Making teaching spatial with Google Earth visualization.

Displaying the Sun

You can display the sun and sunlight across the landscape, To do this:

1. Click *View* > *Sun* or the Sun button [icon]. Google Earth displays the current level of daylight at the location you are viewing. Note that the time slider appears.
2. To change the time of day, drag the time slider right or left. Depending on your location and time of year, you can view the sunrise or sunset while looking east or west.
3. To display an animation of sunlight across the landscape, click the time slider play button.
4. To hide the sun, click *View* > *Sun* or the Sun button [icon].
   Tip - This feature often produces dramatic effects when you are viewing hilly or mountainous terrain.

Changing Languages

You can change the language displayed in Google Earth. To do this in Windows or Linux:
1. Click *Tools* > *Options*. Click the *General* tab.
2. Under Language settings, choose the appropriate language of your choice. *System Default* corresponds to the language used by the operating system of your computer.

To change your language on the Mac:
1. Exit Google Earth.
2. Click on the Apple symbol in the upper left-hand side of your screen.
3. Select *System Preferences*.
4. Click on *International*.
5. Drag the supported language (see below) of your choice to the top of the list.
6. Re-launch Google Earth.

Navigating Photos

You can fly into and navigate photos, such as high resolution images that appear in the Gigapxl layer. To do this, do one of the following:
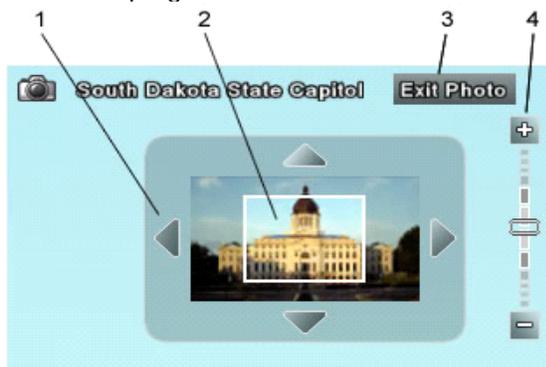
- In the Places panel, double click any item with a photo icon [icon]
- In the Layer panel, check *Gallery* > *Gigapxl*. In the 3D viewer, double click a Gigapxl icon or in the placemark balloon, click *Show full screen*. The 3D viewer displays the photo.

[icon] Gigapxl icon

Note - Gigapxl photos are not available for all locations. If you do not see Gigapxl icons in the 3D viewer, try navigating to another area and zoom in.

Use the following controls to zoom or move in the photo. Note that these controls only appear when you mouse over the top right corner of the 3D viewer.

1. Click the arrows to move around in the photo. These arrows only work when you have zoomed in (see below). You can use your mouse or arrow keys to move around.
2. Click and drag this thumbnail to move around in the photo. Double click to zoom in. Right double click to zoom out. The white box shows you what part of the photo is currently displayed.
3. Click this to exit the photo and return to a standard view of the area.

4. Use the zoom slider to zoom in and out. You can also double click the photo to zoom in or right double click the image to zoom out.

Adding Photos

You can add photos to Google Earth. Your photos are not viewable by other users of Google Earth unless you choose to share them.

Note - This feature is distinct from adding image overlays. When you add a photo, it is located in 3D and does not appear as a ground level image overlay.

To add photos:

1. Click *Add > Photos*... The New dialog box appears.
2. Enter the following information:
- *Name* - Descriptive label of the image
- *Link* - Enter the URL (website address) or location of the photo you want to add. To choose a photo on your computer, click *Browse...*
- *Transparency* - Choose the opacity of the image as it appears in the 3D viewer
- *Description* tab - (optional) Enter any comment or text about the image
- *View* tab - Use these settings to manually place the photo in an exact location. For explanation of terms in this tab, mouse over each field. You can also click and drag the image to the location you want
- *Photo* tab - These settings include:
    - *Camera placement* - This is the location of the default viewpoint as you view the photo
    - *Heading* - The orientation of the photo relative to north
    - *Tilt* - The inclination of the photo relative to the surface of the Earth
    - *Roll* - Use this to rotate the absolute orientation of the photo
    - *Field of view* - These settings control how much of the 3D viewer the photo occupies relative to the Earth. Check *Lock Aspect Ratio* to maintain the original dimensions of the photo
3. Click *OK* when you are finished. You can view the photo as described above. You can return to the photo anytime by double clicking it in the Places panel.
        Note - Using Panoramio, you can also share your photos with other Google Earth users.

Interacting with 3D Buildings

Once you display 3D buildings, you can also do the following:
- **Swoop to the top or side of 3D buildings** - To do this, right click (CTRL + click on the Mac) on the builidng and drag the mouse. You can swoop from building to building by doing the same. Note that this feature does not work with imported SketchUp models.
- **View a 3D building from different perspectives** - To do this, click the middle mouse button (Shift + mouse button if your mouse does not have a middle button).

Using Street View New!

In certain areas, you can view and navigate street-level imagery in much the same way you can in Google Maps. To do this:

1. In the *Layers* panel, check *Street View*. If this feature is available in the current view, photo icons 📷 appear at locations with available views.
2. Zoom in until you can see individual streets. Note that if you are close enough, the photo icons appear as spheres.
3. Click a photo icon. A balloon appears.
4. Click *Show full screen*. The 3D viewer displays imagery of this location.
5. To move around, double click photo icons that appear on the street. You can also look around, zoom and exit at any time.

Street View on the Golden Gate Bridge. **Tip** - You can right click (Ctrl + click on the Mac) any photo icon to save that Street View to the Places panel.