

File name: VR_4T_LP7_Geology_Science_12

Topic: Environmental Science

Keywords: Mt. Everest, glaciers, climate change

Suggested grade level: Grade 12

Estimated activity time: 15 min

Geology – Science 12

Minerals, rocks, and earth materials

VR 360° exploration: Climb Mount Everest In A Ground breaking VR Experience | 360 Video | Sports Illustrated <https://www.youtube.com/watch?v=PBSKvELZ-VM>

General Introduction:

Doing a VR 360° exploration/expedition is like going on a vacation or trip. You have to plan e.g. your destinations, places to eat, relax, and meet friends and family. It means identifying your objectives.

For teachers:

In this section, you will see a modified planning and preparation arranged into three (3) steps. As a teacher, these steps help you maximize the learning opportunities a VR 360° exploration/expedition can potentially offer.

Three steps:

- 1) Pre-exploration: Preview the playlist exploration yourself. By doing this, you are identifying possible questions and activities that might enrich students' VR experience.
- 2) During exploration: Provide guide or key questions or ask the students to formulate new questions about the playlist and encourage students to refer to other resources (e.g., YouTube videos, articles, etc.) to connect and enrich the playlist.
- 3) Post-exploration: Follow-up on the new questions and wonders students have identified. These questions might lead to an interdisciplinary inquiry project, blog posts or short video clips to link with the original unit or chapter coverage.

Description:

In this 15-minute exploration activity, you'll see a 360° panorama of expedition of team climbers and Sherpas as they climb the tallest peak in the world.

“In Spring 2016, Lisa Thompson, a cancer survivor, and Jeff Glasbrenner, a 25-time iron man and amputee, began an expedition that would change their lives. Lead by Madison Mountaineering guide Brent Bishop, son of the legendary Barry Bishop, Thompson and Glasbrenner joined a team of climbers and sherpas to scale the tallest peak in the world. Of the hundreds of people who attempt to scale Everest each year, an even smaller number make it to the top. Their story, one of hope, team work, and perseverance, is captured in this ground breaking immersive series - the first virtual reality climb from the bottom to the top of Everest. Capturing Everest was produced in partnership with Endemol Shine Beyond” Sports Illustrated Published on May 3, 2017

Objective:

The core learning outcome of this playlist is to enrich students' understanding of minerals, rocks and earth materials as observed in Mt. Everest. In addition, it also offers students reflection on the changing landscapes of Everest due to climate change. As well, with the immersive video, students are invited to see the human story of hope, team work, and perseverance.

However, unlike a regular 2D video, this VR provides a 360° panorama, which allows your students to focus on different points of interest that might vary from student to student. So, take time to explore the playlist using different angles and positions.



Climb Mount Everest In A Groundbreaking VR Experience | 360 Video | Sports Illustrated

Suggested Guide:

1) Pre-exploration:

Human ambition: Climbing Everest:

<https://video.nationalgeographic.com/video/00000144-0a2d-d3cb-a96c-7b2dac400000>

2) During exploration:

What key questions could pique students' interest as they watch this playlist?

As well, ask them to think of interesting questions they want to answer as they watch the playlist. Let them discuss these questions and their possible answers.

They can do this by groups of two or three.

With limited number of Google cardboards, let students work in pairs. Let them take turn to watch the playlist and do a Q & A. For example, Student 1 will describe to student 2 what he/she is seeing right now. Student 2 will explain the playlist, to Student 1 and each student will take turns doing Q & A.

3) Post-exploration:

Give time for the pair/class to think about the questions and answers they have generated after watching the playlist.

Let them recall experiences that might relate to the playlist e.g. early preparation and research before hiking on mountain ranges or active volcano or the hazards/effects of volcanic ash on aircraft.

Then invite them to read the link below. With the playlist, let them express their understanding, reactions into any interdisciplinary inquiry projects, blog posts, short video clips, etc.

Mount Everest: melting glaciers exposing bodies of climbers

<https://www.theguardian.com/world/2019/mar/21/mount-everest-melting-glaciers-exposing-bodies-dead-climbers>

References:

https://edu.google.com/products/vr-ar/expeditions/?modal_active=None

<https://www.youtube.com/watch?v=PBSKvELZ-VM>

<https://video.nationalgeographic.com/video/00000144-0a2d-d3cb-a96c-7b2dac400000>

<https://www.theguardian.com/world/2019/mar/21/mount-everest-melting-glaciers-exposing-bodies-dead-climbers>