

Digital Photo Organizing and Editing Using Picasa from Google

Instructor's Lesson Plan

Preparation before Class

Have photos on a digital camera and bring to the class along with USB hookup cable in order to demonstrate how to **Import** photos.

In order to save class time, the instructor should copy the sample photos from the Picasa CD into the **My Pictures** sub-folder of each computer prior to class.

Introduction

Introduce yourself.

Request students turn off cell phones.

Picasa is a **free** program available for download from Google. Review the Picasa Download instructions that are provided in the handout.

On instructor's computer, click on **My Computer** and navigate to **My Pictures** folder to show the students the folders for the sample photos. Note the use of individual folders for each batch of photos, with the folders named according to topic. Explain that these folders can be created at the time you download photos from your camera, using any photo download program. Close **My Computer**.

Open the Picasa program.

Discuss that as soon as Picasa launches, it automatically finds all photos on the entire computer. You must wait while photos are loaded into Picasa, as shown by the small box at lower right corner indicating photos being processed.

(Suggest instructor opens Picasa first on his computer so that students can see files being loaded into Picasa. Students should then open Picasa on their computers.)

Folders

Look at the display of **Folders** on the left-hand side of Picasa. Click on icons for the flat folder structure or the folder tree structure and note different organization methods. The flat structure shows only the folders which hold photos. The tree structure shows the hierarchical organization of folders and sub-folders. Go back to the flat structure for the remainder of the class.

Click on down-arrow icon to show folder options, such as sort by name, date, etc. Change sort to be by **Name**. Note that this covers only the sorting of **Folder Names**.

Library Mode

Note that in **Library Mode**, photos are displayed as thumbnails on the right side of the screen. You can adjust the slider at the lower right to adjust the size of the photos in the Library. Adjust to show three photos on each row. Click on the different folders on the left to see the photos within each folder. Scroll up and down within the library using the sliders and arrows at the right side of the screen. Note the dotted lines in the left column to indicate which folder you are looking at.

Adjusting Photo Display Size in Editing Mode

Click once on the folder **Desert Botanical Garden**. To sort photos within the folder, click on **Folder → Sort By** and then select **Name**.

Double click on the first photo (Barrel Cacti, Palo Verde tree, and red glass spires) to select it and bring it into **Editing Mode**. Review the data displayed just below the photo, giving its file name, date taken, size in pixels, file size in megabytes and several tags.

Click on **1:1** button to enlarge photo to 100%. Explain that 100% means that there is one pixel in the photo for each available dot on the computer monitor. Note the cursor has turned from an arrow into a hand. Now click and drag to move photo around. You can also reposition the photo by dragging the small box around in the **Zoomed** window at lower right. Drag **size slider** left and right to further adjust photo size. Note the photo gets fuzzy if enlarged beyond 100%. Click on **Fit** button to reduce the photo back down so that entire photo fits on the screen. Note that at this size, you cannot move the photo around.

Slideshow

Click on the **Play** button at top of screen. This starts a slide show that plays the full-size images of all the photos within that folder. Move your mouse to turn on the controls at the bottom of the screen. Set the time of display on the right to 3 seconds, then click the center Play button (triangle within a circle) to turn on the slideshow. You can also go forward or back by clicking on the left and right arrows. When the slideshow ends, move your mouse to make the controls appear and click on **Exit**.

Photo Editing

We have now returned to the **Editing** mode. Note the photo editing commands available on the left. Briefly review the editing commands under all three tabs.

We now want to edit photos from a different folder. To access them, you must first click on **Back to Library**. Next click once on the folder for **Editing Examples** to display these photos. To sort photos within the folder, click on **Folder → Sort By → Name**. Double click on the first photo in that folder to get back into **Editing** mode.

Photo 1 - **Agave in bloom**: Click on the **Rotate Clockwise** icon. Click on the words "**Make a Caption!**" just below the photo and type in "**Agave in Bloom**". Explain that Captions can be turned on and off, but Text is a permanent part of the photo.

Click on **Text**. Click somewhere near the base of the Agave and type "**Agave in Bloom.**" You might have trouble seeing the text because it is black. Move the mouse into the small circle in the **Edit Text** window just to the right of the big letter **T**. The mouse cursor will turn into an eyedropper. Click the mouse and then note that you can move around the color palette and get any color you like. Use one of the upper boxes to select white as the text color.

Move the mouse onto the text and locate the mouse on the silver button with the red dot in the center. Note that the cursor changes to a hand. Drag to the right to make it larger, then continue to drag upward to tilt the text. Relocate the mouse to somewhere within the border box and note that the cursor changes to the 4-way arrows. Click and drag to move the text to center it at the base of the Saguaro. Finally click somewhere outside of the border box to finish text editing. Click on **Apply**.

Click on the **Tag** icon. In the **Tags** window, in the box, type in **DBG**, and click on the **Plus Sign**. Next type in **Agave** and click on **Plus Sign**. Now click on **X** at top, right corner to exit from tags.

Click on the **Right Arrow** (top of screen) to get to the second photo. Note that we have not saved our changes. Picasa remembers all our changes automatically! We will discuss saving more after we have finished editing.

Photo 2 - **Crested Saguaro**: Click on **Straighten** and adjust slider until Saguaro is vertical. Click on **Apply**. Click on **Crop**, then select **Manual** from the box. Click and drag to make a square photo. Click to select **4 x 6** in the box. Note that the shape of the crop has changed to the proper width to height ration. Click on 5x7 and 8x10 to see other possibilities. Click on **Rotate** to change orientation. Drag on one side and note that the ratio is kept. You can move the cropped area by clicking and dragging within the cropped area. Click on **Apply**.

Click on the **Tag** icon. In the **Tags** window, click on the tag for **DBG**, and click on **Plus Sign**. Next type in **Saguaro** and click on **Plus Sign**. Now click on **X** in top right to exit from tags.

Photo 3 - **Halloween kids**: Click on **Basic Fixes** Tab. Click on **Redeye**. Note that Picasa automatically detects red eyes. **Accept**. Next photo.

Photo 4 - **Small Yucca plant**: Click on **I'm Feeling Lucky**. Note: This is one of the very few photos for which **I'm Feeling Lucky** works. **I'm Feeling Lucky** is a combination of both **Auto Contrast** and **Auto Color**. Next photo.

Photo 5 – **Kids on Bed:** Click on **I’m Feeling Lucky**. Terrible color! **Undo**. Now try **Auto Contrast**. Next photo.

Photo 6 - **Three dogs:** Click on **I’m Feeling Lucky**. Area around left dog is still too dark. **Undo**. Click on the **Tuning** tab. We will play with each slider to see how they work.

The **Fill Light** slider increases the brightness of all pixels in the photo. Move the **Fill Light** slider back and forth it brightens the whole photo. Note how the black dog is affected just as much as the light-colored dogs to the right. Return the slider to the far left. The **Highlights** slider increases the brightness of the areas which are already brighter than average. Slide it back and forth and note how the black dog is not affected much at all, but the light-colored paws on the rightmost dog have turned completely white. Move it back to the far left. Next move the **Shadows** slider back and forth and note that the entire photo gets darker. Return it to the far left.

Now we will really adjust this photo. Move the **Fill Light** slider around and set the slider wherever it looks good to you. (40%). Next adjust the **Highlights** slider so it looks good. (40%). Since we have made things brighter with the first two sliders, we now must move the **Shadows** slider just a little to add back some contrast. (10%).

Go back to **Basic Fixes** tab. Click on **Crop** and select the **5 x 7** size. Select the right-hand example from the three thumbnails shown. Adjust further to remove hand at right side of photo. Re-align the cropped area by dragging. Next photo.

Photo 7 - **Dark church interior:** Ever go into a church or museum where they don’t allow you to use the flash on your camera. This photo looks hopeless at first, but maybe we can save it. Click on **Tuning Tab**. Adjust **Fill Light** (60%), **Highlights** (60%) and **Shadows** (5%). Next photo.

Photo 8 – **Graduation:** This photo has blue-green color cast to it. Luckily there is an area of “Neutral Color”, meaning white to gray, available. Click on the eyedropper at the right side of the **Neutral Color Picker**. Now click with the bottom of the eyedropper on the white column, just above the dean’s head. This will remove the color cast from the entire photo. Next automatically adjust the contrast by clicking on the **magic wand** to the right of **Highlights**. (This is the same as using the **AutoContrast** command under **Basic Fixes**). Next photo.

Photo 9 – **House Front:** This photo has an odd blue-purple color cast to it. In this case there is nothing white or gray available. You can improve the color by adjusting the **Color Temperature**. Move **Color Temperature** slider to the left to make the photo “cooler” (more blue). Move it to the right to make it “warmer” (more yellow). Set the slider wherever it looks best to you. (Far right). Next.

Photo 10 – **Baby with Bagel:** Review the 3-step process for Retouch: 1-Set Brush Size, 2-Select area to be retouched, 3-Select area to be painted in.

Click on **1:1** to enlarge the photo. Click on **Retouch**. Set the brush size to just cover the scrape on chin. Click over the scrape, then move the mouse around to various places to show how the area being pointed to will appear in the retouch area. Move around on his face trying to get the best match of skin tone. Suggest his left cheek. When the color match looks good, click the mouse. If it looks good, click **Apply**. Next photo.

Photo 11 – **Spiny Prickly Pear Cactus:** Note that photo is just slightly out of focus. Click on **1:1** to enlarge the photo. Click on **Effects** tab, then click on **Sharpen**. Move slider to about $\frac{3}{4}$ the way to the right. Click on **Apply**. Note sharpness of cactus and of rocks in background. **Undo** and **redo** to see the subtle changes. Next photo.

Photo 12 – **Guatemala Walls & Flowers scene:** Click on **Effects** tab, then click on one command at a time to see how they all work. Click on **Undo** after each one. Go only as far as the **Saturation** effect. Note the effect of moving the slider for **Saturation**. To the left decreases the color until the photo becomes black & white. To the right amplifies the colors until they become unnaturally intense.

How Picasa Saves Your Changes

When you make changes to a photo using Picasa, it automatically keeps track of all your changes and stores this information in a file which can be read only by Picasa. It does not automatically update the original photo with your changes. It leaves the original photo alone and just remembers every change you made to it. When you look at a photo in Picasa it takes your original and adds your changes to show you the updated photo. You can return to a photo any time in Picasa and undo any changes that you have made. (Refer to diagram on Page 8).

The one problem with Picasa's method is that your changes can be seen only by Picasa. If you use any other program to view, edit, print, email, or copy the files, it will NOT see the changes. Other programs see only the original file. This is a very significant problem if you use any program other than Picasa to send photos in emails, or to make backup copies of your photos to a CD, a flash drive, or an external disk drive.

To prevent this problem, you should **Save** every photo that you have edited. After saving, the updated photo will be seen by any other program that you might use. You will still be able to return to Picasa and **Undo Save**, and then continue to **Undo** any other changes you have made. Therefore you can still get back to the original photo if you want to. You can save photos one at a time using **File** → **Save** or **Save As**, but it is easier to wait until you are finished editing.

Saving your Edits

Click on **Back to Library**. Click on the **Save Icon** (floppy disk) just below the folder name to save all photos in that folder which have been changed. Confirm that it will make a backup file of the originals. Now double click on the **Dogs** photo to bring it into **Edit** mode. Click on **Undo Save**. Now you can **Undo Crop** and **Undo Tuning** to get back to the original photo. Click on **Redo Tuning** and **Redo Crop**, then again **File → Save**.

Filtering Using Tags

In the search box, type in **DBG**. Note that you now see the two photos you previously tagged. Click on **Back to View All** to see all photos. In the search box, type in **Agave**. Note that it filters all the photos to show just the one that has the tag **Agave**. Next type in **DBG**. This is a very efficient way to organize your photos so that you can quickly find any person, subject, location, etc. that you can tag for. Click the **X** on the right to clear that search criteria.

Using the Photo Tray

Note the **Photo Tray** at the lower left of the screen. You can put several photos into the **Photo Tray** at one time, and then perform an action like **Email** or **Print** on all of them at once. Let's see how the **Photo Tray** works.

Whatever photo is currently selected for editing is automatically in the **Photo Tray**. Click on the **right arrow** at top of screen a few times and note how the small photo in the photo tray changes each time to show the current photo.

You can keep a photo in the **Photo Tray** by having it active and clicking on the **Hold** icon (Green Pushpin). As you go back through the photos one at a time, click the **Hold** button on various photos until you have about 5 photos in the **Photo Tray**. Note the little green dot in the lower left that indicates a photo is being held in the tray. You can remove a photo from the **Photo Tray** by selecting the photo in the tray, then clicking on the **Clear** button (red circle). You can also clear the entire **Photo Tray** by having no photo selected in the tray, and then click the **Clear** button.

Click once on the **Editing Examples** folder. Note that this puts all the photos in that folder into the **Photo Tray**, so you could do an action like **Print** or **Email** on all of them at one time. Instead, click one time on the first photo (Agave) in that folder. It puts the first photo into the tray and removes the rest. Keep the photo in the **Photo Tray** by clicking the **Hold** button (green pushpin). Select the next photo (Saguaro) and click the **Hold** button. With these two photos in the **Photo Tray**, we will see how to **Print** and **Email** both of them at once.

Print

With the 2 photos in the **Photo Tray**, click on the **Print** button. Look through the various **Print Layouts** available. Set for **4x6** prints. Set for **two** prints of each photo. Also review "**Borders and Text Options**". Sample the Borders, and note

that you can show the **Captions**. Captions can be located either on the photo or below it, and you can select the color for the text. Click on the **Review** button and note that you can see the number of pixels per inch for each photo. Click on **Cancel** to get out of **Print**.

Email

With the 2 photos still in the **Photo Tray**, click on the **Email** button. You are offered a choice of **Gmail** or **whatever is your default email system**. Note that **Gmail** is free, and can also have a web album. In the classroom we cannot do a demonstration, but note that Picasa will automatically re-size photos smaller for ease of emailing them. Go to **Tools → Options → Email** to show how to set the size of emailed photos. Also note that you can send a single photo full size.

Shop

With the 2 photos still in the **Photo Tray**, click on the **Shop** button. You are offered a choice locations where you can have your prints made.

Using Picasa Help

You can get to Picasa Help by clicking on the **Help** menu, the selecting “**Help Contents and Index**” or just press the **F1** key. You can read through the various help topics listed, or use the search box to type in what topic you want to get help on. Click on the Getting Started Guide and scroll down to see what is included. Get back to the main help screen and click on Emailing Pictures to see what is there.

Optional Topics (if time available)

Import Photos – Instructor’s Demonstration

Students to watch as instructor demonstrates how to Import photos. Connect instructor’s camera to USB port on instructor’s computer. In Picasa, click on **Import. Select Device** (Camera). Picasa will find all photos on the camera. It will mark with a red X all photos that are already on the computer. Note that the **My Pictures** folder is the default place to put photos. Next you should type in a new **Folder** name. Select a batch of photos made at the same time by clicking on a clock. Then click on **Import Selected** to copy those photos to the computer.

Close from the Import mode. Look at listing of folders on left side of Library screen to show the new folder for the imported photos has been added for instructor’s computer.

Filter by date

Move slider located at top center of Picasa screen slowly to the right to filter out older photos. As you move the slider, note the number of photos shown and date range as indicated to top right of screen. Move slider back fully to the left to show **all** photos.

Upload

If you have created a **Picasa Web Album** (free) you can upload photos to the album and then email invitations to friends to view your photos or download or print them. We will not demonstrate this in class.

Export to a folder or a flash drive

With the 2 photos still in the **Photo Tray**, click on the **Export** button. At the top, specify the destination folder or flash drive. Next you must name the folder for this export batch. Below that, click on **Resize** and adjust the size of the photos after export. **Note:** You can use this to resize photos prior to emailing them with some other **Email** program. **Cancel** out of **Export**.

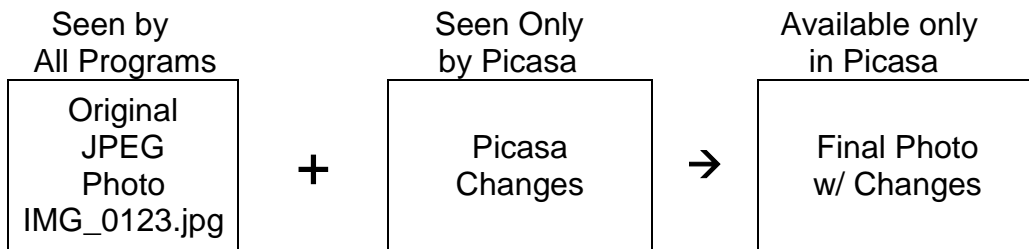
Making a Backup CD

Use **Tools** → **Backup Pictures** to copy your photos to a CD.

Write on whiteboard before class:

Agave in Bloom

DBG



After Photo is Saved

