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Virtual Reality Applications: Is it feasible in an online learning environment?

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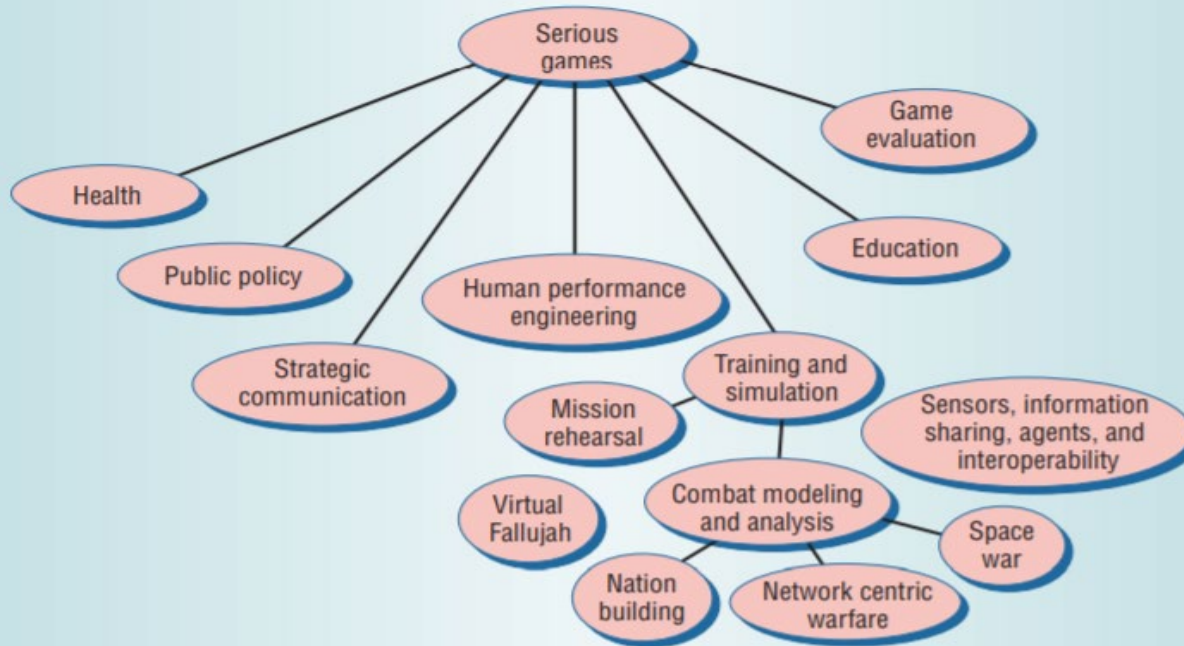
Considerations

- Virtual Reality Applications
- Theory of Connectivism
- Web 3.0 Technologies
- Learning Outcomes in the Online Classroom

Applications of Virtual Reality

Serious games and simulations:

developing a theory for the deployment of games and simulations for purposes of education and training; human performance engineering; applications of games to health, public policy, and strategic communication; game evaluation; serious game development.



Virtual Reality

- Real World Elements
 - Topography
 - Communication
 - Movement
 - Gravity
- Multimodal
- Promotes Active and Social Learning

Example to Keep in Mind



- Second Life is an online virtual world, developed and owned by the San Francisco-based firm Linden Lab and launched on June 23, 2003. By 2013, Second Life had approximately one million regular users; at the end of 2017 active user count totals "between 800,000 and 900,000". (from Wikipedia)
- Initially released June 23, 2003
- www.secondlife.com

Theory of Connectivism Applied

- Defined as “the integration of principles explored by chaos, network, and complexity and self-organization theories.”
- Back-end upgrades 3.0 Web technologies enhance virtual reality.
- Contain “smart” technologies.

Web 3.0 Technologies

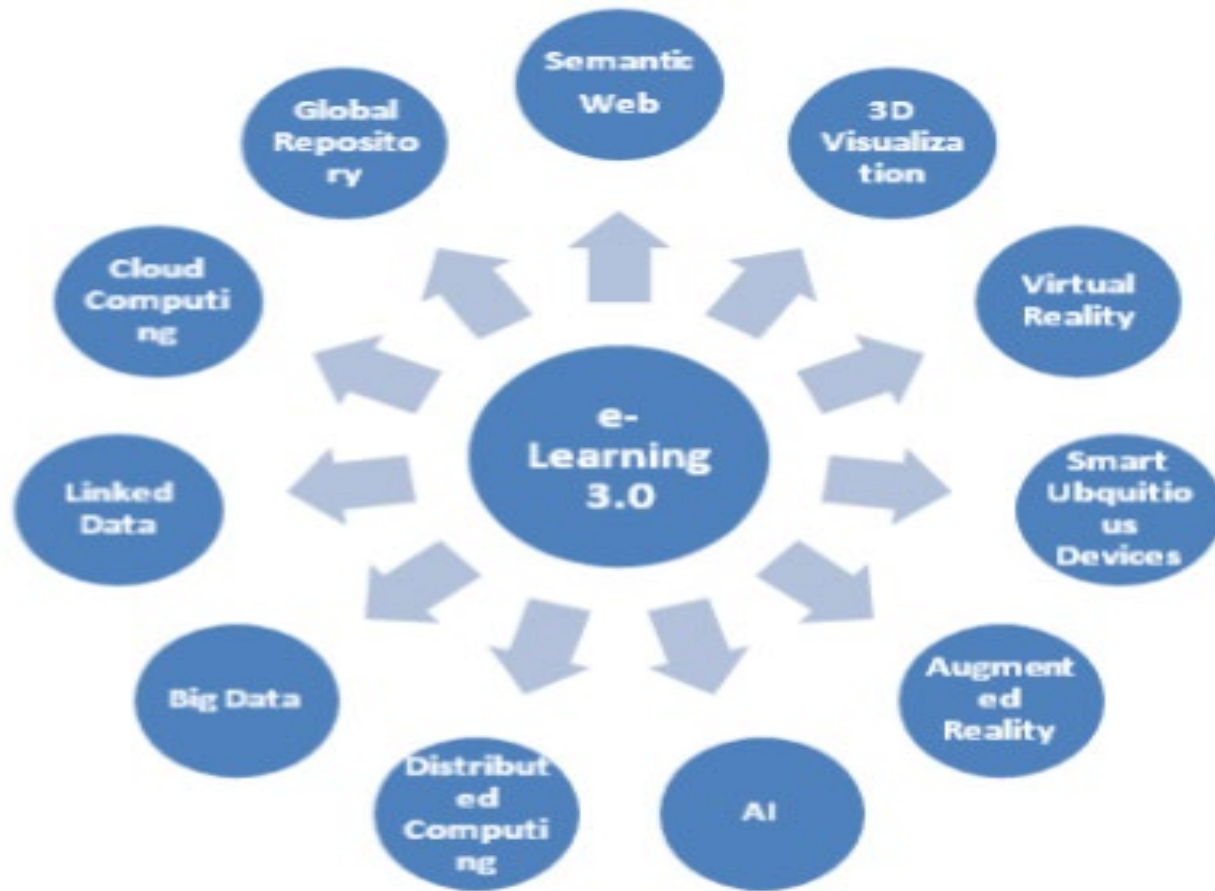


Fig 2. TECHNOLOGIES IN E-LEARNING 3.0

Learning Outcome Benefits

- Promotes Spontaneous Communication
- Feeling of Presence
- Supports Collaborative Learning Groups
- Sense of Community
- Lectures and Meetings

Virtual Reality Challenges

- Learning Curve with new technology.
- Lack of Research
- Faculty Reconceptualizing
- Technical Challenges
- Students Prefer Synchronous Web-Based Learning

Opportunities/Suggestions

- Costs Vary
- Student Orientation
- Faculty Training
- Different Chat Features
- Upfront Investment of Time

Questions

- Questions.....

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