

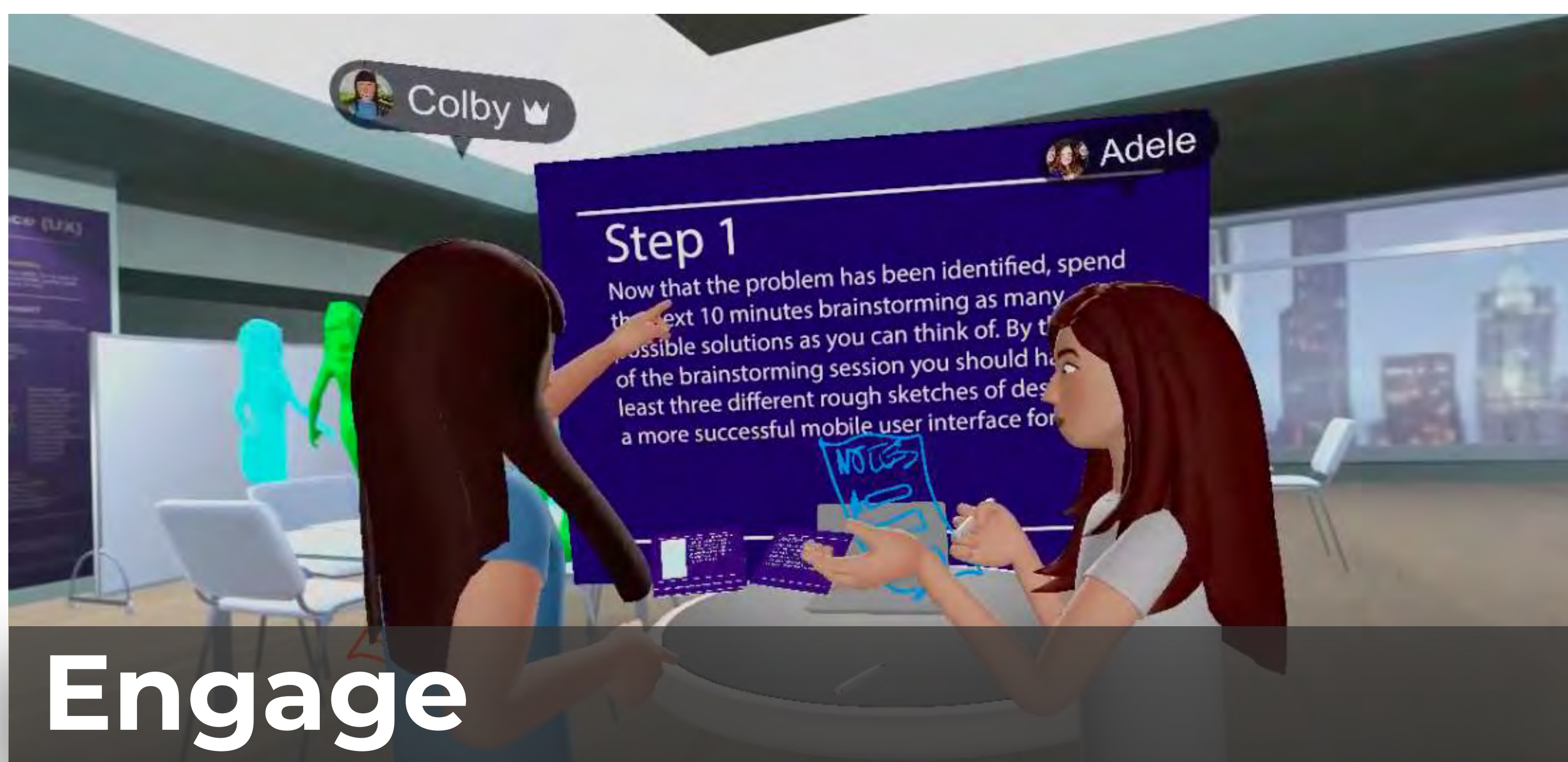
Campus Connection

Increasing college STEM major approachability for female high school students through VR.

Both traditional and virtual methods of campus touring simply tell students what college education is like. Through Campus Connection, students can experience what it is like.

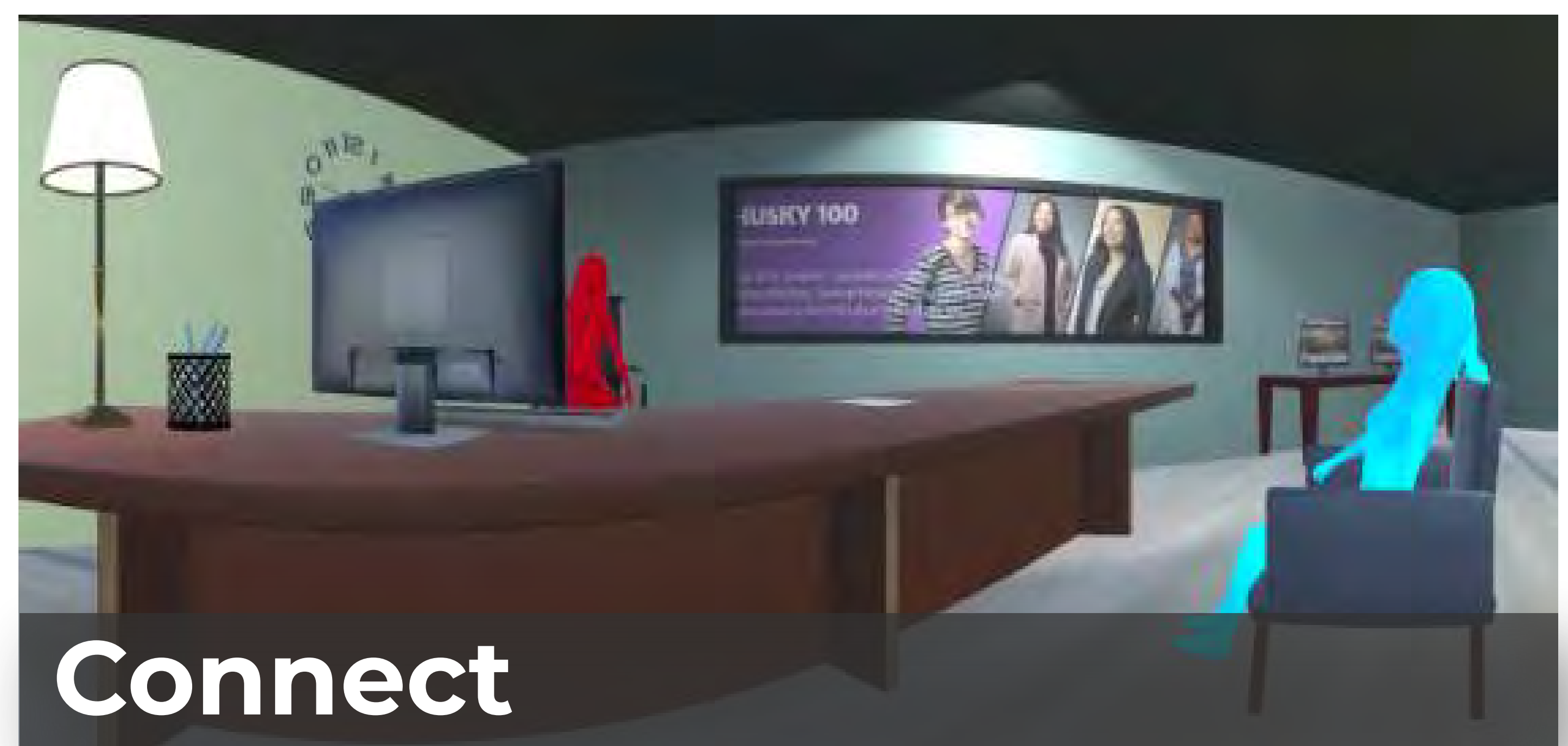
Campus Connection is a tool to help students discover their future. This application allows students to learn about and experience college majors in order to lower barriers and increase approachability, particularly to STEM majors.

Using Human Centered Design and Engineering (HCDE) at the University of Washington as a model for our framework, we demonstrate the functionality of the system.



Engage

Participate in design challenge activities to experience what HCDE majors learn and do in our **design lab**.



Connect

Meet with an advisor for guidance, or connect with students to learn about the department first-hand in our **advising office**.



Immerse

Tour key departmental areas: the makerspace, student lounge, design lab, and more through our **department tour**.



Learn

Attend scheduled student panel discussions to learn more about the department in our **student panel room**.

Research

Surveyed 34 female students in high school through college to learn:

- personal connections are a driving factor for deciding to go to college
- class or other life experience help one decide on a college major

Conducted a **competitive analysis** on physical & virtual tools to learn:

- college tours lack interaction - virtual social spaces can allow for connections to be made that would not be otherwise possible

Prototype

Brainstormed key components:

- Design Lab** - experience HCDE methods
- Advising Office** - connect/mentor
- Dept. Tour** - see key dept. areas
- Student Panel** - events to learn more

Created an **information architecture** diagram to formulate a structured system and **wireframed** each space in 2D.

Presented wireframes to sponsor for feedback, and **iterated** on them to support holding events and encourage collaboration.

Implement

Utilized game-design software, **Unity** to design our virtual environment for each space.

Built off of **Facebook Spaces'** existing functionality to convey the interactivity of our system.

Created **design challenges** for our design lab to facilitate the exploration of the user centered design process.

Evaluate

Ran **usability studies** with four participants to learn:

- content on the walls were informative
- preference over active vs. passive experience
- difficulty acclimating to the design lab
- difficulty in managing clutter and pen tool during design challenges