COMPUTER SCIENCE & DIGITAL FLUENCY SMART START GRANT LESSON PLAN

Date: April 2026 **Unit/Lesson:** Native American Tribes in the US

Approximate Time (in minutes) to complete lesson:
The lesson took place over a two week time period for approximately 35 minutes each day.

Grade Level: 7 & 8th Graders

Materials and/or Resources:

- ☐ Pre-made graphic organizer
- ☐ Introduction video Native American Video
- ☐ Slide Deck Checklist
- ☐ Mini-lesson "How to Choose the Right Resource"
- ☐ Mini-lesson "Work Cited Page"
- ☐ Computers
- ☐ Worksheets posted in our google classroom

CSDF Concept/Standard Addressed:

- ❑ Impacts of Computing
- ❑ Computational Thinking
- ❑ Networks and Systems Design
- ❑ Cybersecurity
- ❑ Digital Literacy

Student-friendly "I Can" Statements:

I can… explain my Native American Nation using a slide deck and verbal presentation.

Vocabulary Words:

-Tradition
-Population
-Native American
-Navajo
-Cherkee
-Haudenosaunee (Iroquois)

ENGAGING THE LEARNERS

I engage my learners by first building curiosity and activating prior knowledge through a short video clip that introduces Native American cultures and traditions. The video helps students visualize the topic and creates an engaging entry point for learning. After the video, I use a map of the United States to help students identify where different Native American nations were located and discuss how geography influenced their lifestyles, resources, and traditions. This visual connection helps students better understand the diversity among Native American groups rather than viewing them as one culture. I then model how to effectively complete the teacher-provided graphic organizer by reviewing each section, explaining expectations, and demonstrating how to record important information from research sources. Students are guided on how to organize facts about location, population, leadership, traditions, and other key details, which helps them stay focused and prepared for creating their final project.

Native American Video
Graphic Organizer

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EXPLORING THE CONCEPT	Students will explore the diverse histories and cultures of Native American groups who have long lived across North America by conducting guided research using a graphic organizer and tools like Google. The lesson will emphasize how to choose reliable sources, including identifying credible websites, cross-checking facts, and understanding why an AI-generated overview is not itself a valid source to cite. Students will gather key information such as the name of the nation or tribe, its leadership (including a chief or governing system), population, geographic region, traditions, ceremonies, and other important cultural or historical facts. After organizing their research, students will transform their findings into a clear and engaging slide deck, following a provided checklist to ensure they include accurate information, proper structure, and thoughtful presentation of their topic. Good Website WKSH Choosing a good website Slide Deck Slide Deck Checklist and Slide
EXPLAIN THE CONCEPT(S)	This lesson connects research skills, digital literacy, and computer science practices by guiding students through the process of finding, evaluating, creating, and presenting information using digital tools. From a computer science perspective, students are not just "using Google," but learning how information systems work—how search engines index content, how algorithms rank results, and why some sources are more reliable than others. This builds critical thinking about digital information rather than passive consumption. Students apply digital literacy skills by evaluating sources for credibility, recognizing that AI-generated overviews summarize information but are not primary or citable sources, and responsibly gathering accurate details about Native American nations, including leadership structures, population, traditions, ceremonies, and historical facts. The lesson aligns directly with standard 7-8.DL.2, as students communicate and collaborate using digital tools (such as shared documents or slide platforms) to develop and revise a collaborative product. They may work in pairs or small groups to compare sources, organize findings in a shared graphic organizer, and give feedback on each other's work. It also supports 7-8.DL.4, as students select appropriate digital tools (like presentation software) to create, revise, and publish a digital artifact—their slide deck. They make decisions about layout, visuals, and organization to clearly communicate their research. The final outcome—a slide presentation paired with a verbal explanation to peers and teachers—demonstrates their ability to synthesize information, use digital tools effectively, and communicate their understanding clearly. This combination of research, creation, and presentation reflects real-world digital practices and reinforces both technical and communication skills.
ELABORATE	**Elaborate:** Students needed additional support in key areas to complete the lesson successfully. Many struggled to identify credible sources, so mini-lessons were provided on how to evaluate websites and understand why AI overviews are not citable sources. They also required guidance on creating a Works Cited page in Google Docs, including using citation tools and proper formatting. Time was built in for practicing verbal presentations, where students used strategies like note cards and visual slides to stay organized and confident. These supports helped students strengthen their research, organization, and presentation skills.

EVALUATE: Assessment of Student Knowledge:

❑ Informal (observation, student work sample, etc..)

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❑ Formal (formative or summative) Students were asked to create a slide deck using a checklist and presenting it in front of the group of 5 people. The teachers will evaluate the students' presentation using a rubric.

Cross Curricular Links (standards):

Content:

1. Standard 1: Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York.
   3. Study about the major social, political, economic, cultural, and religious developments in New York State and United States history involves learning about the important roles and contributions of individuals and groups.
   (Research major events and themes from New York State and United States history (e.g., the American Revolution, new national period, Civil War, age of industrialization, westward movement and territorial expansion, the World Wars) to develop and test hypotheses and develop conclusions about the roles played by individuals and groups.)

Computer Science:

1. Digital Literacy Grades 7-8
   7-8.DL.2 Communicate and collaborate with others using a variety of digital tools to create and revise a collaborative product.
   7-8.DL.4 Select and use digital tools to create, revise, and publish digital artifacts.

Homework / Notes / Reflection:

The following day students were asked to give a verbal reflection on how they thought the project/lesson/unit went. They answered questions including:
-What was your favorite part of this unit? What did you find challenging? What do you think you did in your presentation? What would be one thing you would do differently if we did another slide deck activity? Would you want to do another project like this again?

Notes on the lesson: The lesson was too challenging for my students when I introduced it. I had to modify the activities, provide more support, and replace technology that was not working. I was under the assumption that this lesson would take 3-4 days, however it took over two weeks to come to a completion since students were absent or unsuccessful with the tasks.

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