Student Perceptions and the Future of VR in Online Education

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Our Roadmap for Immersive Learning

**Level 4:** Augmented Reality (AR)
- User has control over viewpoint and path
- Live events can be modified
- Examples: HoloLens, Pokemon Go, etc.

**Level 3:** Virtual Reality (VR)
- User has control over viewpoint and path
- Simulate unlikely or unsafe environments
- Examples: Oculus Rift, HTC Vive, Playstation VR, etc.

**Level 2:** 360° Video
- User has control over viewpoint, but not path
- Captures events as they happen
- Examples: Google Cardboard, Mobile Apps, YouTube 360, etc.

**Level 1:** Traditional Video
- User has no control over viewpoint or path
- Examples: Traditional 2D video, 3D Video, etc.

Should We Do This?

- Improvement in retention due to immersion
- Greater empathy with subject matter
- Deeper engagement for distance students
- Authentic learning experiences in impractical locations
Can We Do This?

- Pedagogical need?
- Logistically possible?
- Cost effective (ROI)?
- Scalable?
- Devices available?
- Accessible for students?
- Knowledge gap surmountable?
- Wanted by online learners?
Evolution of Projects

Special Education course (SPLED 801):
- Optimal learning environment exploration

Nursing course (NURS 352):
- Home environment assessment

Rehabilitation and Human Services course (RHS 100):
- Accessibility of library floor accessibility analysis

Organizational Leadership (OLEAD 465)
- Immersive simulation of collective decision making
Preliminary Perceptions

Survey sent to RHS, SPLED, NURS students
• 80 responses
• 69% were adult learners, ages 25-64

How did they view the videos?
• 73% viewed 360 videos on desktop/web browser
• 52% used a VR headset
70% of students felt that:
• The headset added value to the experience beyond watching the videos on a desktop
• The 360 video content was more effective compared to other forms of content

90% said that:
• The 360 video effectively illustrated the concepts presented in the lesson
• They gained new insights shown in the 360 videos they can put into practice

80% said that:
• They would like to see more content presented using 360 video.
Open-Ended Comments

“Because it gives you a personal perspective of the content.”

“I enjoyed it, but it made me dizzy if I looked at it for too long.”

...Having a history of head injury, I found myself nauseated.

“It was neat to see everything in real view but I was not used to the technology”

Difficult to set up for me... No doubt my age plays a factor.

“It if pertains to environmental/visual information it is easy to process information while viewing it.”

I wear corrective glasses and it was very difficult to wear at the same time.

“More descriptive than reading about the setup. It makes you feel like you're in a classroom more than online.”

“I wear corrective glasses and it was very difficult to wear at the same time.”
Conclusions

Essential Question:

Does VR/Immersive content provide value in an online learning environment?
Evaluate Sessions and Win!

- Download and open OLC Conferences mobile app
- Navigate to specific session to evaluate
- Select “Evaluate Session” on session details screen (located under session type and track)
- Complete session evaluation*

*Each session evaluation completed (limited to one per session) = one contest entry
Five (5) $25 gift cards will be awarded to five (5) individuals
Must submit evals using the OLC Conferences mobile app or website