

Teaching with Google My Maps and Google Earth

Which program to use?

Both Google My Maps and Google Earth are very easy-to-use intuitive programs. However, each has a few special features that make using the platform easier or specially suited for certain projects:

1. Google Earth allows image overlays. This means that you can add a map directly over the satellite imagery, with the capability of using a slider to make this map overlay more or less transparent. This can be really useful for showing historic maps on the modern satellite imagery. My Maps does not allow overlays to be displayed or imported in from GE.
2. Google Earth allows the topography of satellite imagery to be displayed, creating an almost “3D” like effect. By turning the “terrain” feature on in the layers panel, hills and mountains will appear in relief when you tilt the earth. This is a great feature if locations being studied have an important topographical component. The relief can be exaggerated up to 3x as well, to highlight the topography in areas where differences may be more subtle.
3. GE has more organizational and display capability. Each placemark, polygon and line has a check box next to it in the GE navigation panel (left hand side of the screen). These can individually be turned on and off, so that information can be viewed selectively, or progressively. Information can be nested in folders and entire folders then turned on and off. This is especially helpful for information that is linked to different time periods or themes.
4. GE has the ability to offer a chronological time slider. This needs to be added using HTML coding (see the Keck how-to guide for guidance) but it allows individual folders or placemarks/polygons/lines to be linked to specific periods in time. The slider can be moved back and forth across the GE screen, with information appearing and disappearing at the desired date. There is BCE and CE capability.
5. GE allows students to create and record tours. Students can also “snapshot” certain views, so that when moving from icon to icon, the angle and position of view can be customized (especially great if you want to compare an online image with the satellite imagery)
6. My Maps makes formatting your placemark bubbles easy. In rich text format, you can bold, italics, and underline your text, as you would in a Word document. You can also add bullet points or numbered points, as well as highlight text or make text different colors. No HTML encoding necessary, My Maps does it all for you. This is great for projects that will be digital image heavy, or projects that want to include a lot of text.
7. My Maps allows you to easily import video footage from YouTube and Google video. HTML snippets given on the video screens can be cut and pasted directly into the placemark bubbles (in Edit HTML format). There is no complicated coding to be done by the student.

8. My Maps is collaborative. When a student creates a map, he or she can click on the “collaborate” link, and invite other students in their work group to work on their map. Because My Maps is web-based, any time a student updates the map (from any location), the map will reflect the new changes. This allows students to work from multiple locations remotely on a single map.

Technical problems with programs:

One of the major advantages of using GMaps and GE is that both programs are free for students to use (and download in the case of GE). In general, this means that students can work on project on their own computers and off-campus. However, from time to time, a student’s computer will have problems with one of the programs. It is important to stress to students from the beginning of the project that the CDH labs (as well as the CLICC lab on campus and the YRL) are the best places to work on their projects, and that they should plan to use these on-campus resources if their own computers prove inadequate (this could be because of their internet connection speed, etc.). Instructors can request to reserve extra hours (usually right after your scheduled class) in the CDH labs, so that students have a guaranteed time when they are on campus and can work on their projects.

Problems moving between platforms:

While projects created in Google My Maps and Google Earth can be viewed in both programs rather easily, there are a few areas where problems can occur. In general, while projects created in Google My Maps transfer seamlessly to Google Earth, this works slightly less well the other way around:

1. Google Earth image overlays will not transfer to Google Maps.
2. Detailed lines and polygons created in Google Earth will often become distorted and illegible in Google My Maps.
3. Google Earth allows you to vary the size of your placemarks, but these differences disappear when imported to Google My Maps.
4. In a number of non-US locations on the earth, Google Earth satellite imagery has higher resolution than Google My Maps. This means that areas viewable clearly in Google Earth may not be easy to see in Google My Maps. Instructors should check zoom capabilities in both programs before deciding which platform meets their needs best.

**In general then, we recommend that students and instructors create projects in Google My Maps if they intend to display them in that program. If they intend to display results in Google Earth, either program works well.

If instructors want students to create detailed ground plans of buildings, or polygons and lines that very accurately reflect the structure of a building or place at very zoomed in views, we recommend using Google Earth. If students are creating projects that are more regional or global in nature (and they won't be trying to display the satellite imagery at the highest resolution visible), Google My Maps works quite well.

What if students want to post digital photos that aren't online?

My Maps and GE will only link to images that are posted online. This is easy if your students have discovered good websites with lots of images, but in some cases, students will want to use images scanned from a book, or possibly photos they have taken themselves. One easy way to post images so for linking is to use Google's web-based photo storage program PicasaWeb:

<http://picasaweb.google.com/>. Students will not have to create a new account, since they already have a Google account for using My Maps and GE. They can upload photos to their Picasaweb library, then link directly to the images by copying the image URL. This can be done easily (on a PC) by right-clicking on the digital image, choosing "properties" from the box that appears, and then copying the URL listed under "Address (URL)." On a Mac, right click (also control-click) and choose "copy image address" from the box that appears. This address can then be pasted into the My Maps or GE placemark bubbles according to the procedures for each different program. The programs will then link to the digital images on PicasaWeb.

Can students use digital images from ArtStor?

Because of its security settings, ArtStor presents a problem for posting images to My Maps and GE. Even when the image URL is placed correctly into the placemark bubble in GE or MyMaps, no image will appear. There are a few work-arounds for this problem:

1. One way of working around this is to get the image information from ArtStor (click on the "i" icon when viewing a full-sized image or by clicking on the image caption in thumb-nail view and viewing the full record). Often, the source of the image (like a library, university, etc.) will be listed. Have students try to find the image posted on the original source's website – they will be able to post to the image directly from the source without ArtStor's security protections.
2. Students planning to view or present projects ON UCLA CAMPUS (using a UCLA IP address) or through the UCLA remote access server can include a hyperlink to the ArtStor image within the placemark box. The view will be able to click on the hyperlink, which will launch a new browser with the image from ArtStor. Again, this will only work if the viewer is accessing the URL through UCLA (or another server that is subscribed to ArtStor) and this has the disadvantage that the image is not embedded within the information bubble.

What if students want to post video clips that they create themselves?

They need to upload their own clips created on iMovie (Mac) or Moviemaker (PC) to YouTube (<http://www.youtube.com/>) or Google Video (<http://video.google.com/>). Once posted, they can then embed the HTML code from their video according to the procedures for each different program.

Can students post or link to sound clips to GE and My Maps?

Currently, there does not appear to be a way to post sound clips to either program. If sound is especially important to your students' projects, there are a few work-arounds that could be used:

1. Students could create a video on You Tube or Google Video including the sound clip, with a simple image standing in for moving video.
2. Students can include the URL hyperlink to a webpage with the audio clip in their placemark bubbles. The viewer would then click on the link in My Maps or GE, and a new web browser will open and bring up the audio clip (this has the disadvantage of not embedding the actual clip to be played inside the placemark bubble).