

The Last Continent Lesson Plan

By Louise Sarrasin, Educator
Commission scolaire de Montréal (CSDM), Montréal (Québec)

Objective

Enable students to grasp the consequences of climate change in Antarctica, so that each one will be able to use their abilities to take action to protect the environment.

Target audience:

Students aged 15 to 20.

Connections

Languages and literature

Social sciences

Arts and culture

Film required for the activity

The Last Continent (105 min)

Summary of the Lesson Plan

This lesson plan will enable students to understand Antarctica's vital role at the heart of the global climate system, thanks to the mission of Jean Lemire and his crew on the *Sedna IV*: raising global public awareness about climate change. First, students will be introduced to the specific features of our planet's last virgin continent. They will then come to understand the constant challenges the crew had to overcome to complete its mission successfully. By viewing the film *The Last Continent*, students will be able to observe that global warming has already begun in the Antarctic Peninsula and that its consequences will affect the entire planet. Finally, they will understand that each individual can use his or her abilities to play a part in protecting the environment.

Start and preparatory activity: *Sedna IV* in Antarctica: Full Sail Ahead!

Approximate duration: 75 minutes.

Begin by explaining that the film *The Last Continent* is an account of the mission of Jean Lemire and his crew aboard the *Sedna IV*. This mission was intended to serve as a documentary of the climate changes on the Antarctic Peninsula and to raise global awareness about this situation. Have them keep a log, just as Jean Lemire did throughout his mission; have them enter their questions, comments and what they have learned into the log (see note 1).

Step 1: Ask students to relate what they think of when they see the title *The Last Continent*. Help them understand that Antarctica is our world's last virgin planet, since it has no permanent inhabitants. It is also the only continent not subject to traditional state jurisdiction since the signing of the Antarctic Treaty in Washington in 1959.

Step 2: Ask students to locate Antarctica on a map and share what they know about this part of the world (climate, fauna, flora, politics, etc.). Have them differentiate the Antarctic Peninsula from the continent of Antarctica.

Step 3: To arouse their curiosity, have them view the segment about King Penguins or other species (Videos Section) by asking them to pay special attention to the images and comic tone of the report. Gather their first impressions. Then ask them to log any new information found in the segment as well as any questions they might have at this stage.

Step 4: Have students watch the film's trailer and ask them to form teams to share their impressions. Remind them to enter these into their log.

Step 5: Conclude this activity by having them watch the first 14 minutes of the film (up to the moment when Jean Lemire asks his crew members to decide whether they will go or stay). Using the following questions, guide them in a discussion:

- What does the image of the sailing vessel at the beginning of the film suggest to you? Why did the director choose this as the opening scene? Help your students to discover that it is a reference to the sailing vessel *Endurance* (see note 2).
- In the first few minutes of the film, what issues are raised about the mission of *Sedna IV*? About the crew members' soul-searching? About upheavals in climate conditions? About Antarctica and its peninsula? Its wildlife?
- What analogy does the director draw between the missions of *Sedna IV* and that of the sailing vessel *Endurance*? How does he choose to do this? What does this expedition appear to mean to Jean Lemire?

To get a sense of the scope of Ernest Shackleton's expedition, ask students to research it during the week.

ACTIVITY: A Continent to Explore and Protect!

Approximate duration: Two 90-minute sessions.

1ST SESSION: IN THE FOOTSTEPS OF THE EXPLORERS: STAY OR GO!

In this session, students will be called upon to reflect on the many challenges facing those who explore the Antarctic Peninsula and to discuss their motives.

Step 1: Ask students to form small groups to discuss what they have learned about Shackleton's expedition aboard the sailing vessel *Endurance*.

Step 2: Have students review the first 14 minutes of the film and ask them to pay special attention to the dilemma facing several crew members regarding the decision they must make as to whether or not to stay on board the *Sedna IV* for the next nine months.

Step 3: Ask students to form small groups and to put themselves in the place of a *Sedna IV* crew member as they debate their possible motives. Then, initiate a class debate using the following questions:

- What features of the Antarctic winter are shown in this film?

- What challenges must the *Sedna IV* crew face? What differences and similarities can be found between the challenges facing the crew of the *Sedna IV* and that of the *Endurance*? What scientific and other means does the crew of the *Sedna IV* have at its disposal to complete its scientific and educational mission? How do they differ from those available to the crew of the *Endurance*?
- What motives would lead you to participate in such an expedition? What fears? What are those expressed by the *Sedna IV* crew members in this film? How do they differ from or resemble your own? How did the director choose to show the dilemma facing his crew?
- In your opinion, what does the first anniversary celebration mean to the *Sedna IV* crew? Why did the director choose to show it in this part of the film?

Step 4: Conclude this activity by watching the special feature: “Shooting of the Opening Scene of the Last Continent” (see Videos section). Ask students to list the challenges of shooting this scene given the climatic conditions.

2ND SESSION: THE ENVIRONMENTAL AND EDUCATIONAL MISSION OF *SEDNA IV*

In this session, students will be called upon to identify how the director manages to illustrate the extent of climate change on the Antarctic Peninsula. At the end of the activity, they will have come to an understanding of their personal responsibility regarding global warming and the actions that they can undertake to contribute to the protection of the environment.

Step 1: Watch the entire film with the class and then ask students the following questions:

- What are the causes of the climate changes on the Antarctic Peninsula that Jean Lemire and his crew chose to show? In your opinion, what images in the film illustrate these climate changes most effectively? The Arctic winter?
- What does Jean Lemire’s narration add to the film’s images? What is the effect of this poetic narration on you?

Step 2: Music is present throughout the entire film. How does the music composed by Simon Leclerc support the comments made by the film-maker? Give examples.

Step 3: Suggest that the students measure their environmental footprint, to better understand the impact of their consumption on the environment. Then suggest that they undertake actions to protect the environment.

- What did you observe when measuring your environmental footprint? State one action that you can carry out to reduce your consumption.
- What connections can you make between global warming on the Antarctic Peninsula and individual consumption? Consumption on a national scale?

Recap

Suggested duration: 60 minutes.

Suggest that students organize an exhibit showing the effects of climate change on the (indigenous) species of the Antarctic Peninsula.

Reflective Sharing

After having completed the activities of this lesson plan, students ought to be able to:

- Describe climate change in Antarctica and on its peninsula;

- Explain the means used by the *Sedna IV* crew in dealing with the rigorous conditions of the Antarctic winter and in achieving the objectives of its mission;
- Identify the problems nations face in attempting to slow global warming in this part of the world.

Notes:

1. Jean Lemire's logs are available on the CBC web site listed below in the references under the Web Sites section.
2. Jean Lemire expresses great admiration for Ernest Shackleton, an Anglo-Irish explorer who led several expeditions to Antarctica. In his film, Lemire makes reference to the expedition that Shackleton and his crew conducted aboard the sailing vessel *Endurance* from 1914 to 1917. Due to the explorer's courage, the crew survived a shipwreck. Lemire was so deeply inspired by Shackleton in making this film that he featured his story in the opening scene. Several sites are dedicated to this expedition.

Web Sites

CBC created a Web site about Jean Lemire. It contains his logs, documentaries, photos and other items.

<http://www.radio-canada.ca/sedna/?p=/spip/accueil.php3?lang=en>

Protecting the Antarctic

https://www.ec.gc.ca/EnviroZine/english/issues/39/feature1_e.cfm

Many sites exist to calculate our ecological footprint:

<http://www.ecologicalfootprint.com/>

Antarctic Explorers: **Ernest Shackleton**

<http://www.south-pole.com/p0000097.htm>