



Using Mixed Reality to Enhance Language and Cultural Training



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Department of State - Foreign Service Institute
March 25, 2019

What is Mixed Reality?

- **Combines digital interaction with the experience of the real world**
- **Different from Virtual Reality**
- **Real-time interaction**
- **Registered in 2D or 3D**

Mixed Reality Examples



Background

- **Audience:** diverse professional interests, widespread backgrounds and learning profiles, varied language proficiency levels
- **Context:** security requirements related to geo-tagging/geo-localization, and monetary limitations
- **Purpose:** need for technology-infused materials to teach language and culture outside the classroom, immersion-like



SCAVENGER HUNT

All Roads Lead To...




Mixed Reality for Language Learning



Scavenger App Demo

×

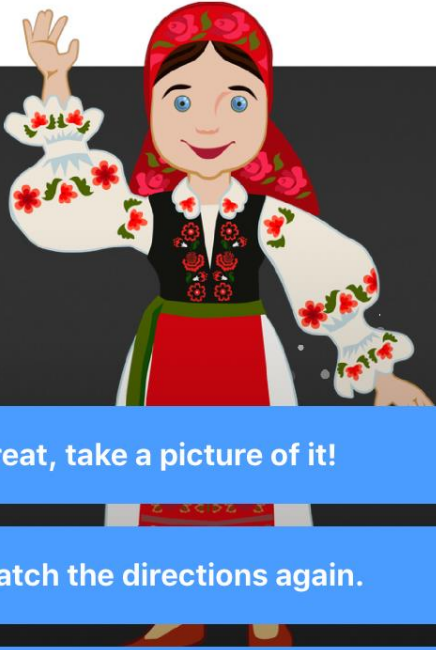
Are you ready to start the scavenger hunt?



I'm ready!

×

Did you find the landmark?




Great, take a picture of it!

Watch the directions again.

I need a hint!

×

Good job! Collect your reward.



Collect my reward

×



Collect item

Pedagogical Aspects

- **Problem solving: learner-centered, task-based interaction**
- **Fluency: listen to authentic, not simplified language**
- **Retention: practicing vocabulary by applying to task in real world context**

Game Dynamics



- **Competition / Collaboration**



- **Badges**

Discover culturally relevant information

- **Rewards – Knowledge is power**

Goals

- **Autonomy**
- **Increased engagement/motivation**
- **Realistic practice outside the classroom**
- **Built-in assessment and feedback**
- **It's FUN**

Feedback

The activity is engaging and interactive.

Learning in a new way – getting out of standard classroom mode is productive.

Movement stimulates learning and memory.

Create more activities of this type!

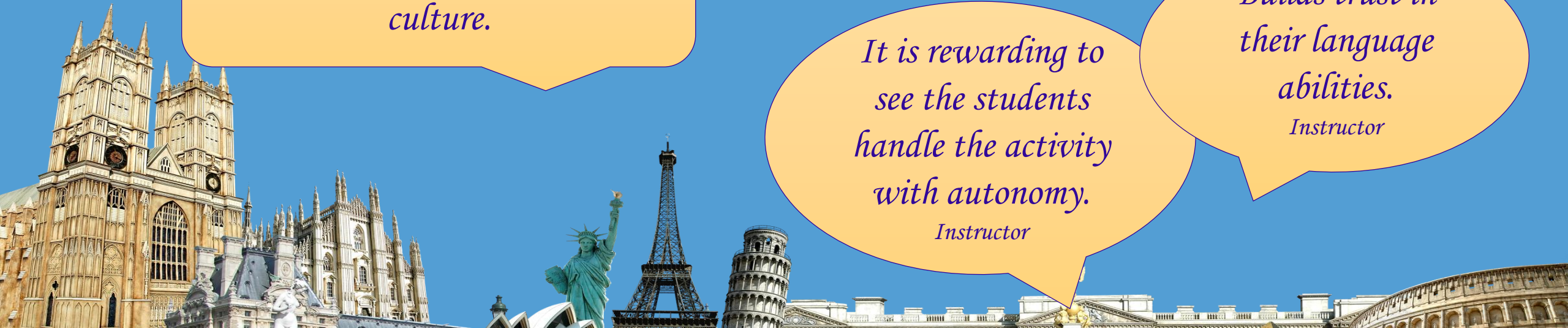
An opportunity for practicing material and learning about culture.

It is rewarding to see the students handle the activity with autonomy.

Builds trust in their language abilities.

Instructor

Instructor



Metaverse

- **Metaverse is a platform that makes it easy to create mixed reality interactive experiences**
- **Widely used in K-12**
- **No programming needed**

Replication

- **Experiences can easily be shared, cloned, and reproduced in other languages**
- **Reduced overall production time**
- **Possibility to create other games**

“Amazing activity! Very easy to adapt to the Italian language and culture.” Italian Instructor

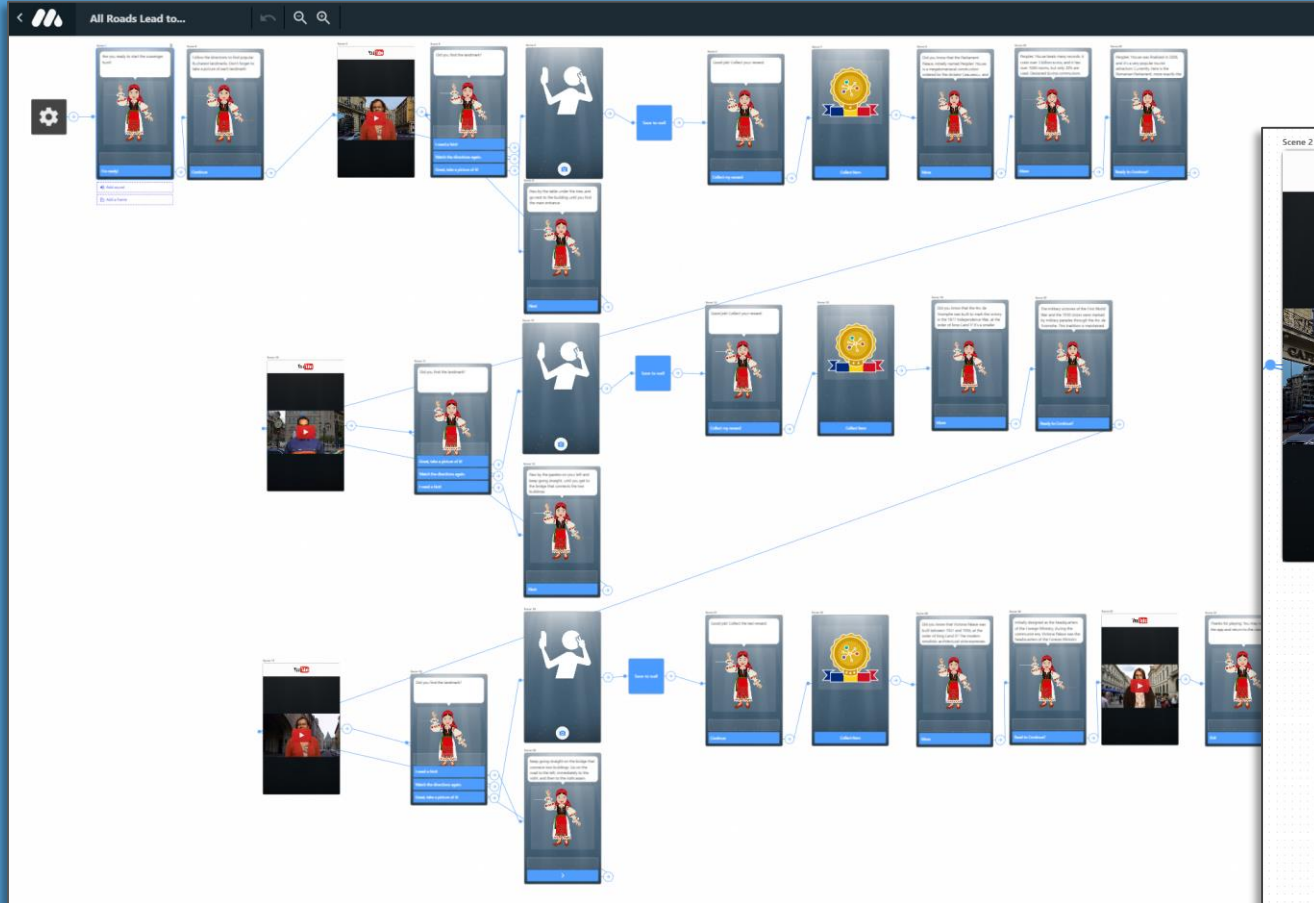
“It was ready in no time. And it’s great that we can highlight popular Italian landmarks.”

Italian Instructor

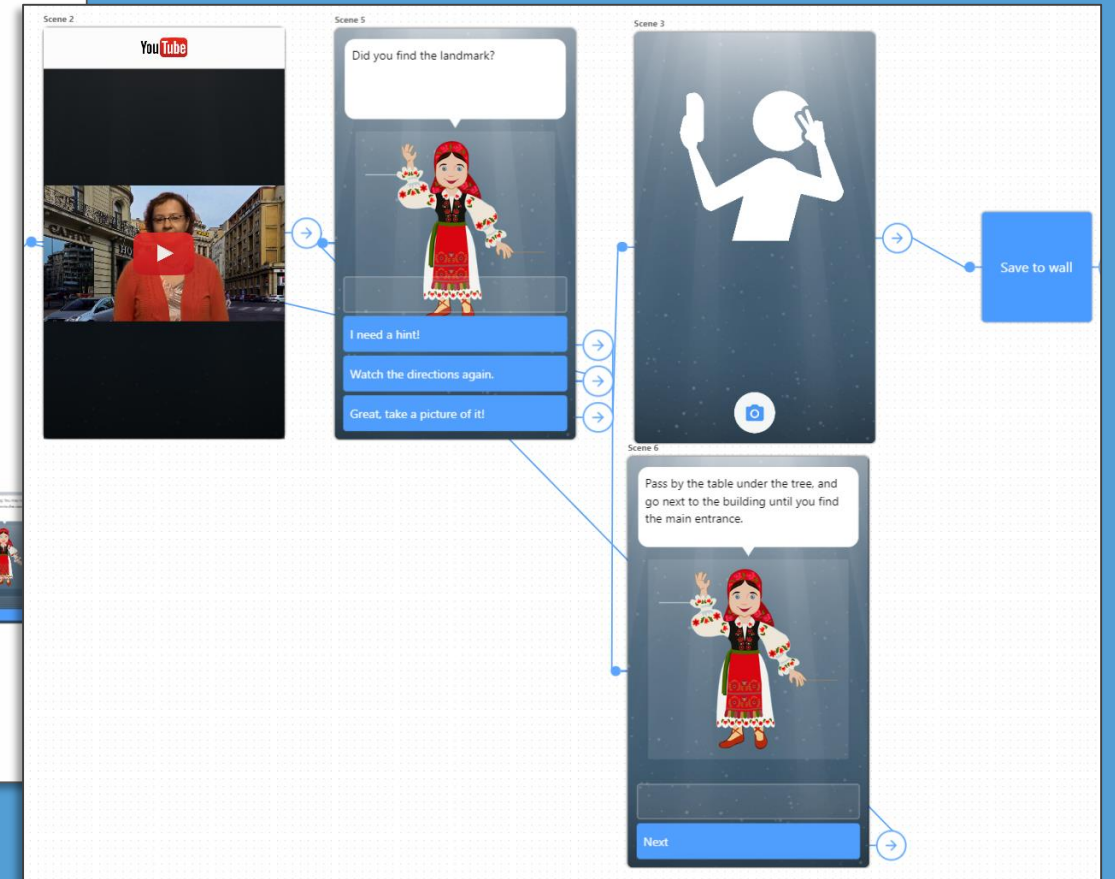
Metaverse Features

- **Character dialogs**
- **Interactive branching**
- **Photo/video walls**
- **YouTube video**
- **360-video**
- **Multiple choice questions**
- **Free response questions**
- **Polls**
- **Custom code implemented via *blocks***

Authoring

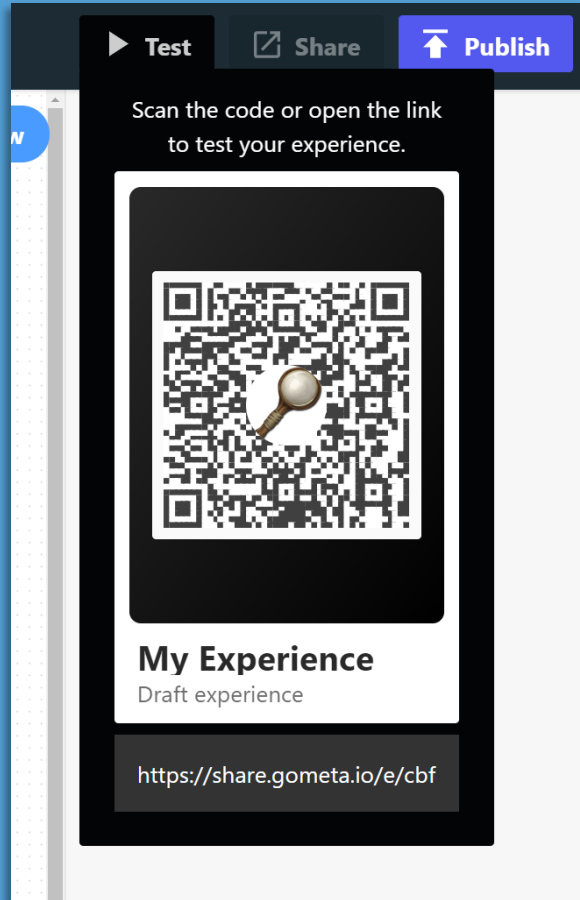


Experience authoring on a Storyboard



Connected Scenes

Testing / Publishing



- **One-click instant play testing on device**
- **Publish your experience publicly, as part of a group, or unlisted**

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