Virtual Reality: Game changer or passing fad?

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Virtual Reality: Game changer or passing fad?

Impossible
Counterproductive
Expensive
Dangerous
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Outline
• Background - AR, VR and MR
• Background - VR Project
• Studies supporting use of VR
• Results of VR Project
• Conclusion
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What is AR, VR and MR?
AR: Augmented reality (AR) adds digital elements to a live view often by using the camera on a smartphone. Examples of augmented reality experiences include Snapchat lenses and the game Pokemon Go.
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• Virtual reality (VR)
• a complete immersion experience that shuts out the physical world
• use VR devices such as HTC Vive or Google Cardboard
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• **Mixed Reality (MR) experience**
• Combines elements of both AR and VR
• Real-world and digital objects interact.
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Project Background: University Funded Grant

Interactive Virtual Job Interviews with Self-Reflection for Logistics Students

- Computing, Logistics, and Shipping
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The project has created:

(1) VR job interview simulation on PC platform available in university's independent language learning centre

(2) VR job interview simulation on mobile Android and iOS platforms

(3) Self-reflection materials for post-interview personal improvement
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Students will be able to:

a) improve their language skills
b) enhance their job interview skills
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VR and Language Learning
Taiwanese tertiary students
• improved their phonology, vocabulary, grammar and syntax knowledge (Chen, 2016)

3D immersive and interactive virtual English classroom
• promoted a positive student attitude and interactive learning experiences (Shih & Yang, 2008)
Reflection and Language Learning

Self-set goals and reflection

• Learners focus on specific language functions and vocabulary to complete communicative tasks successfully (Lozano Velandia, 2015)

Limitations in novice learners ability to reflect effectively

• provide learners with a practical framework of initial support (Power, 2016)
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How can VR be used in education?

Virtual Fieldtrips

Prepare students for:

• Overseas Service Learning
• Overseas exchanges - campus visits
• Immersion in new environments
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How can VR be used in education?

Skills training

• The coffee experiment
  (MacGillivray, 2017)
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How can VR be used in education?

VR + Game-based learning
• goal-oriented and rule-based
• engage players through consequence
• system of rewards for achievement
• negative repercussions
• engage learners within the digital environment
• promote progress within the game experience
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Interactive Virtual Job Interviews with Self-Reflection for LMS Students

- Android and iOS versions ready for download
- VR room with desktop version in University’s Independent Language Centre
Step 3

Select your job category

Global Supply Chain Management
International Shipping & Transport Logistics
Computer Science
Opening Questions

• Small talk
Opening Questions

• **General generic questions**
  • If your application is successful, what do you think would be your biggest challenge when taking on this job? (link)

• **Specific Discipline questions**
  • Suppose you are a data scientist for a supermarket chain, how would you find out the items for a special offer? (link)
  • What do you know about the use of low sulphur fuel for ships coming to Hong Kong? (link)
  • What do you think of Hong Kong’s potential for development as a cruise shipping hub for the region? (link)

• **Closing**
  • Do you have any questions for us? (link)
Step 5

Reflection

Thank you for coming. Goodbye.
VR Room in A305
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ELC VR Job interviews
Looking for an interactive way to practise and rehearse for your next interview? You're at the right place! This app is for you!

Google Earth VR
Explore the world from totally new perspectives. Stroll the streets of Tokyo, soar over Yosemite, or teleport across the globe.

Allumette
Allumette tells the story of a young orphan girl who lives in a fantastical city in the clouds.

Littlstar VR Cinema
Movies, Video, VR, and more. Available in one seamless app
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Becoming Homeless: A Human Experience
Interact with your environment to attempt to save your home and to protect yourself and your belongings as you walk in another’s shoes.

The FOO Show
Watch real TV shows in virtual reality.

The Stanford Ocean Acidification Experience
Stanford researchers have produced a virtual underwater ecosystem to allow you to observe firsthand what rocky reefs are expected to look like by the end of the century if we do not curb our CO2 emissions.

COLOSSE
'COLOSSE' is a real-time virtual reality storytelling experience.
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Game changer in education?
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(Bailenson, 2018).
Challenges / Future

• Collect data
• Introduce game element
• Investigate possibilities of hand and finger tracking
• Explore speech recognition
  • Tailor questions depending upon response
• Extend VR to other areas
  • Presentation skills
  • Service learning
  • Teacher development

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Download the app!

VR app - Android
http://tiny.cc/VR_android

VR app - iOS
http://tiny.cc/VR_ios
References


Power, J. B. (2016). Has this begun to change the way they think? Moving undergraduate learners' level of reflection from where it is to where it needs to be. Teaching in Higher Education, 2517(May), 1-14. http://doi.org/10.1080/13562517.2015.1136278