Virtual Reality Learning: Whole New Worlds
ATDSCC
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Premiere Enterprise VR/AR learning company

Part of Glimpse Group, with 60+ Dedicated VR/AR Staff
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What is Virtual Reality (VR)?

• Special headset
• Content immerses user in 360° content
Let Us Show You
Adept XR Learning Platform
What VR Does Better

Learner is the Protagonist
What VR Does Better

- Learner is the Protagonist
- 100% Engagement
What VR Does Better

Learner is the Protagonist

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Illusion of Reality: Presence
What VR Does Better

Learner is the Protagonist

100% Engagement

Illusion of Reality: Presence

Unique Analytics
When is VR Better?

If the scenario is Physical, Expensive, Hard to Replicate...
When is VR Better?

If the scenario is
- Physical
- Expensive
- Hard to Replicate

Delivering training that is
- Immersive & Engaging
- Experiential
- Data-rich
VR Works

- Saved $300,000 in Training Costs [1]
- 20% Reduction in Errors & Injuries [2]
- 75% Increase in Retention Rates [3] [4]
- 40% Less Time Spent in Training [5]
Virtual Reality Technologies: Rapid, Consistent Improvement
Hardware

Mobile Headsets
- Detect your environment
  - Creates a guardian
  - Avoid hitting ‘the real world’

- 6 Degrees of freedom
  - You can move in every direction
  - Walk around normally
Experiences Adapt to the User

- How we make it feel real, or add to reality
  - Visual
    - Highlighting important areas
    - Hands not going through walls
  - Spatial Audio
  - Voiceover
    - Voice over recorded by a trainer with instructions
  - Haptic feedback
    - Controllers provide feedback to user through vibrations
Keeping Track of Users: State Machine

State Machine
- Reacts based on what the user does
  - Different options for the user to try.
  - Feedback specific to what the user did
Virtual Reality for Scaffolding

State Machine allows us to provide different levels scaffolding for learning:

- Test
- Practice
- Guide

- Allows learner to proceed at their own pace
- Allows Trainer to structure a learning process for their students
Analytics Show User Progress

State Machine

• In Virtual Reality, *everything comes through the computer*

• Experience keeps track of user actions and remembers important tasks the user did.

• Record generated for the instructors.

• Patterns can be detected at a quantitative level
Customizable vs static experiences

• Instructors can select from multiple environment which ones fit better with their course

• Organize a schedule to show new chapters progressively

• Add and remove media content relevant to learning
Multi-user experiences generate new opportunities

• Instructors can directly interact with students
• Students can share and present their work to a live group
• Activities that need cooperation and teamwork are now possible
• Instructors can observe progress without disturbing the users in the experience
Recording:
See experiences from new perspectives

• Experiences can be recorded and played back at any time
• Playing with Scale
• Roleplaying from the perspective of different people and change the experience based on that
New Technologies: Hand Tracking

• Hand Tracking is booming
  • AR (Magic Leap, Hololeans)
  • VR (Oculus Quest)
  • Web-VR (A-Frame)
Hand Tracking Benefits

• Fine motor skill training
  • Not possible with controllers

• Improves immersion for the users
  • More intuitive way to navigate VR
  • No need to teach how to use controls or what buttons to press.
Hand Tracking: Where can it go?

• Currently exploring new use cases

• Glimpse Hand Tracking Hackathon:
  • Hand pose detection
  • Sculpting (fine motor skills)
  • More intuitive ways to navigate menus
New Technology: Voice

• Voice technologies have become more and more powerful
• Natural interface
• AI Agents that allow practice of soft skills & hard negotiations
Adept XR Learning Platform

- Web-based SaaS platform
- Easy management of VR experiences
- Analytics, user, media management

Imagine if spinning up a new meeting room were as easy as a Zoom meeting?
Where is This Going

• Completely configurable
• Easily accessible
• *Normal*
• Any scenario, scene, counterpart
• Full analytics of:
  • Movement
  • Voice
  • Gaze
  • Sentiment
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“Virtual Reality can bring you anywhere. Augmented Reality can bring anything to you”

- Clay Bavor, Google VR/AR Leader
Thank you

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