



Deb Mayers



Is Virtual Reality an Effective Tool for Learning?

Deb Mayers

Twitter: @debmayers24

SketchFab: DebMayers24

Website: debmayers.com

Github: github.com/dmayers340

- 1.) Scope and Definitions
- 2.) Difficulties and Benefits
- 3.) Does VR Increase or Inhibit Learning?
- 4.) My Study
- 5.) Conclusion
- 6.) Q&A, Discussion, and VR

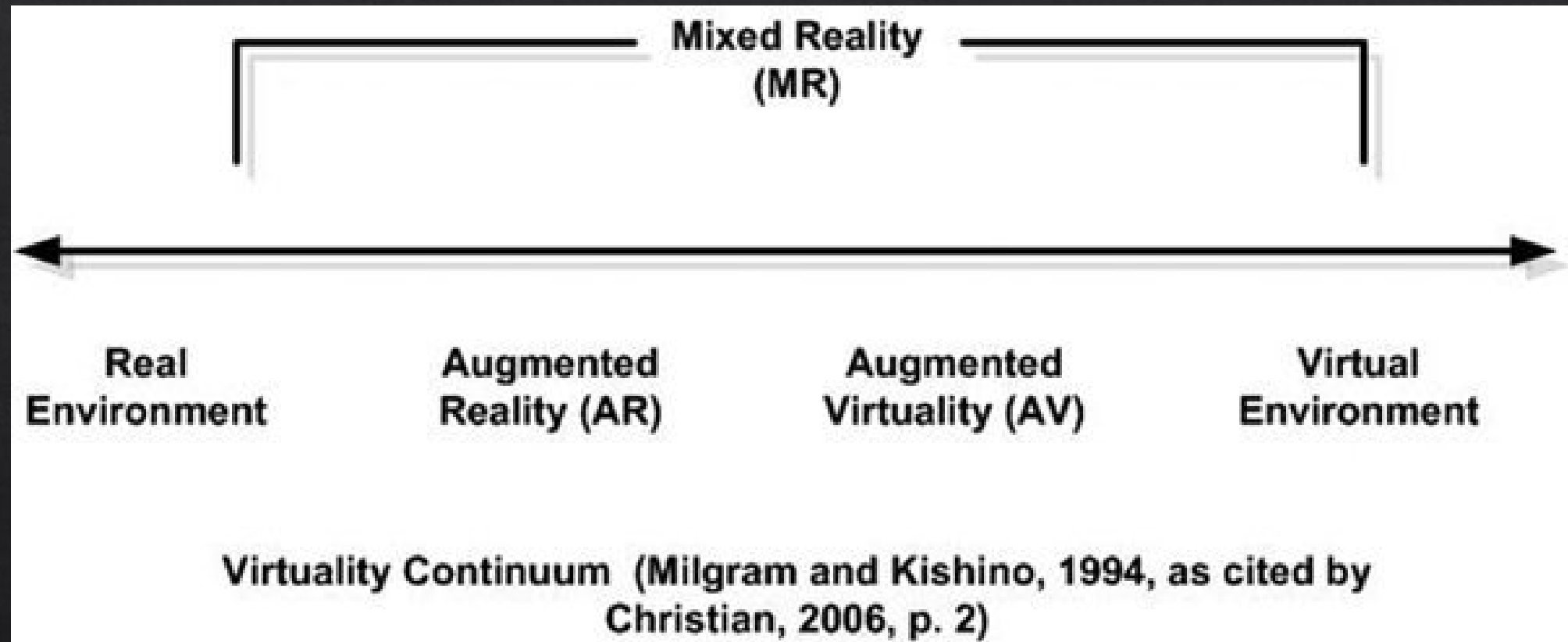
Scope

- ◆ Brief overview of how VR is used for learning to look at effectiveness.
- ◆ Does NOT include an in depth look at psychology, behavioural analysis, or learning pedagogy/theories.

Definitions

◈ What is virtual reality?

Definitions-What is Reality, What is Virtual Reality?

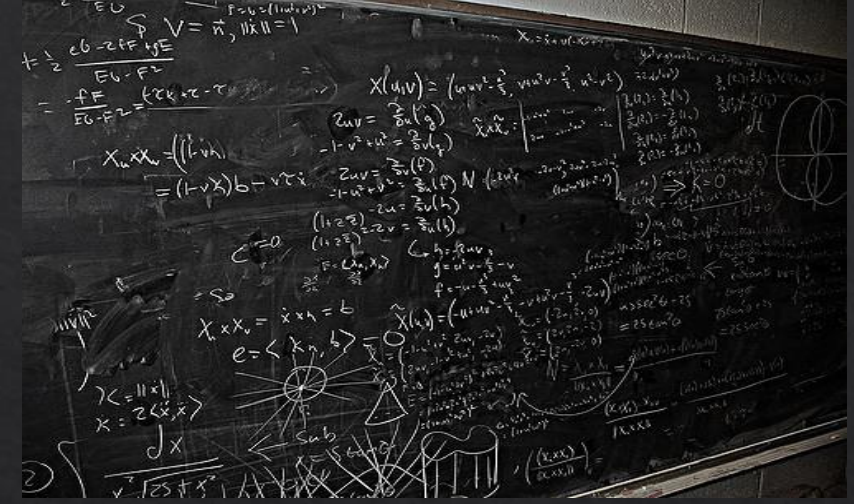


Definitions

- ◆ What is virtual reality?
- ◆ What do we mean by learning?

Definitions-What do we mean by learning?

- ◆ Direct Learning:
 - ◆ Experiential
 - ◆ On the job
 - ◆ Physical
 - ◆ Training
- ◆ Indirect Learning:
 - ◆ Concepts
 - ◆ Theories



Definitions

- ◆ What is virtual reality?
- ◆ What do we mean by learning?
- ◆ Why use VR?

Jeremy Bailenson's reasons for VR experiences:

- 1.) Expensive
- 2.) Dangerous
- 3.) Impossible
- 4.) Rare

Difficulties

- ◆ Context
- ◆ Usability: Intuitiveness, Motion Sickness
- ◆ Cost
- ◆ Fear
- ◆ User's Preconceived Notions
- ◆ No Benefit?

Benefits

- ◆ Engaging Experiences-Brings The Content To Life
- ◆ Relevance Of Experience
- ◆ Environment Reflect Topics
- ◆ Greater Focus on the Topic
- ◆ Control and Direct Manipulation
- ◆ Addition of Sensory feedback 'provide a multidimensional experience that can aid in cognitive processing and information retention.

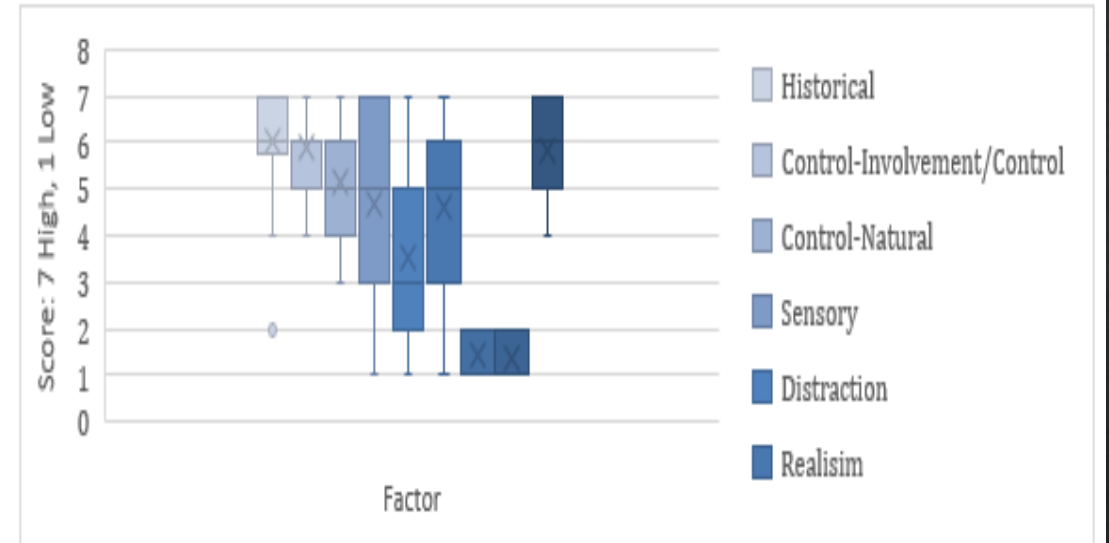
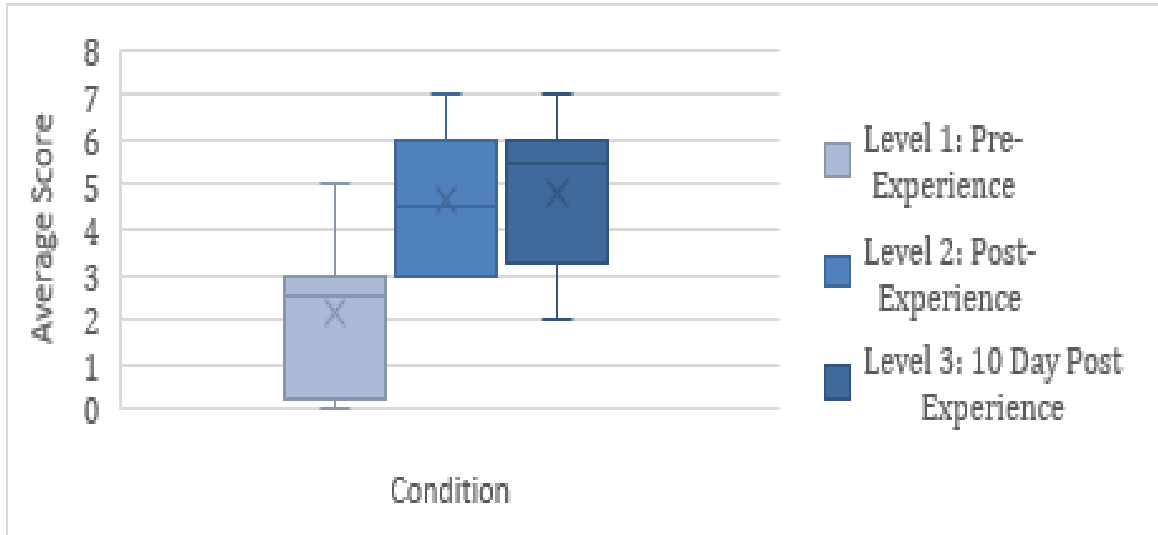
Does VR Increase or Inhibit Learning?

- ◆ Increases
- ◆ Inhibits
- ◆ Inconclusive

My Study

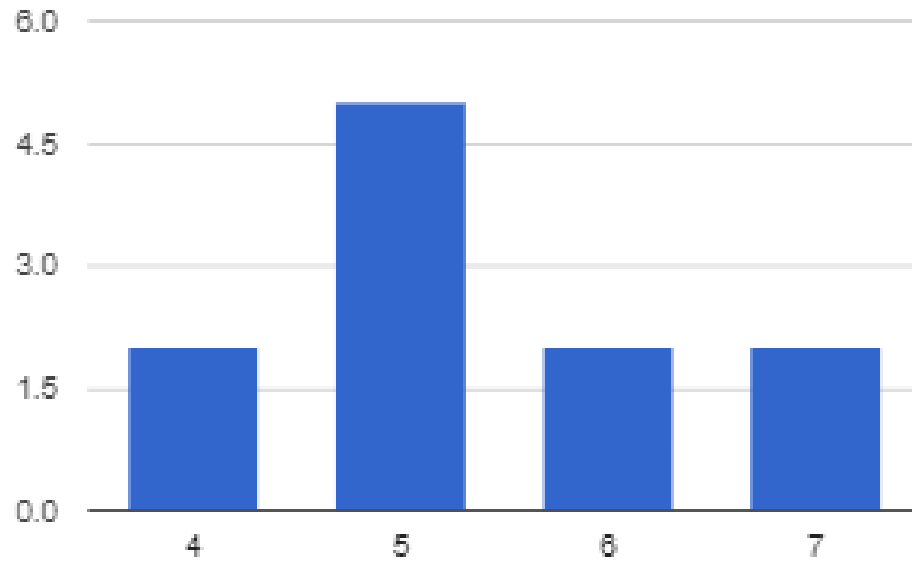


My Study

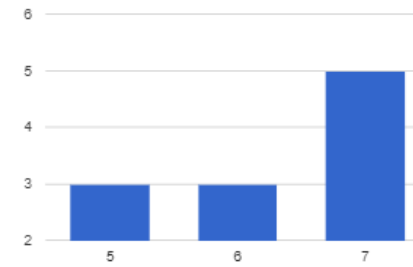


My Study

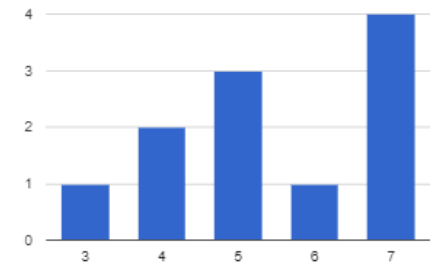
5. How completely were all of your senses engaged? - Average: 5.36



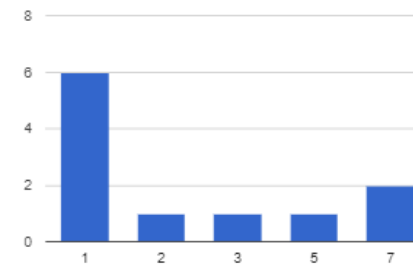
6. How much did the visual aspects of the environment involve you? - Average: 6.18



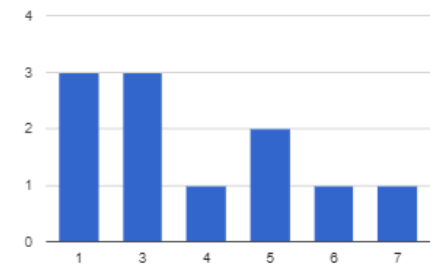
7. How much did the auditory aspects of the environment involve you? - Average: 5.45



8. How much did the olfactory (smell) aspects of the environment involve you? - Average: 2.73



9. How much did the haptic (touch) aspects of the environment involve you? - Average: 3.55



Conclusion

◇ Direct Learning

- ◇ Experiential
- ◇ On the job
- ◇ Physical
- ◇ Training



◇ Indirect Learning

- ◇ Concepts
- ◇ Theories
- ◇ Non-Tangible





Deb Mayers



**Is Virtual Reality an
Effective Tool for
Learning?**

Deb Mayers

Twitter: @debmayers24

SketchFab: DebMayers24

Website: debmayers.com

Github: github.com/dmayers340