HoloLens, Augmented Reality and Teamwork: Merging Virtual and Real Workplaces
WHY

• Providing an innovative and effective training tool to both lay people and healthcare providers in Basic Life Support and Defibrillation (BLSD), by mixed reality

• Maximizing learning results reducing the training costs
HOW

• A self-instruction learning program that requires minimal instructor intervention, within a realistic environment

• Realistic haptic feedback through a CPR manikin and a virtual scenario that can be easily reconfigured to generate many different situations (including extreme and dangerous ones)

A trainee using HoloBLSD (left) experiences a MR training displayed on the HoloLens (right)
TRAINING & ASSESSMENT

• A mixed reality self-instruction training environment allowing also assessment, with the system recording and analyzing performed actions

• Hololens and a standard low-cost CPR manikin to deliver tactile info -- "augmented" by an interactive virtual environment reproducing realistic scenarios

• Virtual 3D objects anchored to the manikin and to the environment
WHY

A cooperative game aimed at fostering behavioral, cognitive and meta-cognitive skills

HOLO-TRANSPORTATION
HOW

• A self-instruction learning simulation program: deep spatial navigation is the simulated environment where 2 teams, comprised of minimum 2 people each, have to cooperate sharing information and knowledge relevant to navigate

• The teams are in different places and can’t directly look at each other
TRAINING

• The teams are in different places and can’t directly look at each other: the team wearing the HoloLens has to provide the most appropriate info to the other team, that has to manage the space navigation by the commands available on a big surface they are facing (part of an e-REAL interactive wall)

• Only in a few special situations the “drivers” are shown with images and recordings from the other team working with the HoloLens, sharing in such a way the same visual outputs.
More info:

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