

Indigenous Peoples' Day Project-Based Lesson Plan (Grades 7-12)

Objective: This lesson plan aims to explore the rich cultural heritage, historical significance, scientific contributions, technological advancements, artistic expressions, and social and environmental impacts of Indigenous Peoples from an interdisciplinary STEAMS (Science, Technology, Engineering, Arts, Mathematics, and Social Studies) approach.

Round Table

- ❖ **Purpose:** Provide an overview and introduce a conversation regarding Indigenous Peoples' Day, its significance, and the cultural contributions of Indigenous communities.
- ❖ **Materials:** Articles, documentaries, and/or guest speakers (if available).
- ❖ **Activity:** Begin with a discussion on the importance of honoring Indigenous history and contributions. Highlight the diversity among Indigenous cultures, touching on various regions (North America, South America, etc.).

Reflection Point

- ❖ **Discussion Questions:**
 - What are the historical reasons behind Indigenous Peoples' Day?
 - How do Indigenous contributions impact society today?

Knowledge Setting

<p>Science (S): Indigenous Climate Adaptation Strategies</p>	<ul style="list-style-type: none"> ❖ Objective: Investigate how Indigenous Peoples have adapted to changing environmental conditions and how these strategies can inform current climate resilience efforts. ❖ Knowledge Setting: Research various Indigenous climate adaptation strategies, such as water management in arid regions, sustainable land use, and natural disaster preparedness. Examine how these practices have evolved over time and their impact on local ecosystems.
<p>Technology (T): Indigenous Innovations</p>	<ul style="list-style-type: none"> ❖ Objective: Discover technological innovations developed by Indigenous Peoples. ❖ Knowledge Setting: Research one significant Indigenous technological innovation (e.g., canoe, snowshoes, or irrigation systems) and explain how it impacted Indigenous communities and the broader world.
<p>Engineering (E): Sustainable Architecture</p>	<ul style="list-style-type: none"> ❖ Objective: Examine Indigenous architecture and how it exemplifies sustainability and harmony with the environment. ❖ Knowledge Setting: Study the design and materials used in Indigenous housing structures (e.g., wigwams, adobe houses, tipis). Focus on how these structures utilized natural resources.

<p>Arts (A): Cultural Expressions Through Indigenous Art</p>	<ul style="list-style-type: none"> ❖ Objective: Explore the role of art in Indigenous cultures, including storytelling, spirituality, and identity. ❖ Knowledge Setting: Introduce students to various forms of Indigenous art (painting, pottery, textiles, totem poles). Discuss the significance of symbols and patterns.
<p>Mathematics (M): Indigenous Counting Systems and Patterns</p>	<ul style="list-style-type: none"> ❖ Objective: Analyze Indigenous counting systems and the use of mathematics in Indigenous cultures, such as in architecture, trade, and agriculture. ❖ Knowledge Setting: Students will study the Mayan numeral system or the Incan quipu (knot-based record-keeping system).
<p>Social Studies (SS): The Historical and Ongoing Impact of Indigenous Peoples</p>	<ul style="list-style-type: none"> ❖ Objective: Understand the historical experiences and contributions of Indigenous Peoples in the Americas. ❖ Knowledge Setting: Students will research key events in Indigenous history (e.g., colonization, land rights movements, the creation of Indigenous Peoples' Day) and analyze the long-term effects of these events on Indigenous communities.

Project

Science (S): Indigenous Climate Adaptation Strategies	<ul style="list-style-type: none">❖ Project: Create an infographic or visual presentation comparing Indigenous climate adaptation strategies with modern approaches to climate change mitigation and adaptation. They will analyze how these strategies can contribute to current global environmental policies.❖ Materials: Research databases, climate science textbooks, Indigenous case studies, and visual design tools.
Technology (T): Indigenous Innovations	<ul style="list-style-type: none">❖ Project: Design a timeline to demonstrate how Indigenous' innovations are still relevant or have evolved into modern-day technology.❖ Materials: Computers/tablets, design software, access to research databases.
Engineering (E): Sustainable Architecture	<ul style="list-style-type: none">❖ Project: Blueprint a modern sustainable house inspired by Indigenous architectural principles, using eco-friendly materials.❖ Materials: Research tools, design software (or paper for sketching), eco-material case studies.

<p>Arts (A): Cultural Expressions Through Indigenous Art</p>	<ul style="list-style-type: none"> ❖ Project: Create an art piece inspired by Indigenous artistic techniques and symbolism, reflecting themes of identity or land. ❖ Materials: Art supplies (paint, clay, textiles), examples of Indigenous artwork.
<p>Mathematics (M): Indigenous Counting Systems and Patterns</p>	<ul style="list-style-type: none"> ❖ Project: Create their own counting system or design a mathematical pattern inspired by Indigenous art and systems. ❖ Materials: Mathematical resources, craft supplies for pattern-making.
<p>Social Studies (SS): The Historical and Ongoing Impact of Indigenous Peoples</p>	<ul style="list-style-type: none"> ❖ Project: Create a Q&A on the importance of Indigenous Peoples' Day and what more can be done to honor Indigenous heritage. ❖ Materials: Historical documents, articles or videos.

Community Involvement

- ❖ **Activity:** Partner with local Indigenous communities or organizations to collaborate on a service project (e.g., climate change mitigation and adaptation, Indigenous modern-day technology, sustainable living).

Assessment

- ❖ **Objective:** Evaluate students on their project completion, understanding of Indigenous contributions, community involvement implementation, and ability to apply interdisciplinary thinking.
- ❖ **Methods:** Create rubrics for project evaluation, conduct peer assessments, provide teacher feedback, and gather student reflections to assess comprehension and application of interdisciplinary concepts.

Feedback Loop

- ❖ **Activity:** Conclude the project with a reflective discussion. Students can share what they learned about Indigenous contributions to their respective fields and how these lessons can be applied to create a more inclusive future.
- ❖ **Journal Prompt:** "In what ways do the lessons from Indigenous Peoples shape our understanding of sustainability, innovation, and community?"

Resume Integration

- ❖ **Objective:** Empower students to effectively communicate the skills and knowledge gained from the project, demonstrating their interdisciplinary competencies and practical application in real-world scenarios.
- ❖ **Methods:** Arrange a session with a guidance counselor or career advisor to help students articulate their project experience. Students will learn how to highlight key skills such as research, problem-solving, creativity, and collaboration on their resumes, personal statements, or college applications.