One Week to Better Photography

Introduction and Lesson 1 – Digital Camera Basics

Images can inform, enlighten, delight and make our world a better place. Anyone can press the shutter button on a camera. But skill is required to shoot photos that tell the story of the year at your school. This One Week to Better Photography set provides a week of lessons and exercises to help you teach your students the basics of photography and get them quickly taking good photos. After that, they will understand that the camera is an instrument, and it takes thinking and practice to take great photos.

There are six sections; five are lessons:

1. Digital camera basics
2. Photo composition
3. Visual storytelling
4. Viewing and critiquing
5. Photo ethics
6. Glossary of photo terms

Lesson 1 – Digital camera basics

The objectives of this lesson are:

1. Gain a working knowledge of basic camera-handling techniques.
2. Effectively use key controls to creatively capture images.

This lesson has two handouts, four related readings and two exercises.

Related readings

Ready the Photo Staff: http://www.walsworthyearbooks.com/idea-file/topics/photography/page/4/

Ready the Photo Staff: Sample Timelines
http://www.walsworthyearbooks.com/idea-file/3340/ready-the-photo-staff-sample-timelines/

Back to the Basics
http://www.walsworthyearbooks.com/idea-file/1660/back-to-the-basics/

Lens Choices
http://www.walsworthyearbooks.com/idea-file/14260/photo-quest-lens-choices/

Digital Camera Basics Handout – Six tips for better digital photos

1. Read the camera manual. If the manual is no longer with your camera, you can find it online. Read about the controls and what they do. Pay attention to adjustments for resolution, image size and white balance.
2. Check the camera's settings before every assignment. Many settings do not reset when the camera is turned off, and someone else's settings may not work for your assignment.
3. Fill the frame when taking photos. Whenever possible, use your legs as your zoom tool, especially since digital zooms aren't always the highest quality. Move closer to the subject, as long as you're not interrupting the action.
4. Learn how to use the flash effectively. Learn the limits of the in-camera flash, and know when you need to add a more powerful flash on the hot shoe or on a bracket with a photoelectric trigger.
5. A digital camera will allow you to immediately look at the image you just took. However, do not stop and look at every photo, as you may miss some action. Keep shooting and review them later.
6. Learn to use Photoshop, Pixlr if you are an Online Design user, or other photo-editing software to correctly crop, change size and change resolution. But always work with a copy of the original image, so if you make a mistake, you can make another copy of the image and start over.

Digital Camera Basics Handout – Understanding basic controls

The first basic control is keeping the camera itself under control. Use your left hand to provide firm support under the camera body and the lens, while you tuck your elbows close to your body. This position will help keep the camera still as you take a photo.

Next, read the manual that came with the camera or find the manufacturer's PDF online. Look for the items listed here, find the controls related to them and learn how to use them.

- Image size – This setting determines the number of pixels that will be in the image. The higher the pixel count of an image, the sharper it will be and the larger it can be. Image size should be selected based on the largest size you want the image to be when placed on a spread.

- Image quality – This setting determines how much compression is applied to the image when it is processed by the camera and moved to the storage card. Use the highest image quality setting possible when making images for use in the yearbook.

- Focusing – Most digital cameras have auto focus. The camera selects what to focus on in the area seen through the viewfinder. That's great, unless you want another part of the image to be in focus. Then you need to learn to use the focus lock. In some situations, such as low light, the automatic focus is too slow or not accurate. Switch to manual focus for quicker focusing and sharper images.

- Camera light meter – The meter works to provide the proper exposure for your image. It measures the light reflected off a subject and either sets the camera controls or indicates the control settings to accurately capture the image. If you can learn to read and understand your light meter, you'll make great strides to being in control of the images you're capturing for your yearbook.

- Aperture – This adjustable opening in the lens determines how much light enters the camera and hits the digital sensor, affecting exposure and overall image quality. It is represented by f-stop numbers. The smaller f-stop numbers (f/2, f/5.6) represent larger openings and less depth of field, while larger f-stop numbers (f/16, f/22) mean more depth of field. By selecting a small aperture, several areas of the image will have equal sharpness. With a larger aperture opening, the main subject will be sharper than other elements in the photo and will gain emphasis.

- Shutter – Like aperture, the shutter determines how long light is allowed to record on the sensor. Shutter speed numbers are whole numbers that represent fractions of a second, for example, shutter speeds of 60 and 125 mean the shutter will stay open 1/60th and 1/125th of a second. Dramatic sports photos that freeze the action of competition are made with faster shutter speeds. When slower shutter speeds are used to shoot moving subjects, the image blurs. The faster the subject moves, the faster the shutter speed required to stop the action.

  Another note about shutter speeds. Ever wonder why there is a delay between pressing the shutter button and when the image is taken? That shutter lag is the time your camera is capturing the image, downloading it to memory, and preparing for the next photo to be taken. The more assignments you shoot, the more practiced you'll be at capturing the decisive moment, which will help you not miss the shot due to shutter lag.

Digital Camera Basics Exercise 1: Learning the camera controls

Instructions
Alone or in pairs, work with the digital camera you will be using for yearbook assignments.

1. Identify the parts of the camera. Use a diagram of your camera, either one that you sketch, copy from your owner's manual, or download from your camera's manufacturer. When complete, staple the diagram to this exercise.
2. Describe the function of each camera control. Check the camera manual for accuracy.
3. Practice adjusting the various camera controls. Describe the types of photo assignments that would be best suited to those camera settings.
4. Discuss the guidelines and warnings for the care and operation of the camera. Create a list of the guidelines and warnings that you can refer to when using the camera.

Digital Camera Basics Exercise 2: Photo Scavenger Hunt: Basics

Instructions
Turn photography practice into a scavenger hunt for individuals or teams of photographers. Find or take the images below. Make sure your camera is set to give you the best image of each.

1. Your teacher/adviser
2. Yourself
3. Two people that showcases a relationship
4. One person with a visual clue as to their hobby
5. A group of four people that showcases interaction
6. A person with light skin
7. A person with dark skin
8. One person that showcases reflection
9. Someone on a bicycle
10. A brick wall with a bush
11. Tree bark showing detail
12. A squirrel
13. A white wall in direct sunlight
14. Green grass with an object
15. Black asphalt with white lines
16. The front door of your home or school
17. A school or community landmark
18. An unusual angle on an automobile
19. The inside of your house or room
20. An image showing the weather
21. People working
22. A portrait of a person with a pleasing background
23. A public statue with an effective background
24. A photo made in late evening
25. A photo in your gym