# Engage, Excite, and Empower K-12 Students

Alice A. Christie, Ph.D.
Arizona State University
President's Professor Emeritus



## Overview

- What is GoogleTreks™?
- Distinctions Between Google Earth and Google Maps as Educational Tools
- Curricular Examples
  - K-12
  - LA, SS, Math, Science, The Arts, Quick Treks
- How to Create a GoogleTrek™

## What is GoogleTreks™?

- An exciting new approach to teaching and learning
- Tool for creating curricular units
- Totally Web-based
- Enabled by Web 2.0 tools
- Easy to share



## What is GoogleTreks™?

- A way to synthesize information in one easy-to-use map that may include:
  - —text
  - —photographs
  - —charts or diagrams
  - —audio files
  - —video files
  - —Interactive web sites
  - —more



## What is GoogleTreks™?

- Created and coined by Dr. Alice Christie
- A repository of GoogleTreks™ created by teachers and students
- Organized by grade level and content area
- GoogleTreks™ Movie



## Google LitTips vs GoogleTreks™

**Google LitTrips:** Jerome Burg

- Use Google Earth
- Literature ONLY
- Limited Number of Authors
- Steep learning curve

**GoogleTreks™:** Alice Christie

- Use Google Maps
- All Curricular Areas
- Unlimited Number of Authors
- Easy learning curve

## Distinguish Between GE & GM

| | Google Earth | Google Maps |
|---|---|---|
| **Software** | Free. Download and install for to Mac, Windows, Linux | None. Can use with any current browser |
| **Hardware Requirements** | Medium to high. Needs at least 512mb of RAM (1mb is better) and newer processor | Low to Medium. Will run on most computers built in the past five years |
| **Connection Speed** | DSL/Cable or better is essential. May not work well with slower wireless points | DSL/Cable modem or better is generally adequate |

http://googletreks.org

## Distinguish Between GE & GM

| | Google Earth | Google Maps |
|---|---|---|
| **Creating Applications** | No account needed Collaboration on projects not yet supported | Requires free Google account Can collaborate with others with Google accounts |
| **Distributing Applications to Others** | Send small file by email or link to file for download | Send URL or embed in web page |

http://googletreks.org

## Why I Choose Google Maps

| | Google Earth | Google Maps |
|---|---|---|
| **Ease of Use** | Easy to navigate<br>Fairly difficult to create<br>Moderately difficult to share | Easy to navigate<br>Easy to create<br>Easy to share |
| **Bandwidth Issues** | Very high bandwidth demand | Low bandwidth demand |
| **Programming Skills** | Some required | None required |

http://googletreks.org

## Google Maps Overview

- Free, web-based Web 2.0 tool
- Satellite imagery with geographical content:
  - maps and terrain
  - layers for pictures, Wikipedia, and more
  - easy to use
  - easy to create interactive maps
  - easy to share user-created maps

http://googletreks.org

## Why create/use GoogleTreks™?

- To engage and excite learners
- To help learners conceptualize, visualize, share, and communicate information about the world
- To provide cross-curricular learning options
- To add a new dimension to learning environments not previously possible
- To leverage ubiquitous tools for learning
- To create active, exploratory, and empowering learning environments

http://googletreks.org

## Rationale

- *When students use geographic maps as adjuncts to text, they recall more text information than they would if they studied the text alone.*

Vekiri 2002

http://googletreks.org

## Importance for Educators

- Emerging digital tool with potential to enhance learning
- Uses real-world data
- Continually updated
- Kids gain perspective about the world in which they live
- Kids explore:
  - mapping conventions & cardinal directions
  - Settings of novels, poems, biographies
  - historical events
  - scientific discoveries



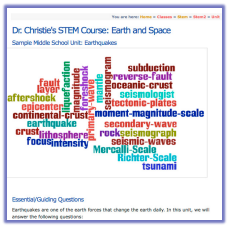
## Opportunities for Students

- to exhibit their learning to others
- to use emerging technologies and digital tools
- to communicate their research in a personally meaningful way (using Web 2.0 tools)
- to view their world from a more connected, global perspective
- to enhance map reading and navigation skills
- to engage more complex dimensions of human perception

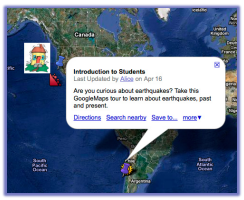


## GoogleTrek™: Feel the Earth Move

Original Earthquake Unit




Earthquake GoogleTrek™



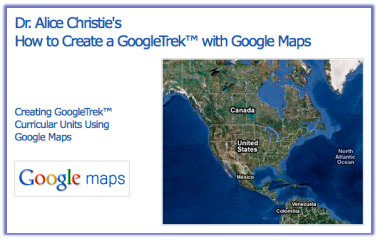



## Curricular Examples

- Teacher created GoogleTreks™
  - Content
  - Level
  - Determined by participants
- Student created GoogleTreks™
  - The Olympics (one student)
  - A Region in Turmoil (many students)
- On the QT (QuickTrek)
  - Central Corridor of Phoenix, AZ

## Creating GoogleTreks™

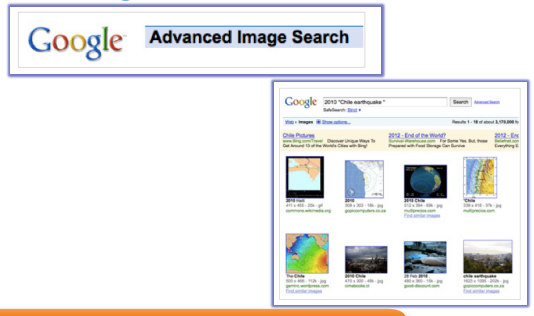
- GoogleTreks™ Tutorial





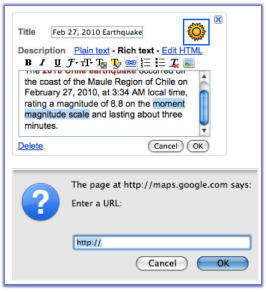

## Adding the Place Marker

## Adding Pictures from the Web



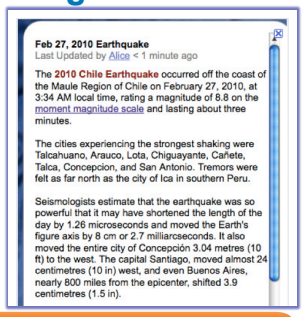



## Adding a Link to a Website



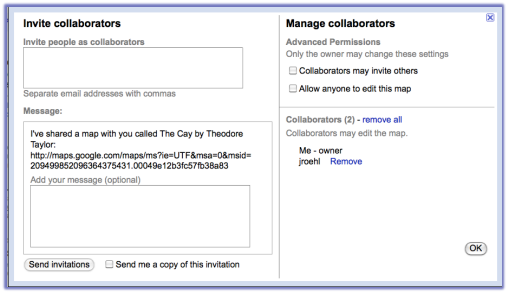



## Adding Additional Text



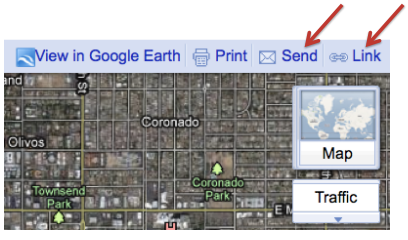



## Collaborative Mapping






## Sharing Your GoogleTrek






## GoogleTreks™ Resources

- Dr. Alice Christie: GoogleTreks™
- Original GoogleTreks™ Contributors
- GoogleTreks™ Rubric
- Posting Your GoogleTreks™
- Student-Created GoogleTreks™

- Google Maps

## Contact Information

Alice Christie, Ph.D.
alice.christie@asu.edu
www.googletreks.org • www.alicechristie.org