



VR/AR Education Kit

Getting Started Guide



Get classroom ready with your
new VR/AR Education Kit

Instructions

Welcome to your first foray into the world of virtual and augmented reality and teaching digitally beyond the four walls of your classroom! This set of instructions will assist in the setup of your kit and how to get started with your first VR/AR lesson.

Package Contents:

- 30/15 Student VR/AR Devices
- 30/15 Lumination VR Headsets
- 5/2 Merge Cubes
- 1 Teacher Tablet Device
- 3/1 Multi-Port Rapid Chargers
- 1 Google WiFi Router
- 1 Gizomos Tripod
- 1 Pelican Case and Storage

Most Importantly:

Once you have received your VR/AR Education Kit, open it up and check that all items listed above are accounted for and without any physical defects. All parts of the VR/AR Education Kit will be pre-configured and set up for your custom requirements, so all that is required is to switch on the devices and be ready to set off on your virtual journey!

Teacher Tablet Device:

1. Power up the teacher tablet device.
2. Your Google Account and WiFi Router username and password information can be located on the homescreen as a pdf. This document is your first port of call for any login or account issues. If you have any questions or persisting issues, please contact our friendly support team at support@lumination.com.au.
3. See the Quick Start App Guides below to get up and running with your first experience!

Product Safety:

Take frequent breaks while using the VR headset. If you experience nausea, discomfort, eye strain, or disorientation, immediately discontinue using the headset.

VR headsets are not for use by children without adult supervision.

Do not use the VR headset while driving, walking, or otherwise by being distracted from real-world situations that prevent you from obeying traffic or safety laws. Do not drive or operate heavy machinery immediately after using the headset if you feel impaired or disoriented.

If you have had or could be prone to seizures, consult a doctor before using VR headsets.

Quick Start App Guides:

Lumination Lead Me

Our new LeadMe Learning app makes it easy to guide your class through VR, AR and other digital experiences safely and smoothly. Launch apps, videos and websites for all learners simultaneously, or assign different activities to different students. Monitor student devices in real-time to make sure no one is being left behind. Pause learner screens for distraction-free discussion time or turn on free play mode and let them explore for themselves! LeadMe provides the tools you need to make sure your class is on track and engaged while immersed in future learning technologies.

Merge Cubes

Your devices come with Merge Explorer and CoSpaces pre-installed, however you can find even more great Merge Cube apps in the official MERGE Miniverse!

To get started with Merge Explorer, open the app and tap on any activity that interests you! 'Learn How to Use Merge Explorer' is a great first option. Scroll down until you find an image with a play button, then tap it to launch AR mode. Point your device camera at the Merge cube when prompted and enjoy holding the digital world in your hands!

To use your Merge Cube with CoSpaces, you will need to sign up for a Pro account with the Merge Cube add-on. The add-on will allow your students to not only view other people's Merge Cube CoSpaces, but also to create their own tactile, interactive AR experiences. Find out more on their website.

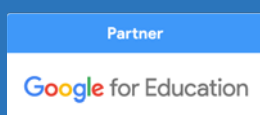
Helpful Links:

[Lumination VR/AR Education Kit Page](#)

[Lumination Lesson Plans and Resources](#)

For further support, please contact our Technical Specialist, Mark Cooper.

support@lumination.com.au



Pedagogy Guide

Break Down the Boundaries

of the Classroom

Congratulations on your purchase of a Lumination VR/AR Education Kit! Now you and your learners can explore the world (and beyond!) in an immersive and curiosity driven way.

The VR/AR Education Kit is an engaging and easy-to-use tool to support student learning across the curriculum. Take your class on virtual field trips around the world, help them to visualise tricky-to-grasp concepts, provide opportunities for your students to experience different perspectives, or make the shift from passive content consumers to purposeful creators by producing their own immersive extended reality experiences for others.

This guide is designed to support educators to use their new VR/AR Education Kits in meaningful and pedagogy driven ways through applying relevant thinking routines and inquiry approaches, and is split into three sections: Getting Them Thinking, Extending Reality, and Reflections.



Getting Them
Thinking

Extending
Reality

Reflections



Getting Them Thinking

The first time your students (and teachers!) use the VR/AR Education Kit, there will be much excitement with 'oohs' and 'aahs' ringing around the classroom. While this is fantastic for engagement, it does not guarantee deep thinking. Try these activities to deepen learner thinking before and during their VR/AR experience.

1. Googleable & Ungoogleable Questions

Before your students delve into the world of VR/AR, introduce them to the topic of the lesson and ask them to generate as many questions as they can related to that theme. Next, ask your students to organise their questions into those which are 'Googleable' i.e., they could find the answer at the library or through a Google search, and those which are 'Ungoogleable' i.e., the answer requires an imaginative, creative, ethical, or personal response. Make sure your students have plenty of questions in both categories to ensure that both expansion of knowledge and higher order thinking are encouraged.

2. Already Know – Think > Pair > Share

Scaffolding plays a big role in knowledge retention, so it is important to connect any new information to what your students already know. Before starting their VR/AR experience, ask students to individually brainstorm everything they already know about the topic. After 5 minutes, ask them to share their list with one other person. Finally, have each pair share back with the whole class. This ensures everyone's thinking is represented.

3. Experiencing Extended Reality

Your students are now primed and ready to learn! Hand out those headsets and devices and let your students jump on in. There are loads of great apps that are easy to pick up and run with depending on your subject area – explore [ancient civilisations](#), [art exhibitions](#), [landmarks all across our amazing world](#), or [even outer space](#)! Or mix it up with the Merge Cube and have students hold the digital world in the palm of their hand!

If you're concerned about jumping from one app to another, just load up the LeadMe Learning App and guide your students with ease. With LeadMe you can launch the right app for your students, pause their screens for distraction-free discussion time, easily show them a VR video, and keep track of what everyone is up to.

To ensure that students are engaged and involved, avoid simply reading out notes and having students passively follow along. Instead, provide them with opportunities to explore and ask questions. A great way to do this is through the 'See, Think, Wonder' visible thinking routine from Harvard Project Zero. After a couple of minutes, pause your class and ask students to choose one thing they see that interests them. Ask them to share what they think about it and any wonderings they still have. Can any classmates suggest an answer to their wonderings?



Extending Reality

1. Understand and Explore

Now that you've begun your extended reality journey, it's time to discover all the different ways you can use your kit across the curriculum. Virtual tours are a great way for students to explore the world around them from the comfort of your classroom. A wealth of resources can be found through Google Earth and Google Arts and Culture, YouTube, Vimeo and more. Another fantastic use of VR and AR is to help your students visualise abstract or challenging concepts, for example mobile apps such as Arloon Geometry can help students see how 2D nets fold into 3D solids, while apps such as InCell VR, MEL Chemistry AR and Titans of Space help students visualise scientific concepts that are beyond our ability to easily see for ourselves. While you're at it, grab those Merge Cubes for a tactile extended reality experience. Pick up an ancient artefact or a fossil and take a closer look!

2. In Your Shoes

One critical skill that can be challenging to develop in our learners is that of empathy. In this area, VR and AR provide a unique opportunity to see the world from someone else's perspective. There are several freely available VR apps and 360° immersive videos addressing topics as diverse as dementia, sensory overload and social interaction in autism, low vision and colour blindness, and more. One noteworthy app for our older learners is 'Drive VR' which aims to help first-time drivers to understand the importance of driving carefully and the potential consequences if they don't. While caution must be taken to choose activities that are appropriate for the maturity level of our learners and sensitive to their own life experiences, when used mindfully, extended reality technology can be a very powerful tool for developing empathy in our students.

3. Create Your World

As your students build their confidence and skills exploring extended reality, a time will come when they are ready to transition from content consumer to content creator. Have students apply their research and critical thinking skills as they build their knowledge around a topic of choice, then solidify that knowledge and develop their technical skills by having them present their learnings as an immersive extended reality experience! A range of easy-to-use tools are available depending on the age and expertise of your learners. Try creating your own VR tours in Situ360, create 3D models in TinkerCAD and view them in AR with your Merge Cube, easily develop interactive virtual worlds in CoSpaces, and for your older and advanced students, why not introduce them to professional game development tools such as Unity and Unreal Engine? Let their creativity shine and their imaginations run wild!



Reflections

Using the VR/AR Education Kit is a fun and engaging experience for students, however to ensure that it is also a meaningful experience and that students retain a conceptual understanding of the content, it is great to wrap up with some simple reflection activities.

1. I Used to Think... and Now I Think...

Another Harvard Project Zero visible thinking routine, this activity requires students to think about how their point of view and understanding has shifted from before the VR/AR experience to now. This pairs beautifully with the 'think, pair, share' activity introduced earlier, and can be done as a discussion activity or with a graphic organiser.

2. Connect, Extend, Challenge

This thinking routine also links well with 'think, pair, share' and asks students to CONNECT what they have seen and heard with what they already knew. Students then reflect on how this new information EXTENDS their thinking in a new direction. Finally, students reflect on anything they still find a CHALLENGE to understand. What questions still need answering to truly understand the content?

3. Viewpoints

As mentioned earlier, one of the most important and difficult skills to develop in our students is empathy. After their VR/AR experience, ask your class to write their point of view on the topic in a circle in the centre of their page. Next, ask students to draw a line from the circle and at the end, have them write from someone else's perspective. What would a scientist think? What about an artist? How would a politician react? Have students write from at least four different viewpoints, one per line. This is a powerful way for learners to practise empathy in a context.

Original Guide by www.unstucklearning.design

Adapted and extended by Dr Marissa Bond

Thank you for Reading.

For more resources, visit our [website](#).



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Sparking the lightbulb moment.

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