

Integrating with MERGE EDU

Using MERGE in Your Lesson Plans

MERGE Cubes and Headsets are digital school supplies that let you illustrate topics and concepts more effectively than by conventional means. Students don't just observe – they experience their learning. Just as you ask a student to reach for a pencil, ruler or laptop, you'll ask them to use their MERGE Cube or Headset in class. Using AR/VR products in the classroom will not only engage your students in active learning today, but will also give them powerful skills that prepare them for the future.

MERGE in the Classroom/Lab

OPTION

1

Use MERGE Explorer (an NGSS aligned app)

Explorer is a fully featured STEAM app that has NGSS aligned content for use in the classroom and lab. It can illustrate complex topics that text and photos simply cannot. You'll find students actively learning through an inquiry based approach in this core application build for the MERGE EDU platform.

When creating your 2-3 week unit plans, identify topics that may be challenging for students to understand. Search Explorer for the corresponding topic and add it to the daily lesson plan. You can illustrate concepts, do more involved activities, or teach entire lesson plans around the AR/VR experience.

Illustrating Concepts

- 1 Ask students to login to their MERGE EDU account, launch the desired topic card, and reach for their Cube or Headset for viewing.
- 2 As you conclude the topic, ask students to put away their Cube or Headset and return attention to the next section of the lesson plan.

Teaching a Lesson Plan

- 1 Build your lesson plan and align it to your unit plan.
- 2 Launch the Explorer topic that you intend to use for class instruction.
- 3 Have the students work through each module in the topic.
- 4 The status indicator at the bottom of each module will indicate each student's level of completion.

MERGE in the Makerspace

OPTION 2

Use Object Viewer (a creation and community 3D Object app)

Object viewer is a 3D object viewing application where teachers and students can upload and view 3D objects of their own, or browse kid-safe community objects that have been uploaded by others. Upload 3D objects from Google Poly or Sketchfab and have the object codes prepared for students to learn, or use the app as an augmented 3D printing and visualization tool in the Makerspace.

3D Modeling

- 1 Using Tinkercad or Paint 3D students can export their objects to www.MINIVERSE.io to turn them into virtual objects that can be held and shared on MERGE Cube (a great alternative to messy/slow 3D printing).
- 2 Make sure the 3D file is supported by Object Viewer. (.fbx, .obj, .stl, .dae, .blend, and .GLTF)
- 3 Use each object's 6-digit object code to share objects throughout the class.

Coding & Programming

- 1 Use CoSpaces Edu with the MERGE Cube add-on to bring student creations to life.
- 2 Use built-in 3D models to physically construct the virtual and augmented world.
- 3 Give them functionality through coding with CoBlocks or Javascript.

MERGE in the Library

OPTION 3

3D Objects replace 2D Images

Instead of locating images on the Internet to explain reading concepts, illustrate the concept in AR by allowing the students to hold it on a MERGE Cube, or experience their learning in virtual reality via a MERGE Headset.

Check-out MERGE Headsets

Make MERGE Headsets available for checkout for classroom learning and students to take home for personal use. Teachers can issue assignments for students to “experience” learning topics to support lesson plans as an affordable option to Google Expeditions. With over 400 kid-safe VR experiences and 360 videos on www.MINIVERSE.io, educators and parents can be confident the content is high quality, engaging, and appropriate.