Virtual and Augmented Reality:

THE 4TH DIMENSION OF HIGHER EDUCATION:
MIXED REALITY OF VR, AR, AND HOLOGRAMS
SHALL WE PLAY A GAME?

WITH OVER $600 MILLION IN MOBILE AR REVENUE IN ITS FIRST THREE MONTHS, POKE’MON GO USHERED IN AN APPROACH TO ENGAGEMENT AND GAMING FOR SOCIAL PURPOSES LIKE WE HAD NOT SEEN BEFORE …

POKE’MON GO FEST
POST SECONDARY EDUCATION
K-12 EDUCATION SYSTEMS
COMMUNITY
BUSINESS AND INDUSTRY

WHAT’S NEXT?
### NUMBER OF VR HEADSETS WORLDWIDE

<table>
<thead>
<tr>
<th>YEAR</th>
<th>VR HEADSETS IN MILLIONS</th>
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</thead>
<tbody>
<tr>
<td>2016</td>
<td>18</td>
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<tr>
<td>2017</td>
<td>31</td>
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<tr>
<td>2018</td>
<td>45</td>
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<tr>
<td>2019</td>
<td>62</td>
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<tr>
<td>2020</td>
<td>82</td>
</tr>
<tr>
<td>2021</td>
<td>100</td>
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VIRTUAL REALITY STATS

For 2017, the revenue of virtual reality products is projected to reach $4.6 billion U.S. dollars.

The total number of active virtual reality users is forecast to reach 171 million.

With revenues from virtual reality software alone forecast to reach an over 3000% increase.

According to a recent B2B survey, the Oculus Rift is one of the best-known virtual reality headsets in the U.S.

Only 4% of the respondents between the ages of 14 and 13 years said that they were not interested in virtual reality at all.

74% of the respondents said that they had not already tried a virtual headset.

9% of the respondents said that it was very unlikely that users would lose themselves in virtual worlds.

A survey in the US concerned with the awareness of "virtual reality". 92% of the respondents said that more were aware of the term virtual reality.
97% of students would like to study a VR course

2016 Augmented and Virtual Reality Survey Report

EDUCATION is expected to be the 4th BIGGEST SECTOR for VR investment


VR IN EDUCATION is predicted to be a $200 million industry by 2020 and a $700 million industry by 2025.

Almost 80% of teachers have access to virtual reality devices, but these are used regularly by only 6.87% of teachers

SAMSUNG SURVEY OF U.S. K-12 Educators’ Opinions and Usage of Virtual Reality

93% of teachers said that there students would be excited to use virtual reality

7 OUT OF 10 TEACHERS want to use VR to simulate experiences relevant to the material being covered

49% of high school teachers would like to use VR to allow students to visit college campuses to encourage further education

69% of teachers said that they would use VR to allow students to visit distant locations

Infographic created by: Virtual Reality Brief www.VirtualRealityBrief.com
Anything you wanna talk about?

Talk to you? How do I do that?

Well, you're doing it right now. Just type in regular English. Anything troubling you?
TOP 6 ELEARNING TRENDS IN 2017

Personalized Learning & Big Data
Personalized Learning and Big Data can be the future for corporate training. Many companies have already started leveraging it.

Gamification
This trend will continue to rise and drive eLearning Industry. Global Gamification Market will reach $7.2 billion by

Automation
Automation in eLearning course development could rise like never before.

Augmented & Virtual Reality
Augmented Reality and Virtual Reality are set to change the way people learn in 2017 bringing immersive learning experiences.

Mobile Learning
Mobile Learning trend is here to stay and grow tremendously. Expected to reach $70 billion by 2020.

Microlearning
Microlearning is the latest trend in eLearning. It is a bite-sized learning nugget designed to meet a specific learning outcome.
CLEANING & HYGIENE
Real Time Augmented Customization
Holograms – Blended Spaces
Medical
Pedagogy and Andragogy

• Duraiswami (2017) states, “[this is immersive education]”
• Varshney (2017) indicates, “This is a new way of communicating and learning that was until now just not possible”
• Carter (2015), “I wanted my students to be able to connect with the period that we are studying”
Theoretical Underpinnings

- Constructivist Approach
- Anchor all learning activities to a larger problem.
- Design an authentic task.
- Design the learning environment to reflect the complexity of the environment in which the learner should be able to function at the end of learning.
- Support the learner in developing ownership for the overall problem.
- Design the learning environment to support and challenge the learner’s thinking.
- Encourage testing ideas against alternative views and alternative contexts.
- Provide opportunity for and support reflection on both the content learned and the learning process.
- From Savery and Duffy (1996)
Digital Teddy Bear
AgriBusiness

Today’s Use of Technology
For Our Future
Future

• Our yesterday is unlike our now and tomorrow will not resemble today ...

• Grocery Store 2040 - https://uploadvr.com/groceries-2040s-oculus-quill/
Technology and Business

- Encirca
- John Deere
- AGCO
- Slingshot
- The use of software is everywhere and leads to ...
Mixed Reality

• Harvest Simulator VR
• Minecraft
• Minecraft - https://minecraft.net/en-us/
• Farming Simulator
• Farming Simulator - https://www.farming-simulator.com/
Bringing VR Farm to Table
Irrigation
Minecraft Farming Mod
What?

- Farming Sim
- This is exciting ...
2027 Classroom
i3

• Intuitive

• Intelligent

• Inspirational
Thank You

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