books.

During almost 20 years EON Reality has delivered applications on many different platforms and in many disciplines. With the latest Virtual Reality Headsets (VRH) like Oculus Rift and HTC Vive and Mixed Reality Headsets (MRH) like HoloLens and new standard for display systems have formed what will radically change the future of e-learning. We can with help of Artificial Intelligence (AI) add yet another dimension in e-learning where computers will help to fill the future need of teachers.

There are three main issues with knowledge transfer today: Quantity, Quality and Attention. As the population continue to grow and more and more people need higher education we need to teach more with less resources. Improving quality of knowledge is in the future not about knowing everything, but to know where to seek and analyze answers. Students need as well good attention during training. These issues are well handled by VR and AR for knowledge transfer.

The new technology is now available and time is now to use this for training globally. The global prediction is that 85% of VR AR growth will come from non-gaming sources like knowledge transfer in fields such as health care, engineering, education, military, real estate and life events.

EON Reality provides an agnostic approach in its AVR platform (Augmented Virtual Reality) by integrating many standard business solutions with its own VR and AR platform.

Use cases comes from many different disciplines and a few of them are presented here:

- EyeSim offers the world's most advanced VR Model of the Eye, developed with world leading Eye experts from Loyola University, USA.
- University of Toledo's Inter-professional Immersive Simulation Center (IISC) incorporates a Tri-Center Concept including the Virtual Immersive Reality Center

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- EON Reality has developed 40 immersive 3D Virtual Reality content on Aerospace training, ranging from engine combustion, familiarization of the aircraft exterior to safety maintenance checks.
- Deakin University in Melbourne, Australia, has decided to use EON's platform for their campus wide AR rollout.
- LIAA (Lean Intelligent Assembly Automation) is an EU funded project where EON Reality provide MR with HoloLens for shop floor workers at factories with collaboration between humans and robots. A live demo of this will be presented.