

VR & AR: A passing fad or the future?

Augmented reality & virtual reality are more than just buzzwords; they're technologies that have begun to reshape the way we interact and experience the world around us.

But here's the million-dollar question: Are AR & VRa flashy fad, or here to stay as essential tech?



LESSON 2 learning objectives

01

DISTINGUISHING AR VS. VR

Understand the core differences and applications.

02

GRASP VR'S IMMERSIVE POTENTIAL

Learn how virtual reality can create entirely new worlds for users.

03

DISCOVER AR'S REAL-WORLD ENHANCEMENTS

See how augmented reality layers digital elements in our real world.

04

LOOK FORWARD TO FUTURE AR & VR APPLICATIONS

Reflect on how AR and VR might be integrated into everyday life and various professions.

Navigating the lesson

Keep an eye out for these symbols throughout the lesson. They're your go-to guide, helping you pace yourself to learn, discuss, practice, and reflect on what you've discovered.



12 MINUTES

An estimate of how long the activity or challenge may take.

CLASS
DISCUSSION

Time to pause and have a discussion with the class.



CRITICAL
THINKING
CHALLENGE

Exercise your critical thinking to evaluate an issue or topic.

AR & VR:

What's the difference?

Put simply, AR adds to the real world; VR creates a new world. AR uses a digital device, like a smartphone or tablet; VR requires special headsets.

VR

VR (Virtual Reality) immerses the user in a completely artificial, simulated digital environment. (Example: Oculus Rift)

VS

AR

AR (Augmented Reality) adds digital elements to a real-life view, usually by using the camera on a smartphone or tablet. (Example: Pokemon GO)



CLASS
ACTIVITY

As a class, check out these examples and see if you can correctly sort them into the VR or AR bucket.



5 MINUTES

VR

or

AR

GPS navigation that utilizes your phone's camera, overlaying digital signage.

Previewing how furniture would look in a room before buying.

Practicing a flight landing in a pilot simulator.

Catching digital creatures that appear in the real world.

Exploring a virtual moon base.

CLASS
DISCUSSION



3 MINUTES

What was your first taste of the new tech?

When you first used **augmented or virtual reality**, which one amazed you more and changed how you saw technology?



Did you KNOW?

One of the first uses of AR wasn't for gaming or entertainment, but for the Air Force. In the '90s, the first functional AR system was developed by Louis Rosenberg at the U.S. Air Force's Armstrong Labs.



Change the game!

Want to reimagine your favorite roleplaying game or racing game in a whole new light? How would VR or AR breathe new life into your favourite game?

Ready to begin your first activity?





Not just fun & games



From **Pokémon GO** sparking a worldwide AR craze to immersive gaming via VR headsets, these technologies are making waves.

But AR and VR are more than just for fun and games; they are being used in real and helpful ways in different jobs, like **healthcare and teaching.**

Greenhouse

VR is redefining what's possible

Imagine exploring the ruins of ancient Rome or diving into the Great Barrier Reef from the classroom. VR makes these virtual field trips possible, turning the world into a vibrant, **interactive classroom**.

In 2020, the New York Times wrote about how VR is **helping students learn in new and exciting ways**. Check out at least one of the videos; don't worry about the activities.

LESSON PLANS

Virtual Reality Curriculum Guide: Experience, Immersion and Excursion in the Classroom

A framework for teaching with New York Times 360 V.R. videos, plus eight lesson plans for STEM and the humanities.



[CLICK HERE FOR THE ARTICLE](#)





AR: A new lens on learning

AR is transforming lessons too: Picture a biology class where students overlay a 3-D model of a human heart onto their desks with smartphones. Or medical students practicing procedures in a risk-free, virtual space. These technologies are ushering in a new era of interactive & immersive learning.

Benefits

AR and VR technologies make learning more engaging by bringing lessons to life.

These technologies are creating immersive experiences that are transforming the way we learn, work, and interact with the world around us.



01

ENGAGING LEARNING PATHS:

AR and VR technologies enable students to interact with 3-D models and virtual environments, thereby capturing their interest and maintaining their focus more effectively than traditional teaching methods might.

02

IMMERSIVE EXPERIENCE:

With VR, students can be virtually transported to different times, places, or situations, allowing them to experience rather than just read about a subject matter, fostering deeper understanding and retention.

03

PERSONALIZED LEARNING PATHS:

AR and VR can be tailored to each student's pace and level of understanding, providing a more personalised education.

Challenges

While AR and VR technologies are a real positive step forward, they come with their own set of challenges.

These challenges are likely just problems that can be solved as the technology gets better.

01

COSTS:

The financial burden for these technologies can be significant. This includes the cost of hardware (such as VR headsets), software development or licensing, and maintenance.

02

HEALTH AND SAFETY CONCERNS:

Extended use of AR/VR can lead to eyestrain or motion sickness. There are also concerns about students' physical safety while they are immersed in a virtual environment.

03

ACCESSIBILITY ISSUES:

Not all students have equal access to such advanced technology, and this may exacerbate educational inequities.



Let's venture **beyond the classroom walls** and dive into how the new tech is revolutionising various industries and propelling them into the 21st century.

Healthcare

AR and VR are changing the game in healthcare. They're used in things like practice surgeries, patient care, training for doctors, and even virtual therapy sessions. Plus, they're giving doctors and medical students a new way to see complex health issues, which helps with more accurate diagnoses and tailored treatments.



Aged Care

AR and VR technologies are transforming aged care by offering virtual social interactions to combat loneliness, cognitive therapies for dementia patients, virtual reality experiences for exercise and relaxation, and AR-assisted tools for caregivers to improve care delivery.





Advertising & marketing

AR/VR allows for interactive and immersive advertising campaigns, enabling brands to **engage with customers** in new and innovative ways. Picture walking through a virtual showroom, exploring new product releases, or even interacting with brand ambassadors, all before deciding on your next purchase.

Retail

The tech enables customers to **virtually try products**, such as clothes, furniture, or cosmetics, which enhances the shopping experience and aids in purchasing decisions. Imagine trying on a whole new wardrobe or rearranging your living room without leaving your house.





We hope we put a whole new lens on AR and VR!

In our upcoming technology lesson, we'll dive into **social media**. This lesson will explore the expanding network where influencers, politicians, celebrities and public figures connect and communicate with fans & followers.



See you next time!