

# Immerse, Innovate, Imagine: Teacher Educator using Mixed Reality Simulation

BranchED

Summer Institute 2022





Wilson: Cast Away

# Lunch Activity: Stranded

- Your team is:
  - Stranded in this room
  - The doors are lock, and you can't break down the windows or the doors
  - During lunch you must collectively choose 10 items from this room that you will need for survival for the next 3 days
  - Once you select them, rank them in order of importance
  - Make sure each team member has a list of these items for our next activity

# Group Picture

- All together now...



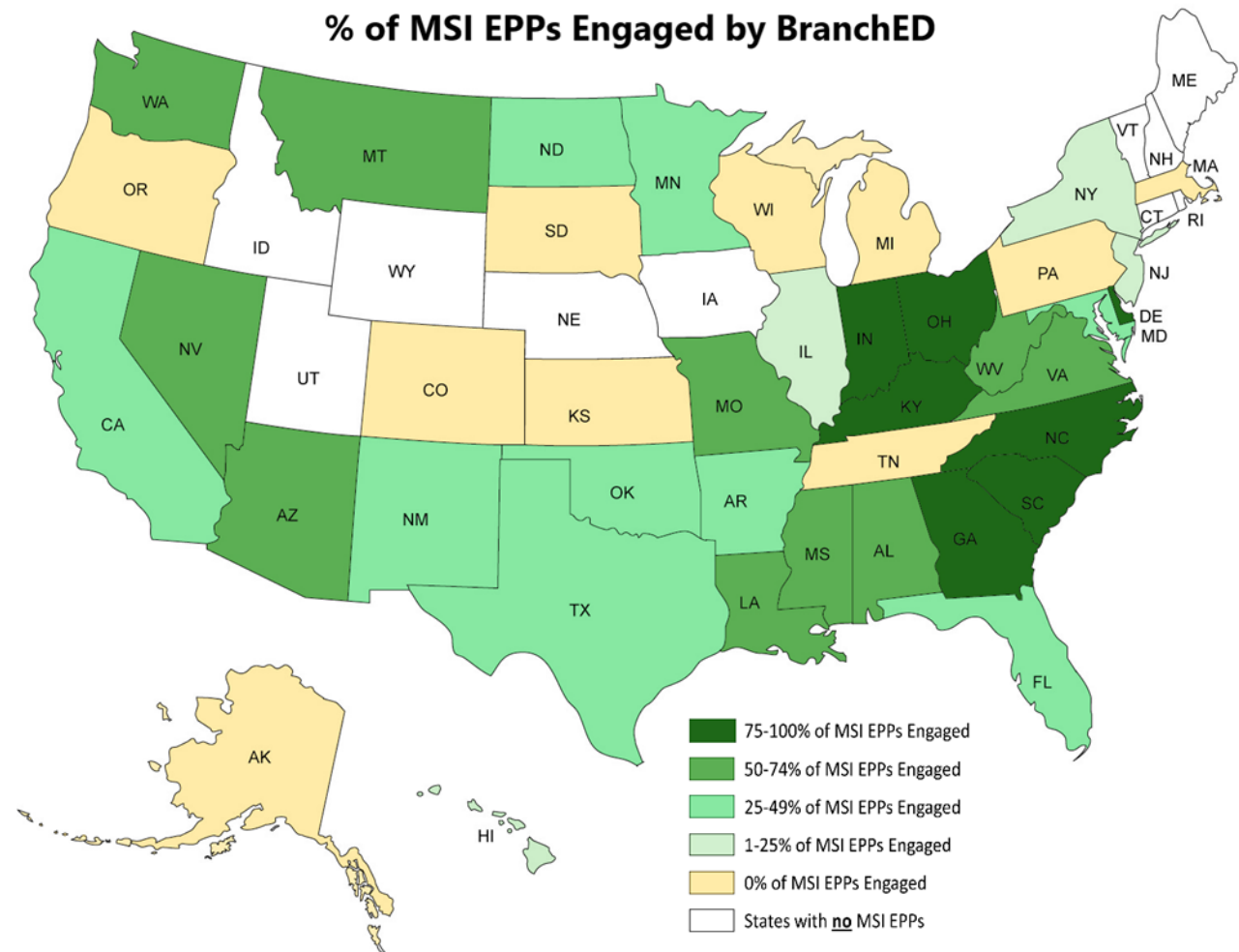


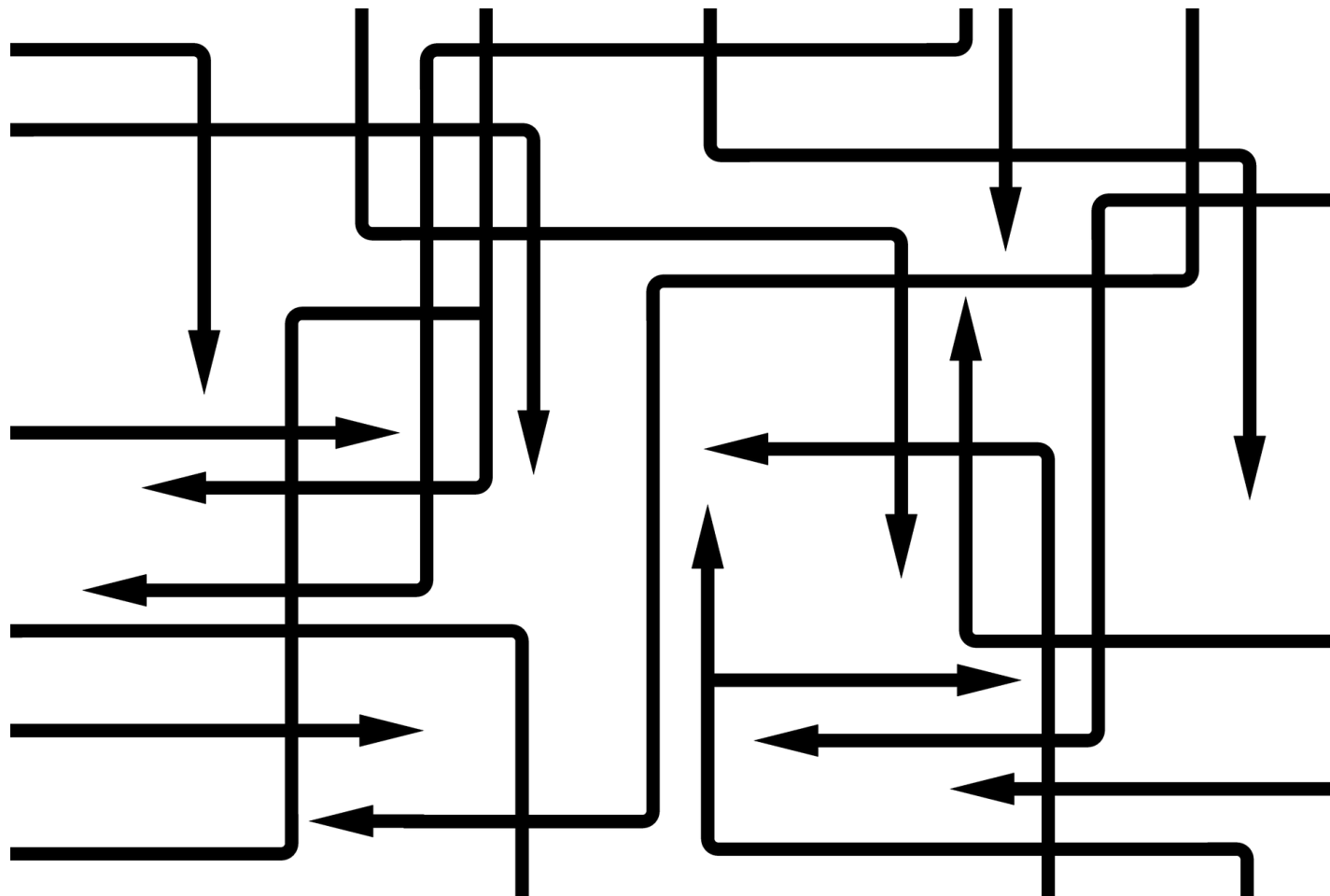
# Welcome





To date, BranchED has engaged **197** educator preparation providers (EPPs) (located across the country in 38 states, the District of Columbia, Puerto Rico, and the Virgin Islands) that prepare some **76,576** teacher candidates per year. And graduate **24,823** teachers per year. These engagements have reached more than **640** faculty and leaders.







Learning  
Objectives

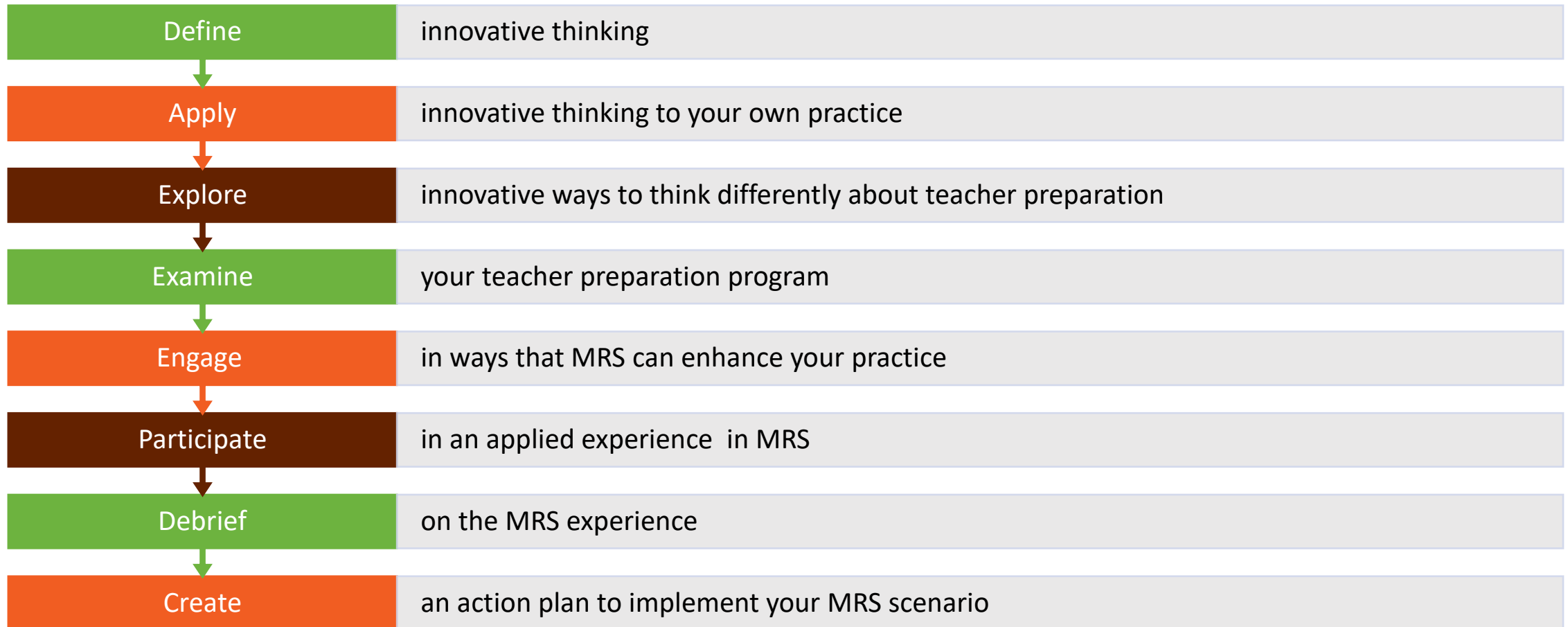
Connector

Think  
Wrong

Innovative  
Journey

Reception  
and Dinner

# Learning Objectives









# Institute Goals



Learn from our Peers



Network



Engage in Innovative Thinking



Create a Scenario



# DIGITAL BADGE

- Indicator of accomplishment that can be shared with your networks
- Aligned to specific competencies
- Deliverables





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# Stranded revisited

- Connect
- Discuss
- Introduce



# Why Think Wrong?

- It's easy to become familiar with our environment and tune out the world around us.
- Get creative. Step back, embrace your strange surroundings, and use a new starting place to jump off with.
- Shift our mindset from what is right to what is possible





# That's Odd Drill

1. With a partner, head out to identify the **three strangest things** you can find in the surrounding environment.
2. Text photos of what you find to 931-510-8419
3. When you get back, write your three strangest things on index cards using only 1-2 words to describe each one.



# Random Words Drill

- Choose two index cards from our basket.
- Use your random word pair to begin to generate ideas to accomplish our goal: ***preparing effective teachers***
- We are looking for nouns – things that will address our challenge – maybe a new product, service, campaign, etc.
- Prepare to pitch your solution to the group!
- Bonus points for laughter – if it feels funny or crazy, you are probably on the right track!



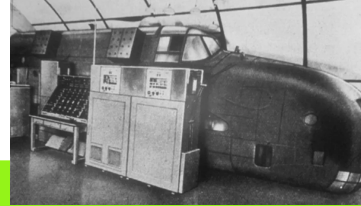
# History of Virtual Reality



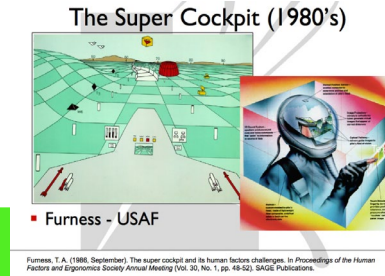
1838



1939



1960



1980



1985

1986



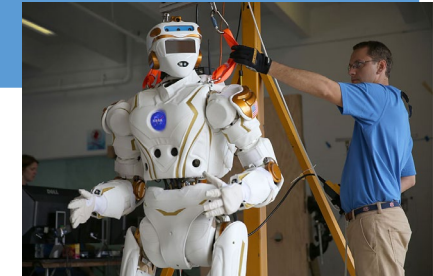
1990



2017



2018





# Recap

## Virtual Reality:

- Immerses a user in a simulated environment



## Augmentative Reality (AR):

- Superimposes a computer-generated image on your view of the real world

## Mixed Reality Simulation (MRS):

- Encompasses both AR and VR, creating a mix where digital & physical objects interact in real time



# Simulated Practice

- The use of simulations is a **well-validated approach for individuals** in fields **outside of education** such as military and medical training

(McGaghie, Issenberg, Petrusa, & Scalese, 2010)





# AN INNOVATIVE SOLUTION

- Simulations allow individuals to **learn and master new skills in an environment that does not put others** (e.g., students) or relationships at **risk**.
- This enables the learner **to practice decision-making and receive feedback on decisions** through virtual responses and peer observers.

(Brown, 1999; Dieker et al., 2014)

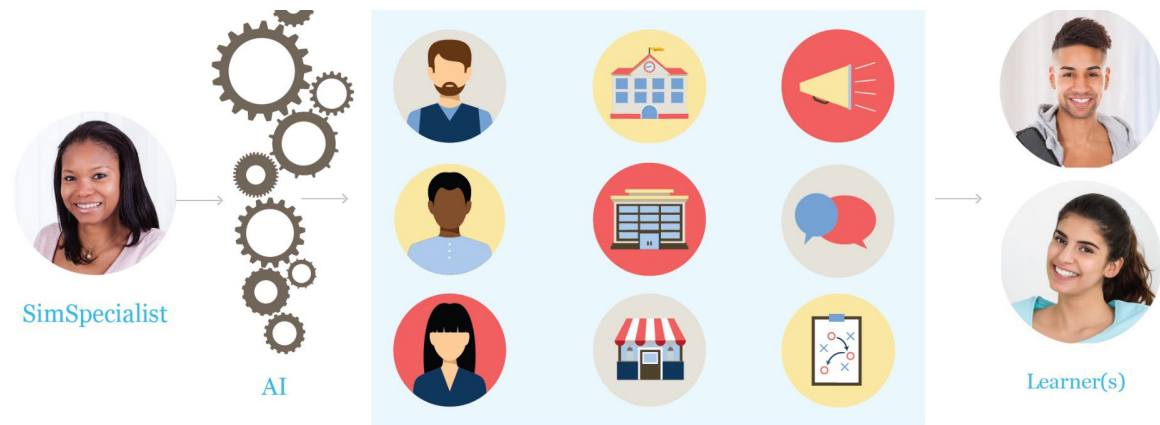


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# UNIQUE BLEND OF HUMAN AND ARTIFICIAL INTELLIGENCE



- Artificial intelligence allows a simulation specialist to control single or multiple avatars: **“Human in the Loop paradigm”**
- Machine learning used to **classify learner’s simulation performance**
- Learners can **personalize** the learning challenge in **real time**



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Break





# Dr. Lisa Dieker

Dr. Lisa Dieker is a Pegasus Professor and Lockheed Martin Eminent Scholar Chair at the University of Central Florida. She serves as a professor in the College of Community Innovation and Education specializing in Exceptional Student Education



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# MAINTAIN THE MAGIC

- Stay engaged, even in a difficult simulation
- Refer to the avatars as “students” and by their names.
- Treat them as real people, so will your participants.



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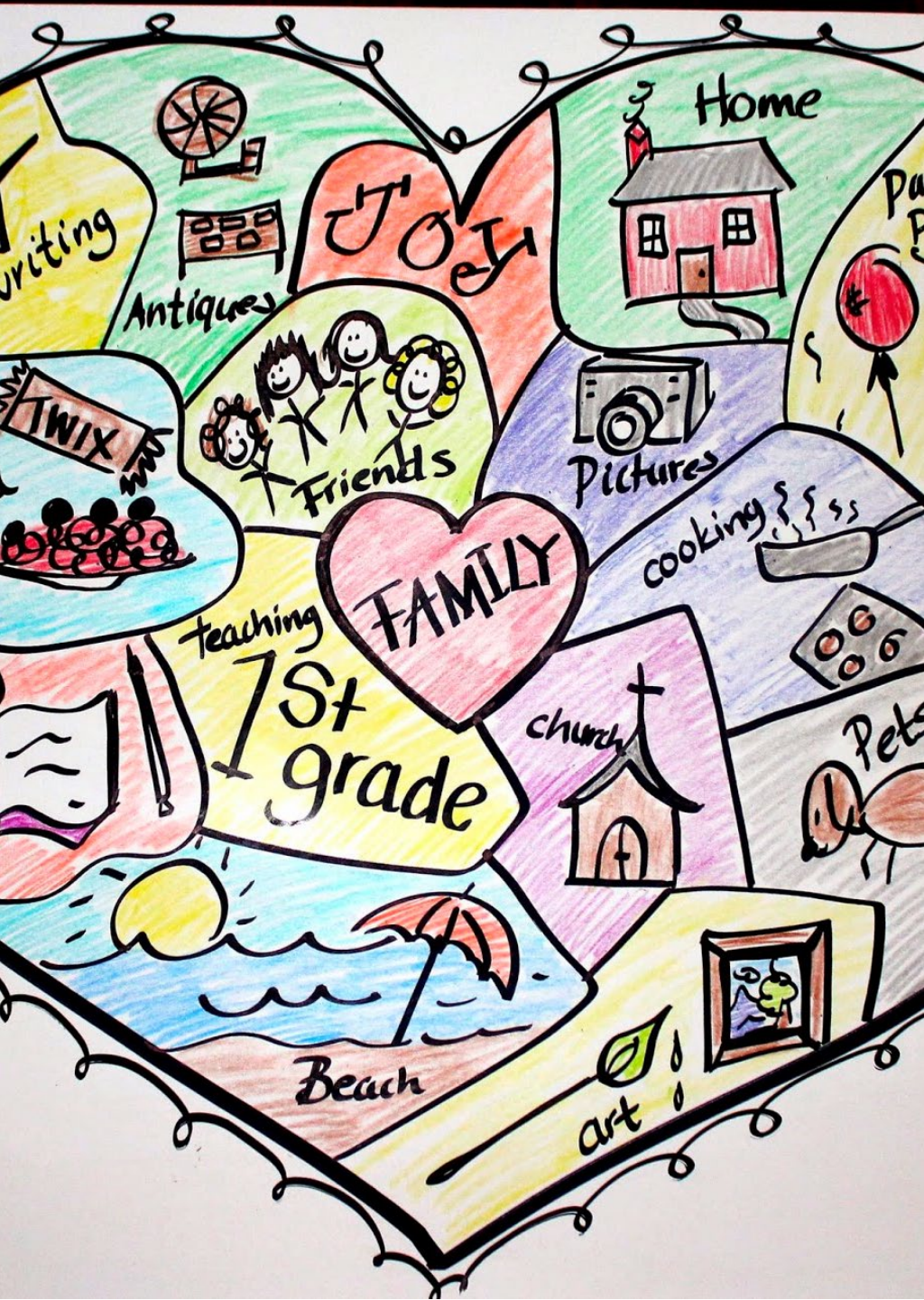
# Meet The Middle School Students



# Helpful Hints







# SCENARIO

You are a substitute teacher filling in for Ms. Hill who is out on family leave. The students' homework assignment from last night was to create a "Heart Map" to share with the class. The Heart Map Activity is a way for students to illustrate or write about people, activities, or things that are important to them.

**Your objective:** to facilitate a class discussion that introduces you to the class, establish rapport, and learn a little bit more about each individual student.



# Levels of Behavior



**Low:**

Suited for introductory classroom

Confidence building sessions or content delivery and error correction strategies.

Exhibit mostly on task behavior with some fidgeting



**Medium:**

Suited to practice classroom management and content delivery in a moderately challenging environment.

A variety of student reactions to content and participant pacing and pedagogy with moderately paced off task behavior.

Exhibit side talking, use of cell phones and potential power struggles that can escalate in intensity based on strategies used by the participant.

Escalation will abate with use of effective strategies



**High:**

Suited for preparation for challenging classroom settings and application of behavior management and de-escalation strategies.

May include bullying behavior, power struggles, swearing and potential direct attack of the teacher if outlined in the scenario design

Exhibit off task behavior and aggressive interaction at a rapid pace.





## Meet the Middle School Students: Round II









# SCENARIO

You are substitute teacher filling in for Miss Hill and Miss Johnson. Their kindergarten classroom is co-taught. Every morning Miss Hill and Miss Johnson bring the students to the rug to set the tone for the day and to interact with one another. Together, create a brief lesson for the morning meeting.

**Your objective:** to facilitate a morning meeting that has the following three elements:

- A **greeting**
- A **sharing** activity in which students share about their personal life
- A **brief activity** that cultivates connection, provides opportunities for self-wellbeing skills, and primes the students for the work they will engage in for the day.





## Meet the Early Elementary Students: Round II









## Meet the Upper Elementary Students



# Institute Webpage

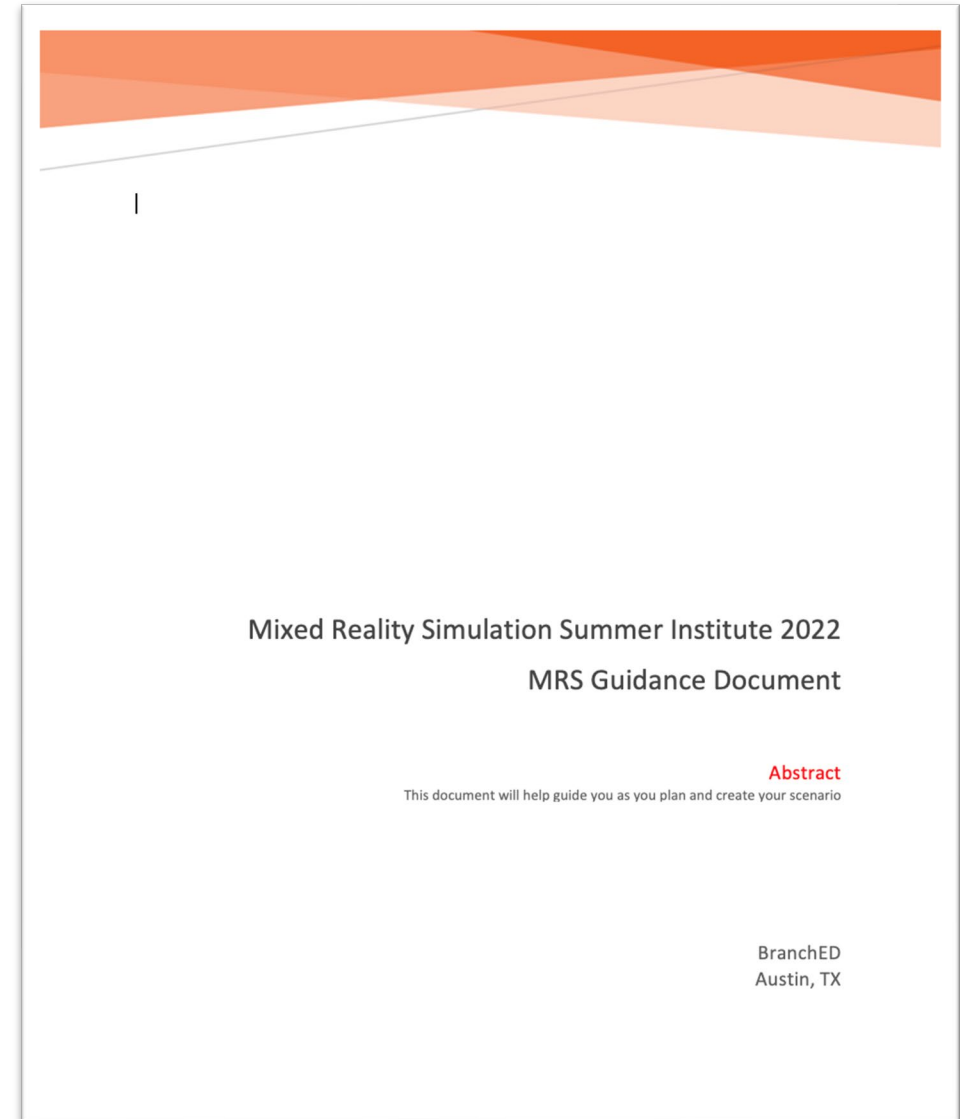


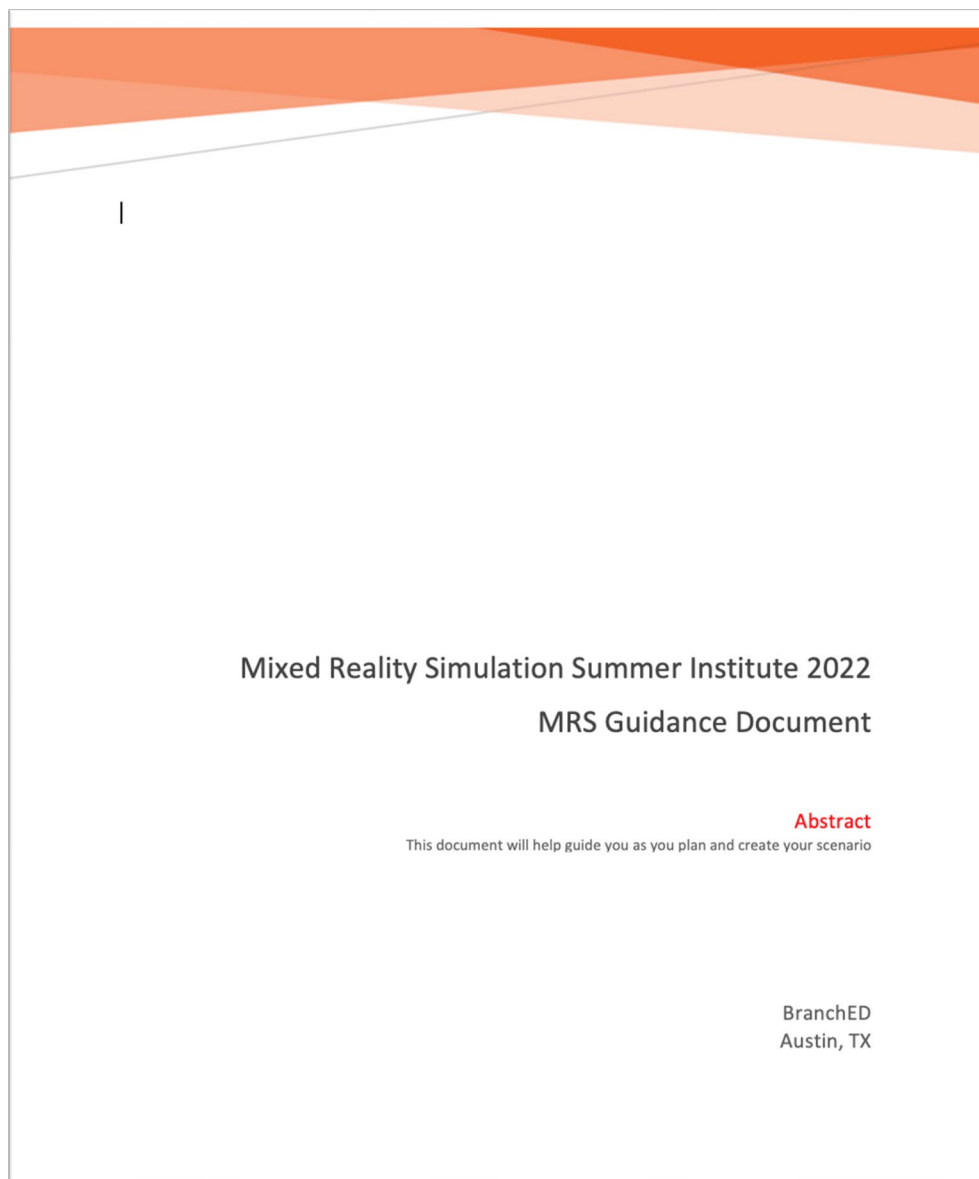
<https://www.educatordiversity.org/summerinstitute/>

# Mentimeter



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# Homework





# Reception and Dinner



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