

File name: VR_2T_LP6_EnvironmentalScience_Science_11

Topic: Environmental Science

Keywords: Lion, flying rays, threatened species

Suggested grade level: Grade 11

Estimated activity time: 15 min

Environmental Science – Science 11

Diversity and sustainability of ecosystems

VR 360⁰ exploration:

LIONS' LAST STAND

<https://www.discoveryvr.com/free-vr-videos/6260178866799640576/>

PROTECTING OCEAN ANCHOR SPECIES

<https://www.discoveryvr.com/free-vr-videos/6260174584935350272/>

General Introduction:

Doing a VR 360⁰ 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 360⁰ 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 lions and mantra in the context of conservation.

“Long seen as the epitome of wildlife, lions continue to hold our imagination from their habitat in the savannas of South Africa. Reaching up to 500 pounds, the apex predator has been threatened by hunting and the illegal animal trade” Discoveryvr.com

“Anchor species like manta rays and whale sharks are vital to the survival of our oceans. But they are largely threatened around the world. Join marine biologist Luke Tipple as he swims alongside these magnificent animals and shares why we all need to protect them” Discoveryvr.com

Objective:

The core learning outcome of this playlist is to enrich students' understanding and awareness on the efforts of conservationist or individuals to protect endangered species.

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.



Suggested Guide:

1) Pre-exploration:

African Wildlife: <https://www.awf.org/wildlife-conservation/lion>

Watch these fabulous flying rays:

<http://www.bbc.co.uk/earth/story/20150512-watch-these-giant-rays-fly>

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.

World Lion Day:

<https://blog.nationalgeographic.org/2016/08/10/world-lion-day-what-would-you-do-to-protect-lions/>

Watch these fabulous flying rays:

<http://www.bbc.co.uk/earth/story/20150512-watch-these-giant-rays-fly>

References:

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

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