

Booklet 6: PHOTOGRAPHY



ASSIGNMENTS

ASSIGNMENT #1

Have small groups of students look over photographs from various publications (newspapers, magazines and/or websites) and have them pick examples of timely photojournalistic images. Have students discuss ...

- Why were these photos chosen?
- What emphasis has the photographer created and how has this been done?
- What emotional or physical impact does the photo have?
- Does it answer the necessary W's and H?
- What extra information does the photograph provide us outside of the obvious?

PREPARATION IS KEY

Before sending out photographers, they must understand what they are doing. Understanding the principles of photojournalism is one thing, however understanding the expectations placed on them by their Yearbook staff is another. Simply sending a yearbook photographer to an event with ambiguous instructions will not get the intended results.

Only through preparation can we achieve the intended results. The following steps are key to ensure that all staff know what they should be doing.

1. Ensure that all photographers understand the book's theme, layout style and other stylistic elements.
2. Make sure to communicate what orientation you'd like and how many of each. How many portrait vs landscape pictures do you need?
3. Have them do a practice shoot/simulated shoots and bring you the images. Review the pictures together and adjust behaviors before they start taking real shots.
4. Expecting someone to succeed at a new job with no training is not reasonable. Go with all photographers to their first event (regardless of skill-level). Show them what to do and your expectations for how they should comport themselves.
 - a. Show them how to introduce themselves to coaches, refs, teachers
 - b. Show them what getting close means. Telling a student to get close to the action may mean the back seat in the bleachers to them.
 - c. Take some pictures with them to show what kind of quality you'd like to see.

5. Show them what you need for team photos. Keep space around the edge of the frame to allow for cropping if needed, take the team picture regardless if some are missing.
6. Create a shopping list for images needed for each event (including how many of each orientation you need). The list will provide the student with a clear idea of what they need to do.
 - a. Dominant Photo – Player making a layup taken from under the hoop.
 - b. Shot of players watching game from the bench.
 - c. 5+ images of fans cheering.
 - d. Cheerleading team.
 - e. Action shots of players on court (get close).
 - f. Coach and players in huddle.
 - g. Pregame warm-ups.
 - h. Post-game victory celebration.
7. Photo checks should be done at the midpoint of any season or event to be sure you have good images. By doing it then, you have time to correct it. If you wait till the end of the season or event and you do not have what you want, you cannot fix it.

Photographers should never delete images. They need only submit good images; however, they should keep other images stored only deleting clearly bad pictures (blurry, out of focus, etc.)

ASSIGNMENT #2

As a class, create photography checklists for photographers. You should create at minimum, three checklists.

1. Pre-Event Checklist
2. Event-Day Checklist and Expectations
3. Post-Event Checklist

Make sure that your checklists provide your photographers with everything they need before, during and after events. Ensure that the lists are clear, concise, and appropriately explain the Yearbook expectations.

THE ART OF THE PHOTOGRAPH-COMPOSITION

With events needing covering now on the horizon, understanding the core elements of photography is essential. Elements of photographic composition, outlined below, often take photos to the next level. These guidelines can improve many photographs, however, some of the best photos can break these rules. Also note, many of these guidelines can apply to the same photograph.

FOCUS AND DEPTH OF FIELD

- Focus is the most important element of photography, but not everything in the photograph needs to be in focus. Depth of field refers to the part of the picture that is in focus.
- Using a shallow depth of field, $f/2.8$ or $f/4$ you can blur the things that are not important and highlight your subject.
- Using a deep depth of field, $f/16$ or $f/22$ creates a 'deep zone' that allows more forgiveness with precision focusing.

CAMERA ORIENTATION

- The camera can be held in two ways to view a scene; landscape format (horizontal) or portrait format (vertical). Camera orientation affects what the photographer sees and shoots as a different emphasis is viewed, thus dynamics change. Picture shape should be dictated by the natural arrangement of the subject and elements being shot.

STANCE OR ANGLE OF VIEW

- The perspective from which the photographer chooses to take a photograph is generally, eye level (also called flat angle). This perspective can be a little boring to the viewer.
- For a stronger composition, move up higher or get closer to the ground, or move far off to the side for a more unusual perspective. Think bird's eye view and worm's eye view. Shooting up at people can give you a whole new perspective. Alternatively, step on a chair or table to shoot down at what you want to capture. Shooting down at a group you can show much more of each person! By bringing the horizon low in the frame or shooting up at something, you can also get a dramatic effect.

DISTANCE

- Robert Capa (20th Century war photographer) commented, "If your pictures aren't good, you aren't close enough."
- Strong images isolate the key part of the action or emotion for the audience and exclude extraneous elements from the frame. Cropping after shooting the image is a poor habit. Good photos are tightly cropped in-camera. It is important to attend to the scope of the scene e.g. a French horn player or a basketball player going up for a basket

BALANCE AND THE RULE OF THIRDS

- A basic guide for strong compositional structure in a photograph is the rule of thirds. The rule of thirds imagines each image being made up of a nine-square grid like a stretched tic-tac-toe box. Using the imagined lines and intersecting points on the grid as guides for placing key elements that makes up the composition. By thinking in rule of thirds attention is directed from 'middle of frame' composition that can dismiss valuable emphasizing elements that can create additional impact.

FRAMING AND SHAPES

- Framing is a tactic by which a photographer looks for and uses elements in the scene to frame the subject. This could be shooting through the legs of a chair or branches of a tree, making sure the subject is in tight focus. A natural frame within your picture can increase interest. Arches, both natural and man-made can be used to great effect especially when lighting conditions are optimized.
- Using natural or coincidental shapes can also make photographs more interesting. Often the distorted shapes of athletes under strain will make great sports photographs or use interesting angles of view to create great shapes from simple objects.

LEADING LINES

- Leading lines lure the eye deeper into a picture or to an important subject. Straight, curved, parallel or diagonal lines are all good at promoting interest. Hallways, lockers, field striping, a finger pointed at someone or the way a group of people are looking are all leading lines. A leading line can be a visible or invisible line.
- Telephone poles that suddenly appear to be coming out of a person's head are an example of leading lines that should not get into a photograph.

PATTERN AND REPETITION

- Just as lines can lead the eye to a place in the photograph, patterns can draw in the viewer to evaluate what they are looking at. Whether a repeated shape leads the eye through the image, or a staggered pattern gives depth, you control where the eye looks.
- Including a repeating element in a photo, such as a sequence of swimmers' feet, or a row of helmeted football players on a sideline or a whole basket of peaches.

BLURRING AND FREEZING ACTION

- Most sports photos are taken with a fast shutter speed, which freezes the action, and can show the contortions of the athlete's body. Another way of capturing the movement is by panning or moving your camera with the object you are photographing. This keeps your subject in focus, but blurs the background, to give a good sense of speed.

PATIENCE AND THE DECISIVE MOMENT

- Since a photograph is a fraction of a second, the photographer learns to anticipate and to trip the shutter to capture the exact moment of an action or scene. Catching action is one of the hardest things to do. It is easy to go to a game, take 200 photographs and still not have one good image.
- If there is no action in the photograph, no interaction between people, no reaction to events and no emotion that you can define, what story are you telling?

LIGHT

- Light; its direction, its colour, its contrast, its intensity, its absence, is the ingredient without which there is no photo, no image, no moment. The quality of the light affects the overall mood of the photo, the shadows which may or may not occur and every other part of the photograph.
- A great time of day for soft, mellow light in pictures happens at the 'golden hour,' which is about an hour before sunset.
- Photographs taken in bright light at noon have a lot of contrast, which creates harsh shadows, and can give people raccoon eyes.

ASSIGNMENT #3

Dividing the class into small groups (no more than five students), each group must go out and take 2 pictures showing the various categories of composition. Once complete, have each group present their photographs to the class for critique and evaluation.

PICKING UP THE CAMERA

Knowing when the camera is on, if the lens is open and knowing what button to press to capture the picture is fundamental to the success of any photographer. Understanding how your equipment works will help make each photographer exponentially more successful.

In today's school environment, most yearbook programs have access to three basic kinds of cameras.

DSLR (DIGITAL SINGLE LENS REFLEX CAMERA)

This is the standard camera used by most working photojournalists. It has fully adjustable shutter speeds, a family of lenses that offer the photographer a wide variety of shooting options.

POINT AND SHOOT

This camera is often more compact, has a singular lens and limited zoom capacity. Often it provides a digital zoom offering to allow users to increase the size of a subject.

SMARTPHONE/CELLPHONE

The best camera is the camera you have in hand. Most smartphone/cellphones all have digital cameras on them. These cameras are convenient and often allow us to take high quality images

TIPS! TAKING PICTURES WITH YOUR SMART PHONE

These days hundreds, if not thousands of photos are being taken at an individual event. Use this to your advantage and gather photos from the student body.

- Make sure your smart phone lens is clean. Cell phone camera lenses tend to be exposed and get touched by oily fingers.
- Natural light works best. Turn off the flash.
- Use the focus feature by tapping the screen on what you want to be in focus.
- Hold your phone still. Just like a DSLR, you will get better pictures if you are not moving.
- Do not use the front facing camera (the lens where if you are looking at your phone you can see yourself). The front facing camera has a lower resolution and will result in a lower quality photo.
- Get closer to the subject and do not use the zoom.
- Turn on the grid so you can follow the rule of thirds.

Each camera-type offers unique advantages and disadvantages. It is best to evaluate each unique situation to decide which equipment choice is best for your individual photographer.

Once you have selected your camera-type, each photographer should be familiar with the terminology and features that they will need to take the best photographs.

APERTURE

- Refers to the opening diameter of a camera lens; the aperture is the opening of the lens, which allows light to travel through it and strike the light-sensitive surface to create an image. The aperture is like the iris of the eye; it contracts or expands to adjust for ambient light hitting the eye.
- The numbers on the lens barrel are called F-stops and refer to the 'brightness' of the lens as it is stopped down.
- The key concept to keep in mind is that the lower the F-stop number, the more light that is coming through the lens. Generally, this is most important to pay attention to when shooting in a low light, because a 'fast lens' allows the photographer to stop more action and shoot in situations with low ambient light.
- A lens with maximum F-stop of 2.8 is usually considered 'fast.' For shooting sporting events or stage performances.

SHUTTER SPEED

- The length of time light can travel through the camera's shutter before the shutter closes. In order to take a photo, light must travel through a lens, and strike a light-sensitive surface for the right amount of time.
- Shutter speeds are actually fractions of a second: 125 on the shutter speed dial means 1/125th of a second, while 1000 means 1/1000th of a second.

- The right shutter speed paired with the properly adjusted F-stop, will create a well-exposed image on the memory card.
- In terms of good photographs, a few rules of thumb are helpful in getting good images:
 - When holding a camera (handheld photography), avoid taking photographs at 1/60th, because the movement the photographer makes can show up as camera-shake in the photograph. f/22 f/5.6 f/8.0 f/2.2 1/1000 1/250 1/80 MOVEMENT STOP SLOW BLUR FAST SHUTTER SPEED
 - The higher the shutter speed, the faster the action that can be captured as a 'freeze frame'. When a picture looks blurry and as though someone has moved too quickly in the frame, it happens because the shutter speed was too slow to capture the action.
 - 1/60th
Slowest suggested shutter speed for handheld photography. Good shutter speed for a portrait when the subject is standing or sitting still, or for a handheld still life. Not suitable for action photography.
 - 1/250th
Good all-around shutter speed that will freeze slow-moving action, such as a person walking or a person giving a speech and moving slightly but not too quickly. This setting is a good shutter speed for providing great variety in F-stop combinations when shooting on standard sunny days outside. Indoors, this might be the highest available shutter speed for an indoor sporting event, such as basketball, and because of the lighting tradeoff, there will likely be motion blur of a player's hands, arms, or feet.
 - 1/500th
Shutter speed that will freeze a high percentage of movement but not all of it.
 - 1/1000th-1/2000th
The highest shutter speed on most DSLRs. These shutter speeds will freeze fast-moving action, such as soccer players, moving branches in a high wind or droplets of water

EXPOSURE

- The combination of shutter speed and F-stop that will create a well-exposed image. Memory Cards and ISO Memory cards are made up of pixels, however, the ISO is effectively 'set' by the photographer, and the ISO can be set higher or lower at will by the photographer within different frames shot on the same memory card.
- A higher ISO rating [400/800/1600/3200] indicates a more sensitive digital medium that can produce good quality images under low light conditions.
- A lower number [25/50/64/125] moves down the scale of sensitivity, requiring more light to get the same image than a 'faster' ISO setting

ASSIGNMENT #4

Breaking your class into small groups, give each group one of the various types of cameras that you have. Have each group go and take 10 different pictures however, they MUST take each picture using each kind of camera. Encourage them to experiment with the different camera's abilities with Exposure, Shutter Speed and Aperture.

Once complete, have the groups present their photos to the class and share their findings/experiences using each camera type.