

A close-up, high-angle photograph of a microchip or integrated circuit. The chip is dark with intricate, glowing blue and white circuitry patterns. A central, rectangular, yellowish-gold component is visible, surrounded by a dense network of fine lines and small circular pads. The background is a blurred, bokeh-like pattern of light blue and white dots, suggesting a complex digital or technological environment.

Using Technology to Teach Global Challenges Impacting Latin America

A Curriculum Guide for World Language Classrooms

*Center for Latin
American Studies*

VANDERBILT  UNIVERSITY

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

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

TIME	90-180 minutes or 1-2 class periods	MATERIALS	<ul style="list-style-type: none"> • iPad/Smartphone (1 per 1-5 students) • Tellagami App • Kahoot Account • New Vocabulary List (Appendix A) • YouTube videos: <i>Los animales salvan el planeta</i> #1, 4, 5, 6, 7 www.youtube.com/watch?v=vPcZGUAwjlc • 60 Minutes video: The Recyclers: From Trash Comes Triumph www.youtube.com/watch?v=YxUuKthY1dQ
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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

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About the Authors

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#LatinAmerica #Environment #Sustainability #Health #Globalization

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