

# ARTIFICIAL INTELLIGENCE



## AI Travel Adventures: Your Virtual Vacation

### Intended Audience:

Grades 6-12

### Learning Standards

ISTE CS Standard 5A: Algorithms & Programming

ISTE CS Standard 7A: Impacts of Computing

CSTA Standard 3A-AP-19

CSTA 3A-DA-11

### Lesson Objectives

Participants will:

Develop digital literacy and geographic awareness

### Time Needed

90 minutes

### Equipment and Supplies

Computers/tablets with internet access

Access to an AI chatbot (e.g., Claude, Microsoft Copilot)

Google Maps

### Getting Ready

Get creative and be ready to let your imagination run wild.

### Prepared by: (Authors)

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## Background

Have you ever dreamed of standing at the top of the Eiffel Tower, walking through the bustling streets of Tokyo, or exploring the ancient ruins of Machu Picchu? While time, money, and distance might make these adventures seem out of reach right now, technology has opened amazing new ways to explore the world! In this exciting lesson, you'll become a virtual traveler using artificial intelligence as your personal travel agent and Google Maps as your magic carpet. You'll have the power to design your dream vacation, discover hidden gems in faraway places, and virtually walk the streets of cities thousands of miles away - all from your classroom. Get ready to combine the creative power of AI with the exploration capabilities of digital maps to embark on an unforgettable virtual adventure that will teach you real-world skills while letting your imagination soar!

## What to Do

Youth will learn to craft effective prompts to generate detailed travel itineraries for their dream vacation, complete with suggestions for attractions, activities, and local experiences. Then take their AI-generated plans and bring them to life using Google Maps and Street View, virtually walking the streets of their chosen locations to verify the AI's suggestions and discover hidden gems along the way.

### LESSON: INTRODUCING THE ACTIVITY

Imagine having the power to plan your dream vacation anywhere in the world with an AI travel expert by your side. In this innovative lesson, you'll learn how to use artificial intelligence to create your perfect travel itinerary, then embark on a virtual exploration of your chosen destination using Google Maps and Street View. Whether you dream of wandering the streets of Paris, discovering ancient temples in Kyoto, or exploring the vibrant markets of Marrakech, you'll have the opportunity to not only plan but virtually experience these destinations. You'll act as both a travel planner and digital explorer, using AI tools to craft your journey and digital maps to verify and enhance your discoveries.

### LESSON: EXPLAINING THE CHALLENGE/ACTIVITY

In this hands-on technology lesson, youth will use artificial intelligence and digital mapping tools to create and explore their own personalized vacation itinerary. Starting with basic AI chatbot interaction skills, youth will learn how to craft effective prompts to generate detailed travel plans for their chosen destination. They'll work with the AI to develop a comprehensive itinerary including specific locations, attractions, activities, and cultural experiences. Once their AI-generated plan is complete, students will take their virtual journey to the next level by using Google Maps and Street View to explore these locations digitally. They'll verify the AI's suggestions, discover additional points of interest. Throughout the project, students will compare the AI's recommendations with real-world locations, learning valuable lessons about both technology capabilities and geographic awareness. This project integrates technology skills, geography, critical thinking, and presentation abilities while keeping youth engaged through personalized exploration.



### Step 1: Opening (5 minutes)

- Open with a hook: "If you could travel anywhere in the world right now, where would you go?"
- Show 2-3 quick Street View examples of famous locations
- Get youth excited about being virtual travelers

### Step 2: Demo the Tools (10 minutes)

- Show youth how to:
  - Access the AI chatbot you're using
  - Write a basic travel prompt
  - Navigate Google Maps
  - Use Street View (drag, rotate, move forward/backward)
- Pro Tip: Have these tabs pre-opened on your demo computer

### Step 3: Model the Process (15 Minutes)

- Show a live example using your own dream destination
- Write a prompt: "Create a 2-day itinerary for Paris, including specific attractions, recommended times to visit, and nearby restaurants."
- Demonstrate refining the AI response: "Can you give me specific addresses for these places?"
- Show how to check locations on Google Maps

### Step 4: Planning Phase (10 Minutes)

- Youth choose their destination
- Guide them in writing their first prompt
- Provide prompt template: "Create a [number] day itinerary for [location], including [specific elements you want]"

### Step 5: AI Interaction (15 minutes)

- Youth work with AI to create itinerary
- Circulate to help with prompt refinement
- Remind youth to save their AI conversations

### Step 6: Virtual Exploration (15 minutes)

- Youth complete virtual visits
- Practice using Street View
- Document discoveries
- Reflect on learning

### LESSON: FACILITATOR NOTES:

Make sure that youth are using an AI chat bot that is approved.

Helpful Teaching Tips:

- Have a backup plan for technology issues (offline activities ready)
- Keep a running list of great prompt examples on the board
- Set clear boundaries for appropriate destinations
- Have early finishers help peers or explore additional locations

## Digging Deeper

Budget and Scheduling

- Research actual costs for flights, hotels, activities, food, etc.
- Create a detailed travel budget and schedule for the vacation

## Expand and Explore

Reframe the Project

- Instead of planning an individual dream vacation, have youth plan a trip for their family
- Explain that they will need to consider the needs and interests of multiple family members

Empathy Building

- Have youth interview their family members to understand travel preferences, budgets, and constraints
- Create a "family profile" to guide their planning process

Itinerary Development

- Use the AI chatbot to generate a multi-destination itinerary optimized for their family's needs
- Emphasize considerations like transportation, lodging, activities for different age groups, etc.

## Talk it Over

### SHARE

Share with your friends and your parents about the experience being your own travel agent. Consider this as a communication project.

### PROCESS

How was your experience with an AI chatbot bringing your vacation to life?

What went well?

What should you change for next time?

### GENERALIZE

Who can use the information learned in this lesson?

### APPLY

Think about your next family vacation. Maybe you can plan it together with the help of AI

## Career Connection

The following career area(s) connect to this activity:

**Data Science and AI Engineering:** Building AI tools that support vacation planning such as recommendation systems for destinations, accommodations, or attractions. These professionals create algorithms that tailor suggestions based on user preferences, budget, and travel history.

**Geographic Information Systems (GIS) and Cartography:** GIS professionals use technology to map and analyze geographic data, which is essential for tools like Google Maps and Street View. They work to collect and interpret spatial data, helping travelers navigate the world virtually and in person.

**Software Development and User Experience Design (UX/UI):** Planning tools and mapping software require intuitive design and seamless user experience. Software developers and UX/UI designers create, test, and refine the platforms youth interact with when planning vacations, ensuring the AI tools are user-friendly and helpful.

**Travel and Tourism Management:** AI is transforming the travel industry by helping tourism managers develop smarter strategies for attracting and assisting visitors. This career field involves using technology to analyze travel trends, enhance guest experiences, and manage tourist destinations efficiently.

**Marketing and Digital Content Creation:** Marketing professionals use AI to tailor digital campaigns that target potential travelers with personalized recommendations. They might also create content that educates users on how to use tools like Google Maps for exploring destinations.

**Virtual Reality (VR) Development:** VR developers work on creating immersive experiences that allow travelers to explore destinations virtually. This field can intersect with AI, as AI can enhance VR experiences by offering interactive, real-time guidance based on the user's preferences and actions.

## Learning More

Consider this an opportunity to educate other about AI and how you were using it in an educational way. Share your project as a communication exhibit at your local fair.

