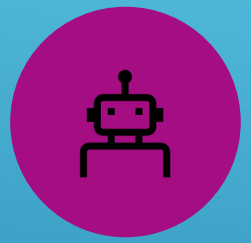
# AR/VR/XR IN LIBRARIES

# Ryan Easterbrooks, Technology Program Coordinator (Ed Tech), South Carolina ETV

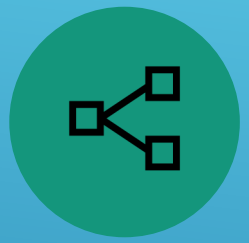

- reasterbrooks@scetv.org
- (803)737-2212


# INTRODUCTION

# LEARNING OBJECTIVES



BE ABLE TO DEFINE VIRTUAL REALITY, AUGMENTED REALITY, AND EXTENDED REALITY



TO UNDERSTAND THE IMPORTANCE OF VR/AR/XR

BE ABLE TO INCORPORATE VR IN YOUR LIBRARY OR CLASSROOM

USE VARIOUS APPS, OCULUS, AND BE ABLE TO IDENTIFY HOW THESE TOOLS CAN BE USED

# SOUTH CAROLINA ETV RESOURCES

- https://www.scetv.org/edtrainingrequest
- Knowitall.org
- Let's Go! (3D Interactive Field Trips); Matterport App
- Reconstruction360.org

# WHAT IS VR/AR/XR

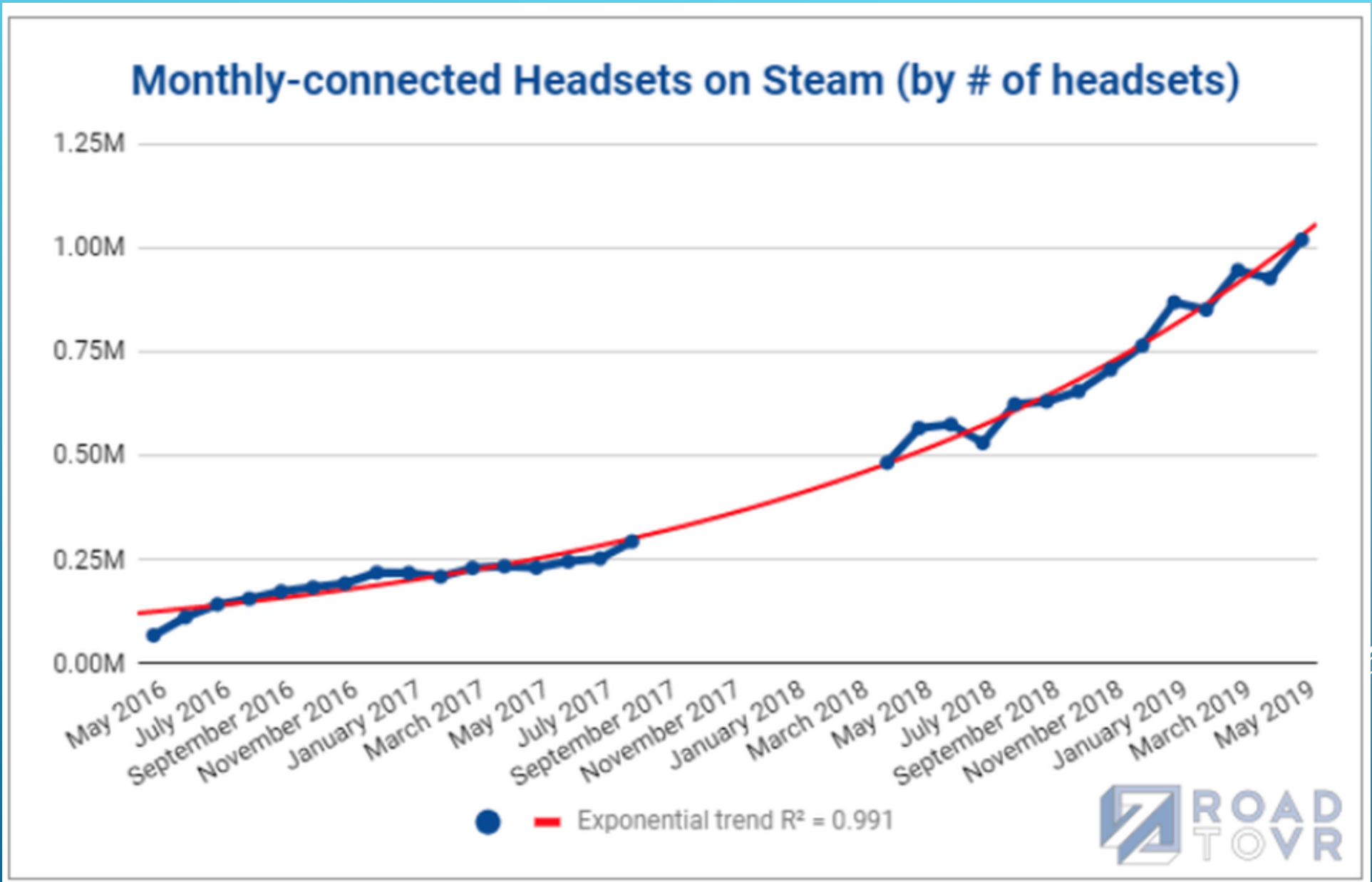
- https://www.youtube.com/watch?v=H7ezU9MzaUE
- Extended Reality (XR) refers to all real-and-virtual environments. The "X" is interchangeable. Examples include Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR)
- Virtual Reality (VR) encompasses all virtually immersive experiences. This type of experience requires the use of a Head-Mounted Device (HMD)
- Augmented Reality (AR) is an overlay of computer generated content on the real world. Examples include Pokemon Go, Harry Potter Wizards Unite, Google Translate, etc. (https://www.youtube.com/watch?time_continue=34&v=Arbeh7vSIi8&feature=emb_title)

# HOW IS VR USED TODAY

- Entertainment- Movies, Sports, Gaming
- Healthcare- diagnosis and treatment by constructing 3D models of a patient's anatomy. Surgery practice, training procedures, rehabilitation.
- Athletics
- Museums- Virtual Archives
- Courtrooms- Recreating crime scenes in VR
- Military- simulators to train soldiers
- Architecture/Business

# WHY IS VR IMPORTANT

- 6.2 billion dollar industry in 2019 projected to be more than 16 billion by 2022.
- Emergence of 5G
- 8% of US households own some type of VR in 2019.




*Data gap from seven months of data misreported by Valve*

# 360 DEGREE VIDEOS

- Youtube (app)
- SCETV Let's Go (Knowitall.org)
- Google Street View App (create a 360 degree video)
- Google Expeditions (https://www.youtube.com/watch?v=3MQ9yG_QfDA)

# VR/AR APPS

- 3D Bear
- Figment
- Wonderscope
- Tiltbrush and VR art
- BBC Earth and other Apps

# OTHER WAYS TO INCORPORATE VR

- Merge Cubes
- Curiscope's VirtualiTee: https://www.youtube.com/watch?v=QOHfdqgvvFU
- Escape rooms and escape room puzzles

# YOUR TURN

- Brainstorm and design a lesson that incorporates VR.  You can use what we learned today or any other types of VR/Apps.