Concurrent Presentation Session
NEW, CREATIVE WAYS TO LEARN

Collaborative Augmented Reality with Virtual Humans to Support Social Learning

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IFEST

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"...I've long wished that we as medical students could get more experience interviewing patients outside of just our standardized patient encounters, or role-playing with friends or people we know in real life. This would be a great way for us to do that."

-- UTSW Medical School
Research Study Participant 2017-2018

Challenges of Online Learning and Potential of Collaborative Augmented Reality With Virtual humans

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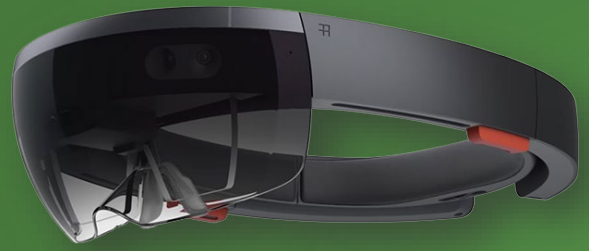


The Emotive Virtual Patient

Results of Pilot Study Research

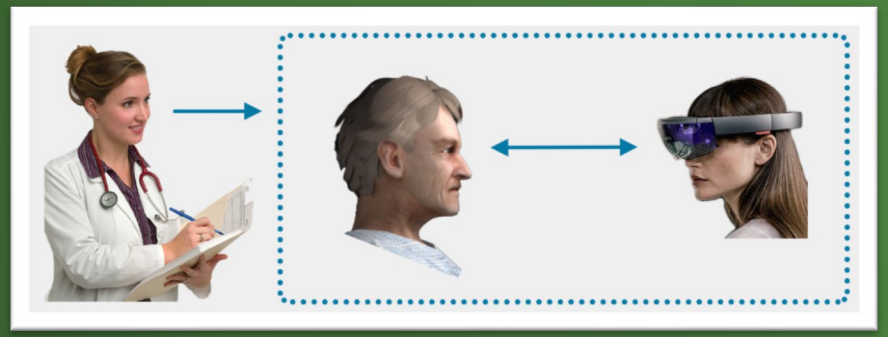
We found that students preferred AR and VR delivery over monitor-based and the results were statistically valid at the 5% level.

Presence Questionnaire Results

	Max score possible	Monitor Based	Augmented Reality	Virtual Reality
Realism	49	25.00	29.00	38.96
Possibility to act	28	15.67	19.39	20.43
Quality of interface	21	7.13	8.22	8.00
Possibility to examine	21	9.13	11.65	13.91
Self evaluation of performance	14	10.96	10.35	11.30
Sound	21	16.92	16.74	17.48
Total	154	84.79	95.35	110.09

Realism: VR outperformed AR and MB and is significant at 5% level. Quality of interface: AR outperformed MB and VR and is significant at 5% level. Totals significantly different at 5% level.

Future Research
Networked Augmented Reality and Mixed Reality



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Questions?