

<b>CAREER CLUSTER:</b> Hospitality & Tourism	<b>DURATION:</b> Approximately 20 sessions, but can be modified to fit classroom schedules. (Session = 45 to 50 Minutes)	<b>TEACHER:</b>	<b>U.N. SUSTAINABLE DEVELOPMENT GOAL:</b> #15 — Life on Land
<b>GLOBAL ISSUE OVERVIEW</b>			
<p>Deforestation, desertification, and threats to biodiversity affect people and animals across the globe. To give an idea of the scale of these issues: 3.3 million hectares of forest were lost between 2010 and 2015 due to deforestation. Drought and desertification cause the loss of 12 million hectares of arable land every year — an area that could produce 20 million tons of grain. These changes also threaten the diversity of life supported on land. Habitat loss, combined with poaching and wildlife trafficking, endangers countless species. A report from the United Nations states that up to one million species are at risk of extinction due to human population growth and human use of land and sea resources. (Chappell &amp; Rott, 2019).</p> <p><b>Why should we protect life on land?</b></p> <p>As members of a global community, we all have a responsibility to care for the Earth and the life it supports. Forests cover almost a third of the Earth’s surface and are home to 80% of the world’s terrestrial animals, plants, and insects. 1.6 billion people, including tens of millions of indigenous people, depend on forests for their livelihood. Acting to protect forests is an important way to fight climate change, protect biodiversity, support responsible natural resource management, and make land more productive.</p> <p>Droughts and desertification caused by human actions and climate change contribute to soil degradation, which is considered a moderate or severe problem for 52% of the world’s agricultural lands. In turn, soil degradation leads to land degradation, or an overall decrease in an entire ecosystem’s ability to support life (FAO, 2018). The effects of land degradation are hardest on the world’s poorest people, especially women in rural areas.</p>			

Rich biodiversity can deepen the resilience of these vulnerable populations, and biodiversity is crucial for all people when it comes to adapting to climate change and recovering from disasters. Everyday basics like healthy diets and medicine, depend on diversity in animals, plants, and microorganisms. What’s more, the value of the millions of different species on our planet is still largely undiscovered. For example, less than 1% of the world’s 80,000 tree species have been studied for potential practical applications.

**What can we do about it?**

Life on land — that is, managing forests, combating desertification, slowing and reversing land degradation, and halting biodiversity loss — is the focus of United Nations Sustainable Development Goal (SDG) #15. Targets for SDG #15 include integrating biodiversity values into local and national planning and development processes, enhancing global support for protected species, and ensuring the sustainable use of forests, mountains, wetlands, and more. The tourism and hospitality sector can play an important role in encouraging respect for all kinds of life on land.

**Global Competencies Addressed:**

- *Investigate the World:* Initiate investigations of the world by framing questions, analyzing and synthesizing relevant evidence, and drawing reasonable conclusions about global issues.
- *Recognize Perspectives:* Recognize, articulate, and apply an understanding of different perspectives.
- *Communicate Ideas:* Select and apply appropriate tools and strategies to communicate and collaborate effectively — meeting the needs and expectations of diverse individuals and groups.
- *Take Action:* Translate ideas, concerns, and findings into appropriate and responsible individual or collaborative actions to improve conditions.

**STANDARDS ADDRESSED\***

Career/Technical Knowledge and Skills	Academic Knowledge and Skills	21 <sup>st</sup> Century Skills
<p><b>Common Career Technical Core</b>  <b>Career Ready Practices</b>                      1. Act as a responsible and contributing citizen and employee.                      2. Apply appropriate academic and technical skills.</p>	<p><b>National Council for the Social Studies</b>  <b>Theme 3:</b> People, Places, and Environment  <b>Theme 7:</b> Production, Distribution, and Consumption  <b>Theme 9:</b> Global Connections</p>	<p><b>21<sup>st</sup> Century Interdisciplinary Themes</b></p> <ul style="list-style-type: none"> <li>• Global Awareness</li> </ul> <p><b>Learning &amp; Innovation Skills</b></p> <ul style="list-style-type: none"> <li>• Creativity &amp; Innovation</li> </ul>

4. Communicate clearly, effectively and with reason.
5. Consider the environmental, social and economic impacts of decisions.
6. Demonstrate creativity and innovation.
7. Employ valid and reliable research strategies.
8. Utilize critical thinking to make sense of problems and persevere in solving them.
9. Model integrity, ethical leadership and effective management.
12. Work productively in teams while using cultural/global competence.

**Hospitality and Tourism Career Cluster**

- **HT 1.** Describe the key components of marketing and promoting hospitality and tourism products and services.
- **HT 2.** Evaluate the nature and scope of the Hospitality & Tourism Career Cluster and the role of hospitality and tourism in society and the economy.
- **HT-RFB 4.** Demonstrate leadership qualities and collaboration with others.
- **HT-TT 3.** Analyze cultural diversity factors to enhance travel planning.
- **HT-TT 9.** Identify the community elements necessary to maintain cooperative tourism development efforts.
- **HT-TT 12.** Select the most effective communication technique and media venue to convey travel marketing information to a target audience.

\*Additional standards may be met depending on the theme of student projects.

**Next Generation Science Standards**

Engineering Design:

- **HS-ETS1-1.** Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.
- **HS-ETS1-2.** Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.
- **HS-ETS1-3.** Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts.

**Common Core Academic Standards**

ELA/Literacy:

- **CCRA.SL.1.** Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- **CCRA.SL.4.** Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
- **CCRA.L.1.** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

Mathematics:

- **MP.1.** Make sense of problems and persevere in solving them.

- Critical Thinking & Problem Solving
- Communication
- Collaboration

**Information, Media, & Technology Skills**

- Information Literacy

**Life & Career Skills**

- Flexibility & Adaptability
- Initiative & Self Direction
- Productivity & Accountability
- Leadership & Responsibility

## PROJECT DEFINITION & GOALS/OBJECTIVES

This project stems from the United Nations Sustainable Development Goals initiative (SDG). The SDGs are a set of 17 goals that aim to end poverty, fight inequality, and stop climate change. Specifically, this project focuses on Global Goal #15: Life on Land, with a focus on promoting responsible tourism. Students will create a communication campaign aimed at tourist and hospitality professionals and/or tourists which promotes positive action related to forests, land, and biodiversity. Students will engage in a design process to define the problem, brainstorm possible solutions, build a campaign, and present their ideas to community and/or global partners.

### Goals:

- Students will gain an understanding of the UN SDGs and develop an understanding of the importance of healthy forests, lands, and terrestrial biodiversity.
- Students will apply knowledge of the tourism/hospitality industry to a complex real-world problem.
- Students will use a design process to develop solutions to a complex real-world problem.

### Objectives:

- Research threats to healthy forests, lands, and biodiversity as well as the local, regional, and global impacts of those threats.
- Brainstorm and evaluate ways the tourism/hospitality industry can play a role in addressing threats to life on land.
- Develop a team work plan to create a communication campaign promoting responsible action in a specific environmental context.
- Design a communication campaign promoting responsible action in a specific environmental context with a team.
- Evaluate and revise the campaign to maximize efficacy.
- Communicate the potential impact of the campaign to peers, adults, and industry experts.

## SCENARIO OR PROBLEM: What scenario or problem will you use to engage students in this project?

You have been commissioned as part of a United Nations task force to promote responsible tourism. As part of a team, you will create a communication campaign geared at tourism/hospitality officials, tourists, or both, in a specific region. The campaign should clearly show what life on land issue is at stake in your area and why the issue matters on a local, regional, and global scale. You will outline specific actions the target audience can take to address the issue. As much as possible, the campaign should provide resources and tools for the target audience to take the desired action. The campaign should be supported with appropriate physical and digital materials such as flyers, posters, and/or videos. Your team can choose one of the following areas:

- Yellowstone National Park, USA

- The coast of Australia
- Chobe National Park, Botswana
- Cape Town, South Africa
- Your local community

### Essential Questions

- Why is the health and sustainability of life on land at risk?
- Why should we protect forests, arable land, and biodiversity?
- How can the tourism/hospitality industry protect life on land?

### Grade Level Adaptations

- Lower level classes can produce fewer or lower-quality supporting materials.
- Teachers can stipulate a certain budget for the campaign based on industry standards.
- The project could be presented as a class competition where teams compete against one another to create the best campaign.
- Higher level classes can select their own life on land issue in a tourist destination.
- The project can be adapted according to the focus of the class. For example, projects could focus specifically on campsite lodging, water use in restaurants, or recreation/amusements/attractions such as safaris.

**ASSESSMENT: How will you determine what students have learned? (Check all that apply.)**

FORMATIVE		SUMMATIVE	
Quizzes/Tests		Multiple Choice/Short Answer Test	
Notes/Graphic Representations		Essay Test	
Rough Draft		Written or Electronic Product with Rubric	<b>X</b>
Practice Presentation	<b>X</b>	Oral Presentation with Rubric	<b>X</b>
Preliminary Plans/Goals/Checklists of Progress	<b>X</b>	Other Product or Performance with Rubric	
Journal/Learning Log		Self-evaluation or Reflection	<b>X</b>
Other:		Evaluation by Authentic Audience	<b>X</b>
		Other:	

**MATERIALS, RESOURCES, or CONSTRAINTS: What materials and resources will be needed? Are there any perceived challenges?**

**Materials:**

- Computers with internet access
- Posters and markers
- Nametags
- Digital design software such as the Adobe Suite
- Video cameras (optional)
- Project rubric

**Resources:**

- Library access for three days (access to journals, magazines, newspapers, and/or books)
- [U.N. Sustainable Development Goals](#)
  - [Goal #15: Life on Land](#) (includes links to U.N. Environment, U.N. Food and Agriculture Organization, the International Maritime Organization, and more)
- [1 Million Animal and Plant Species Are at Risk of Extinction, U.N. Report Says](#) (NPR)
- The Leave No Trace Center for Outdoor Ethics: “[7 Principles](#)”
- Scott Moore’s article, “[On ‘Day Zero,’ Cape Town Will Run Out of Water. It’s Not the Only City at Risk.](#)” (*The Washington Post*)
- Gwynn Guilford’s article, “[Western Australia’s War on Sharks Probably Won’t Make Swimmers any Safer](#)” (*Quartz*)
- Jim Burnett’s article, “[Can the Tourism Industry Help Save Africa’s Wild Elephants?](#)” (*National Parks Traveler*)
- **Video resources:**
  - United Nations Foundation’s video, “[A Look at the Sustainable Development Goals](#)” (1:00). An introduction to the 17 Sustainable Development Goals from the United Nations Foundation.

**Possible Constraints & Solutions:**

- The professional quality of communication campaign materials could be limited according to the access to design or editing software. To mitigate this, adjust the project requirements according to available resources. If design and editing software is unavailable, task students with “contracting out” that section of the project. Students can research the availability, costs, and standards of designers or videographers.
- Authenticity of final presentations could be limited due to availability of volunteer industry representatives and/or community members. To mitigate this, consider realizing the final presentations via Skype, Zoom, or another video conferencing program.

**SUPPORT, MODIFICATIONS, AND EXTENSIONS: What is needed to provide support for students who have difficulty learning the content, modify for students with special learning needs, or to provide enrichment for advanced students?**

**Support & Modifications:**

- Provide assistance navigating library resources in weeks 1 and 2.
- Prepare a predetermined work plan for week 3, and check in at the end of each day to monitor students’ progress.
- Create rubrics to guide students in giving peer feedback during week 4.

**Extensions:**

- Advanced students can implement their campaigns locally. If necessary, global campaigns can be modified with local action steps. Students may partner with local or global organizations to implement their campaigns.

**CALENDAR OF MAJOR LEARNING ACTIVITIES: What are the learning activities or tasks for each day? Are there any project milestones? When will formal assessment activities occur?**

Week 1				
Monday	Tuesday	Wednesday	Thursday	Friday
<p><b>Initiating:</b> Introduce SDG #15. Lesson focuses on defining key terms like “deforestation,” “desertification,” “land degradation,” and “biodiversity.”</p>	<p><b>Initiating:</b> Expand on and deepen Monday’s conversation. Lesson focuses on answering the question, “Why should we protect forests, land, and biodiversity?”</p>	<p><b>Initiating:</b> Introduce five themes:</p> <ul style="list-style-type: none"> <li>• Sharks in Australia</li> <li>• Drought in Cape Town, South Africa</li> <li>• Ivory trade in Africa</li> <li>• Impact of hikers/campers on forest ecosystems</li> </ul>	<p><b>Initiating:</b> Students produce as many specific questions as possible about deforestation, desertification, land degradation, and biodiversity. Questions could also focus on any of the five themes introduced yesterday.</p>	<p><b>Initiating:</b> Let students individually choose three to five questions that were generated yesterday to answer. Students will use library and online resources to find answers to the questions. Encourage</p>

		<ul style="list-style-type: none"> <li>[Optional] Local issue pertaining to forests, land degradation, or biodiversity</li> </ul> <p>These themes should be introduced only briefly. Tell just one story or give a teaser of the issue — piquing students’ interest and making them want to learn more. At the end of class, ask students to rate their interest in the different topics to aid in assigning project groups next week (or allow students to choose the topic of most interest to them).</p>	<p>Questions could be generated by giving students nametags correlating to broad subject areas (e.g., “forests,” “sharks,” “arable land”). It’s okay to distribute multiple nametags with the same subject area. Students find a partner and spend one minute writing down questions related to their partner’s area. At the end of one minute, students find a new partner and start again.</p>	<p>students to look for answers in a variety of sources such as online or print journals, magazines, books, websites, or newspapers.</p>
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**Week 2**

<p><b>Initiating:</b> Students share the results of their research and identify unanswered or additional questions. This could be done on three giant posters labeled “Forests,” “Land,” and “Biodiversity.” Students visit each poster, writing key facts from their research, seeing what others wrote, and adding further questions.</p>	<p><b>Initiating:</b> Assign project groups according to student interest in the five major themes (i.e., sharks, drought, ivory trade, hiking/camping, local issue), or, let student groups choose their own location and issue.</p> <p>Groups begin their project-specific research, focusing on the question, “What are the major issues threatening life on land in your area?”</p>	<p><b>Initiating:</b> Groups continue project-specific research, focusing on the question, “Why are the issues identified yesterday important? What is their local, regional, and global impact?”</p>	<p><b>Planning:</b> Groups begin looking for solutions. What can the tourism/hospitality industry do to address the issue or issues facing your town/area?</p>	<p><b>Planning:</b> Groups continue looking for solutions. What can tourists do to address the issue or issues facing your town/area?</p>
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Week 3

<p><b>Executing:</b> Teams make a work plan for the week. Students identify tasks, set goals for each day, and assign tasks to team members. Work plans are approved by the teacher.</p> <p>By the end of the week, each group should have a detailed plan for a communication campaign geared at tourism/hospitality officials, tourists, or both. The campaign should clearly show what life on land issue is at stake and why the issue matters on a local, regional, and global scale. It should outline specific actions the target audience can take to address the issue.</p> <p>As much as possible, the campaign should provide resources and tools for the target audience to take the desired action. The students should produce appropriate physical and digital materials to support their campaign such as flyers, posters, and/or videos.</p>	<p><b>Executing:</b> Team work time according to student work plans.</p>	<p><b>Executing:</b> Team work time according to student work plans.</p>	<p><b>Executing:</b> Team work time according to student work plans.</p>	<p><b>Executing:</b> Team work time according to student work plans.</p>
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**Week 4**

<p><b>Executing:</b> Team work time according to student work plans.</p>	<p><b>Executing:</b> Introduce or remind students about the concept of constructive criticism. Emphasize the importance of revision — identifying the weak points of our campaigns is an important part of making our projects stronger.</p> <p>Teams pair up to present their campaigns and provide feedback to each other. Rotate teams and repeat as time allows.</p>	<p><b>Executing:</b> Students implement feedback gathered yesterday.</p>	<p><b>Closing:</b> Teams present their campaign to industry representatives and/or community members.</p>	<p><b>Closing:</b> Teams present their campaign to industry representatives and/or community members.</p> <p>If possible, have students contact tourism boards in the country they focused on and present to them.</p> <p>Don't forget to reflect on the overall project and celebrate success!</p>
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**STUDENT REFLECTION ACTIVITIES: How will students reflect on their work? Add reflection questions and/or activities here.**

After their final presentations, students grade their own campaigns. Students consider how effective their campaign would be in a real-world setting and the impact of the actions their campaign promotes. High scores must be justified with research and/or expert opinion. Students who give their campaigns low scores must consider what went wrong. What resources or information would have made their campaigns more successful?

Adapted from:

- “Sustainable Development Goals: Goal 15: Life on Land,” 2018, New York: The United Nations. Retrieved from <https://www.un.org/sustainabledevelopment/globalpartnerships/>
- “Unit Planning Template” by the Southern Regional Education Board, n.d., Atlanta: Southern Regional Education Board.

Works Cited:

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