Lumination Learning Lab

Lesson Bytes
Teaching ideas for immersive learning

Responsible Recyclers

Learning Area
Science

Year Level
Year 7

Introduction

In this lesson, students will explore the sustainable use and management of resources through immersive virtual reality experiences. They will investigate waste management and recycling processes using Trash Time VR and engage with 360º videos to understand environmental challenges related to resource management.

Application

Trash Time

Trash Time VR allows students to experience waste management and recycling processes firsthand in a virtual environment. They will learn about the lifecycle of materials and sustainable practices in waste disposal.

Lesson Overview

Lesson Objectives

- Understand the concept of sustainable use and management of resources.
- Explore different aspects of waste management and recycling practices.
- Raise awareness about environmental challenges related to

VR/AR Resources

- Nespresso Recycling Factory "3... (2:31)
- 360° IT Recycling Facility Tour (3:48)
- Clearing Everest's Trash - 360 | ... (4:48)

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resource management.

Lesson Outline

Before the Immersive Learning Journey

- Review/display the Lumination Safety Poster.pdf
- Ensure that all VR equipment (headsets, controllers, sensors) and software (applications, simulations) are properly set up and functioning.
- Ensure access to Youtube 360° videos and their appropriateness for students.
- Provide/ discuss an overview of sustainable resource management concepts.

During the Immersive Learning Journey

IMVR Station: Students will use Trash Time VR to learn about waste management processes and the importance of recycling. Direct students to answer:

- What challenges did you come across when recycling in Trash Time?
- Is recycling an easy process? Why/why not?
- What could businesses do to ensure they recycle their materials properly?

HHVR Station:

- **Nespresso Recycling Factory "360" Visit:** Students will watch and discuss the recycling process of Nespresso capsules.
- **360° IT Recycling Facility Tour:** Explore the recycling of electronic waste.
- **Clearing Everest's Trash - 360 | National Geographic:** Discuss environmental conservation efforts on Mount Everest.

Direct students to complete a connect, Extend, Challenge:
Connect: How do each of these recycling experiences connect to what you already know about recycling?
Extend: What has extended your knowledge (what is something new you learned)?

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Challenge: What questions do you now have?

Research and Reflection Station: Students will research additional information on sustainable resource management and reflect on the environmental impacts of waste.

Creation Station: Students create an infographic poster (using platforms like Canva) to showcase their understanding of the challenges of recycling and their suggestions to their school peers.

After the Immersive Learning Journey

Reflection Questions:

1. What are the challenges associated with managing non-renewable resources sustainably?
2. How can recycling and proper waste management contribute to environmental conservation?
3. What actions can individuals take to promote sustainable resource use in their communities?

Other Activities:

Conduct a classroom debate on sustainable resource management practices.

Write a reflection on personal commitments to reduce waste and promote recycling.

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