Using Technology to Teach Global Challenges Impacting Latin America

A Curriculum Guide for World Language Classrooms
Pollution and Recycling

Target Audience: Novice language learners; Spanish learners in grades 7-12

RELATED CONTENT AREAS

Spanish, Ecology, Environmental Science

OVERVIEW

This lesson incorporates technology to teach about pollution and recycling in Latin America and the United States. Technologies used in this lesson include smartphones/iPads, YouTube videos, Tellagami App, and online dictionaries.

STANDARDS

ACTFL World Readiness Standards

COMMUNICATION

Interpersonal Communication Learners interact and negotiate meaning in spoken, signed, or written conversations, to share information, reactions, feelings, and options.

Interpretive Communication Learners understand, interpret, and analyze what is heard, read, or viewed on a variety of topics.

Presentational Communication Learners present information, concepts, and ideas to inform, explain, persuade, and narrate on a variety of topics using appropriate media and adapting to various audiences of listeners, readers, or viewers.

OBJECTIVES

Learners will be able to...

- Identify and use words related to the environment, pollution and recycling.
- Communicate about the environment of their neighborhood.
- Write about pollution and recycling using pictures.
VOCABULARY

<table>
<thead>
<tr>
<th>Spanish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>El agua</td>
<td>Water</td>
</tr>
<tr>
<td>La polución</td>
<td>Pollution</td>
</tr>
<tr>
<td>El aire puro</td>
<td>Clean air</td>
</tr>
<tr>
<td>El jardín</td>
<td>Garden</td>
</tr>
<tr>
<td>El árbol</td>
<td>Tree</td>
</tr>
<tr>
<td>La flor</td>
<td>Flower</td>
</tr>
<tr>
<td>La tierra</td>
<td>Earth/Ground/Soil</td>
</tr>
<tr>
<td>La botella</td>
<td>Bottle</td>
</tr>
<tr>
<td>Contaminado/a</td>
<td>Polluted</td>
</tr>
<tr>
<td>Contaminar</td>
<td>To contaminate/pollute</td>
</tr>
<tr>
<td>La lata</td>
<td>Tin</td>
</tr>
<tr>
<td>La basura</td>
<td>Trash</td>
</tr>
<tr>
<td>El vidrio</td>
<td>Glass</td>
</tr>
<tr>
<td>El reciclaje</td>
<td>Recycle</td>
</tr>
<tr>
<td>El plástico</td>
<td>Plastic</td>
</tr>
<tr>
<td>El planeta</td>
<td>Planet</td>
</tr>
<tr>
<td>La playa</td>
<td>Beach</td>
</tr>
<tr>
<td>El mar</td>
<td>Sea/Ocean</td>
</tr>
<tr>
<td>El lago</td>
<td>Lake</td>
</tr>
<tr>
<td>El río</td>
<td>River</td>
</tr>
<tr>
<td>Limpio/a</td>
<td>Clean</td>
</tr>
<tr>
<td>El océano</td>
<td>Ocean</td>
</tr>
<tr>
<td>La naturaleza</td>
<td>Nature</td>
</tr>
<tr>
<td>La contaminación</td>
<td>Contamination/Pollution</td>
</tr>
<tr>
<td>Conservar</td>
<td>To conserve</td>
</tr>
<tr>
<td>Proteger</td>
<td>To protect</td>
</tr>
<tr>
<td>Reciclar</td>
<td>To recycle</td>
</tr>
<tr>
<td>Reutilizar</td>
<td>To reuse</td>
</tr>
<tr>
<td>Tirar</td>
<td>To throw away</td>
</tr>
<tr>
<td>Sucio/a</td>
<td>Dirty</td>
</tr>
</tbody>
</table>

TIME

90-180 minutes  
or  
1-2 class periods

MATERIALS

- iPad/Smartphone (1 per 1-5 students)
- Tellagami App
- Kahoot Account
- New Vocabulary List (Appendix A)
- YouTube videos: Los animales salvan el planeta #1, 4, 5, 6, 7  
  [www.youtube.com/watch?v=vPcZGUAwjc](www.youtube.com/watch?v=vPcZGUAwjc)
- 60 Minutes video: The Recyclers: From Trash Comes Triumph  
  [www.youtube.com/watch?v=YxUuKthYidQ](www.youtube.com/watch?v=YxUuKthYidQ)

PROCEDURE

1. As an introduction to the lesson, play the video Los animales salvan el planeta #1 (41 seconds). This video commercial is short, funny, and will help spark interest in the topic. After showing the commercial, guide students in a discussion about the message of the video clip.

   Pass out the vocabulary list (Appendix A). Students will engage in a digital scavenger hunt activity for 10-15 minutes. During this activity, students are to walk around the school campus and use the digital camera on a smartphone to take pictures that
represent as many of the vocabulary words they can find. For example, students may choose to take a picture of the recycling bin in the classroom. Be specific about what kind of pictures are expected and the minimum number of photos. Emphasize that only quality photos are accepted, therefore students should take pictures that are not blurry so the object can be clearly identified. Upon returning, ask students to email their top five favorite photos to the instructor; these will be used later in the lesson.

2. Next watch Los animales salvan el planeta #4, 5, 6, 7. Video numbers 5, 6, 7 and 11 are specifically about recycling, however, watching all of the videos (1-11) may also be beneficial. While watching, ask students to write down the message at the end of each video in the target or native language. Once they have watched each video and recorded the message, ask students to discuss the message and record their thoughts with a partner. Next, guide the class in a whole group discussion about the messages in the videos.

3. Ask students to brainstorm with a partner to create a list of ways they already recycle, and a list of ways they could improve their habits. While making their lists, encourage students to use the new vocabulary words, as well as other words they know in Spanish. Once the groups have completed the lists, guide the class in a discussion about their ideas.

4. Next, show students the YouTube video of the 60 Minutes news story The Recyclers: From Trash Comes Triumph. This is a 13-minute video about a town in Paraguay outside of the capital that is built on and around the landfill. There the people have started to take the trash they find in the landfill and make musical instruments out of the trash. The children in the town have learned to play music and have created an orchestra from the trash. After watching the video, discuss alternative uses for trash.

5. As a homework assignment, ask students to take a picture of how they recycle in their house, as well as a picture of pollution they notice in their community. The next class period, students will use the app Tellagami on a smartphone to select one of the pictures they took as homework and narrate the photo. Students should include vocabulary from the lesson. When they have a finished product that they are happy with, ask students to save their work and email it to the teacher. All the Tellagamis can be shared with the class and students can guess who created which Tellagami.

6. To assess student knowledge of the vocabulary, create a quiz on Kahoot using the vocabulary words and pictures taken during the scavenger hunt. Learners may use their personal smartphone, iPads, or laptops to participate. Instead of asking students to select the correct translation of the word, students will select the correct vocabulary
word that matches the picture. For example, show a picture of the recycling bin at your school and students have to select the word *El reciclaje* as the answer.

**EVALUATION**

Learners will be evaluated formatively through the digital scavenger hunt, class discussion, creation of their Tellagami, and playing Kahoot.

**EXTENSION ACTIVITIES**

1. Learners may research trash pickers in Latin American countries such as Mexico, Guatemala, Brazil, or Honduras and present their findings to the class.

2. *Landfill Harmonic* is a full-length documentary about the orchestra featured in the 60 Minutes video. Also recommended is the documentary *Wasteland* about the visual artist Vik Muniz who travels to his home country of Brazil and gets trash pickers from Brazil’s largest landfill to help him recreate famous paintings using trash collected from the landfill.

3. Ask students to research visual artists on Instagram who use trash to make art. They can search using hashtags like #trashart or #recycledart. Once they have seen examples of art made from trash and recycled items, students can create a piece of art from the trash/recycling in their house. Students will present about their art piece to the class.
POLLUTION AND RECYCLING NOVICE
VOCABULARIO NUEVO - NEW VOCABULARY

El agua Water
El aire puro Clean air
El árbol Tree
La basura Trash
La botella Bottle
La contaminación Contamination/Pollution
La flor Flower
El jardín Garden
El lago Lake
La lata Tin
El mar Sea/Ocean
La naturaleza Nature
El océano Ocean
El planeta Planet
El plástico Plastic
La playa Beach
La polución Pollution
El reciclaje Recycling
El río River
La tierra Earth/Ground/Soil
El vidrio Glass

Contaminar To contaminate/To pollute
Conservar To conserve
Proteger To protect
Reutilizar To reuse
Tirar To throw away

Contaminado/a Polluted/contaminated
Limpio/a Clean
Sucio/a Dirty
Acknowledgements

This curriculum guide was produced by the Center for Latin American Studies at Vanderbilt University with support from the U.S. Department of Education Title VI National Resource Center grant. The Center for Latin American Studies seeks to expand awareness and knowledge of Latin America in K-16 settings.

About the Authors

Andrea Beebe López is a Minneapolis native who moved to Nashville in 2007 to pursue her teaching career. She has taught various levels of Spanish for the Metro Nashville Public School district since January 2008. She has a B.A. in Spanish studies with a minor in Chicano studies from the University of Minnesota and is finishing her M.A. in Spanish Linguistics at New Mexico State University. She serves on the teacher advisory board for the Vanderbilt University Center for Latin American Studies. Andrea loves traveling and learning languages and sharing those passions with her students. She lives in Nashville with her husband and their mini dachshund named Salchicha.

Stephanie Knight is the Assistant Director at the Center for Applied Second Language Studies at the University of Oregon. She holds an M.A. in Latin American studies from the University of New Mexico and serves on the teacher advisory board for the Vanderbilt University Center for Latin American Studies. She has spent eleven years serving as a Spanish teacher in grades 5-16. During this time, she served as coordinator for an International Baccalaureate Middle Years Programme and an International Baccalaureate Diploma Programme in Nashville, Tennessee. Knight currently devotes much of her work to language curriculum development and pedagogical support for world language teachers, focusing largely on the integration of digital technologies in the world language classroom to positively impact second language acquisition.

Lisa Finelli is the Outreach Coordinator at the Center for Latin American Studies at Vanderbilt University. As Outreach Coordinator, Lisa leads all public engagement programs, organizes K-16 teacher workshops and summer institutes, coordinates the curriculum development and strengthens collaborations with community organizations and educational institutions.
Using Technology
To Teach Global Challenges
Impacting Latin America

#LatinAmerica #Environment #Sustainability #Health #Globalization

Produced by Vanderbilt University’s Center for Latin American Studies
with support from the U.S. Department of Education Title VI National Resource Center Grant.

Publication Date: April 2017

Permission is granted to reproduce this unit for classroom use only.
Please do not redistribute this unit without prior permission.