Media-Making Resources: Google Maps

INTRODUCTION

Multimedia maps are a great way to share a story that features a particular location or several locations. The links and tips in this document will help you make informative and engaging science maps. The following tutorials are excellent resources for learning how to create Google Maps. If you're creating audio slideshows or video for your map, see the links and tips in the other "Resources" documents for those media types, too.

"Creating Maps Using My Maps" tutorial from Google
http://earth.google.com/outreach/tutorial_mymaps.html

Educast #1 and #3 tutorials and PDFs about uploading and geotagging your photos using Flickr, and making a collective map using Google Map from PBS "The National Parks: America's Best Idea"
http://www.pbs.org/nationalparks/for-educators/digital-storytelling/#tier1

"Designing and Exploration on Google Maps: A Guide for Educators and Group Leaders" PDF from QUEST Exploration
http://www.kqed.org/quest/files/download/52/QUEST_ExplorationCreation.pdf

GOOGLE ACCOUNTS

The My Maps function of Google Maps requires that you have a Google account. Google requires account holders to be at least 13 years old. Consider these questions when addressing the issue of accounts.

- Do you want each student to have an account?
- Do you want to create one account per class, giving all students access to the class login information?
- Do you want to have a teacher or class account, where you (or designated students) are responsible for uploading student/class information?

MAKING MAPS

These tips will help you produce interesting, high-quality maps for your projects.

General

Consider the following questions when planning your map:

- Do you want people to visit this area? If it's a sensitive area, you may not want to tell people where it is by putting it on a map.
- How accessible is this location?
- If your map is of a path or hiking trail, how difficult or easy is it? How will you share that information with your audience?
- Do you need to consider seasonal changes? Will elements on your map vary depending on season? Do you want to focus on one season or provide information for more than one?

Add Science Content

- Give your content bubble a title.
- Stick to a theme, for example
    - Identify a rock sample or discuss the geological history of the area.

    - Talk about an environmental feature related to the time of year or season.
    - Share the relationship between two or more species in the area.
    - Give an overview of a restoration project.
- Include hyperlinks to such things as volunteer opportunities, docent schedules, trainings and online photos.
- Identify species using their proper Latin names. Explain if the species are native or exotic/introduced.
- If this is an area you want people to visit
    - Create a content bubble with directions to the starting point or parking area. Add a hyperlink to specific directions and/or call attention to the Google direction links that will automatically appear at the bottom of the saved bubble.
    - Suggest ways for visitors to engage their senses at particular points in the area, for example, "smell the...," "look for..." or "listen for…."

Troubleshoot

Sometimes Google Maps does unexpected things. For example, your map of Mono Lake could suddenly end up in Iceland, or the four content bubbles you've worked so hard to perfect suddenly disappear. When things like this happen (and they will), take a deep breath and thank Google for offering this wonderful tool for free. Then follow these suggestions to fix the problem.

- Sign out and back in to Google Maps. Sometimes this corrects the problem.
- Be sure to use the Science Maps Media Organizer to collect and record all of your media ahead of time. If Google Maps loses the information from your content bubble, you can paste it back in.

Embed Images

- Before you add a photo to a content bubble, enter your text (it works better that way).
- Every picture on the Internet has a URL, but that doesn't mean you have permission to use them all. Whenever possible, take your own pictures and upload them to a photo-sharing site. That way you'll be sure you have permission to use the photos in your map.
- Credit the photographer of any image you have permission to use. Hyperlink their name to the original picture or to a Web site with information about them, like their Flickr profile.
- For images you have permission to use that are on Web pages, you can get the URL if you
    - Right click (PC) or control-click (Mac) on the image and either copy the image location or click on "Properties" and copy the URL from the pop-up box.
- For images you have permission to use that are on Flickr, you can get the URL if you
    - Go to the photo page and click "All sizes" on the top left of the photo (note that not all photographers offer this option).
    - Click on the size you want in your map (thumbnail or small is recommended, so the photo doesn't take up the whole map when the bubble opens).
    - Follow the instructions above for copying the URL (note that the URL for the photo is **not** the one displayed in the address bar).

Embed Video

- Before you add a video to a content bubble, enter your text (it works better that way).
- Many videos on the Web have video embed codes, but that doesn't mean you have permission to use them all. Whenever possible, use your own video. That way you'll be sure you have permission to use the video in your map Videos must be uploaded to YouTube to be used in Google Maps.
- Credit the creator of any video you have permission to use. Hyperlink their name to the original picture or to a Web site with information about them, like their YouTube profile.
- Change the dimensions of your embedded video so it doesn't overwhelm your map. Change the width and height using a 4:3 ratio (320x240 or 240x180 or 180x120).

Embed Audio

Currently, there is no simple way to embed just audio into Google Maps. Here are two ways to get around this:

- Create a "video" with one still image and your audio.
- If you don't want to use the image or video on YouTube, customize the video height to 25. Just the "Play" bar should show up in the content bubble.

SAMPLE SCIENCE MAPS

Created by *QUEST*

- Explorations
  Science- and nature-themed hikes
  http://www.kqed.org/quest/exploration/sibley-volcanic-regional-preserve-exploration
- Toxic Business of Dry Cleaning
  Map of environmentally friendly cleaners (embedded in blog)
  http://www.kqed.org/quest/blog/2008/02/28/reporters-notes-toxic-business-of-dry-cleaning
- Mercury in the Bay
  Map tracing the history of mercury in the Bay Area (embedded in blog)
  http://www.kqed.org/quest/blog/2008/04/18/reporters-notes-mercury-in-the-bay-part-1/
- Ghost Fleet
  Map of individual "mothballed" ships in Suisun Bay (embedded in blog)
  http://www.kqed.org/quest/blog/2008/08/12/producer39s-notes58-ghost-fleet/

Created by *Jean-Michel Cousteau: Ocean Adventures*

- Take a Trip with Ocean Adventures
  Map of videos and lesson plans from this PBS series
  http://maps.google.com/maps/ms?hl=en&ie=UTF8&msa=0&msid=108107140468609515280.00045e1db3dccbe3762bb&ll=54.977614,-118.652344&spn=74.651095,158.203125&z=3

Created by Students and Educators

- Pat's Native Plant Walk
  Created to share local native plants by Terry from Youth Science Institute
  http://maps.google.com/maps/ms?source=ig&hl=en&ie=UTF8&msa=0&msid=100078105349757354440.00046 74e73f3a5344785b&z=16
- Hiking a Volcano in Bali, Indonesia
  Created to make a volcano lesson more personal by Gregg
  http://maps.google.com/maps/ms?source=ig&hl=en&ie=UTF8&msa=0&msid=113625945260765640499.00046 5182ec9e3193afbb&z=12
- Water Striders Junior Guide Map
  Created by fifth graders and the Oakland Museum of California
  http://maps.google.com/maps/ms?ie=UTF8&hl=en&msa=0&msid=101742454540440351090.00046bec097d51 a53f265&ll=37.849917,-122.316971&spn=0.31447,0.693512&t=h&z=11
- Geological Features of Yellowstone
  Created by science teachers in Acalanes Union High School District
  http://maps.google.com/maps/ms?ie=UTF8&hl=en&msa=0&msid=113490003484686896546.0004705397ec69f 868e26&t=h&z=10

ABOUT THE TOOLKIT

This resource is a component of the Media-Making Toolkit for Science Education, developed by KQED Education Network. The Toolkit includes instructions, worksheets and rubrics to assist educators in implementing media-making projects with students.

For a complete listing of the resources in KQED's Media-Making Toolkit, please visit www.kqed.org/quest/education