Engaging through the use of Virtual Environments

Dr Tanya Petrovich
Business Innovation Manager
Centre for Dementia Learning
Dementia Australia
What we do

Dementia Australia supports people of all ages living with all forms of dementia and their families and carers.

Our Centre for Dementia Learning offers person-centred, evidence-based, contemporary and immersive dementia education, inspiring people to change their attitudes and behaviours.

Our consultancy services transform care practices and work cultures at the individual, team, facility and organisational level.
1.5 million people are involved in the care of someone with dementia.

By 2058 it is estimated that 1,076,129 people will have a diagnosis of dementia in Australia.

There are more than 447,115 people living with dementia in Australia.

Dementia is the 2nd leading cause of death in Australia.

Every three seconds, someone in the world develops dementia.
Dementia in Australia

447, 115
Australians living with dementia

> 50%
of those in residential aged care are living with some form of dementia

70%
are living in the community

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Our aim: To create unique learning experiences which touch, move and inspire participants and organisations to transform their dementia practice.
Dementia Care Education
Virtual Dementia™ Experience

Multi-Sensory Environment
“Came with a bit of a negative attitude, left with a can’t wait to get to work and try and implement a lot of things….. Made you think about how someone with dementia sees the world!”

Course Participant
Health Award 2015

2015 Microsoft Imagine Cup -

i-Awards - 2014
‘This sense of self-other merging in the virtual environment transfers to the physical world and translates into actual helping behaviour, even when the other person is a complete stranger.’ S.J. Abn et al.
Evaluation of the Virtual Dementia Experience
Report

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17 June 2015
Results

1. Knowledge of Dementia Enabling Environments - VDE participants identified more dementia-friendly changes.

2. VDE participants showed an increase in Empathy.

3. Both groups reflected on care practice and training. But, VDE participants responded from the perspective of a person living with dementia.
Virtual Dementia Experience - for Medical and Pharmacy Students

Qualitative evaluation of how a virtual dementia experience impacts medical and pharmacy students’ self-reported knowledge and attitudes towards people with dementia

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Impact of a Virtual Dementia Experience on Medical and Pharmacy Students’ Knowledge and Attitudes Toward People with Dementia: A Controlled Study


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Mobile Tech
Oculus Gear and Cardboard

2016
EDIE has been found to improve:
• Knowledge
• Attitudes
• Empathy
• Understanding of care needs
Evaluation of EDIE

• Participants who reported feeling more immersed in VR experienced greater improvement in understanding of dementia care environments.

• Carers from non-English backgrounds can benefit from immersive technology over and above standard training methods to achieve improved understanding.
A day in the life…
Meal time
A day in the life
Ted- Avatar living with Dementia
THE DEMENTIA-FRIENDLY HOME

Tap anywhere to begin
Tech To Engage & Assist People Living with Dementia
2014 – AVED

Applying virtual environments for the person living with dementia
The Virtual Forest-2016
The Forest – Enviro Stimulus rating

Main Objectives:
• Engagement
• Enjoyment
The Forest — Observed Emotions

- Pleasure ↑
- Alertness ↑
- Anxiety ↑
Developed a tablet based program designed to ensure family visits are interactive and meaningful for both parties.
Co-creation and investigation of social interactions
A Better Visit App
Thank you
dementia.org.au
National Dementia Helpline
1800 100 500
For language assistance call 131 450