Get Certified!

jea.

Certification
Committee
www.jea.org

Photojournalism

Rod Satterthwaite • Chicago 2018
Palo Alto (Calif.) High School
rod.satterthwaite@gmail.com
www.mrsatt.com

JEA Curriculum

- The history of photojournalism

- Photojournalism in the newsroom

- Basics of photojournalism

- Tips and tricks

- Exposure

- The digital darkroom

- Portfolios and assessments

Types of questions on the CJE test

- CJE test format:
  - **multiple choice**
    - Which camera control can help stop action?
      - A. aperture
      - B. shutter speed
      - C. ISO
      - D. depth of field
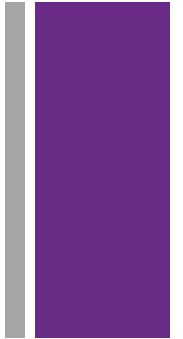 - **short answer**
    - Explain the difference between a photograph and a photo illustration
  - **demonstration exercises**
    - A student on your staff downloads a photo from the internet for use in your publication. How would you help this student make an ethical decision about whether or not to use this photo?

Overview

- Photo storytelling

- Basic terms and techniques

- Rules of composition

- Lighting basics

- File formats

- Photo organization and storage

- Types of lenses

- Photojournalism law and ethics

- Software

- Resources

Visual Storytelling

Good photos tell stories by providing unique perspectives, capturing important moments and showing things people haven't seen before.

- Photo types:
  - Action
  - Reaction
  - Mug shot
  - Environmental portrait
  - Photo illustration including cutouts (COB)

Coaching student photogs

coaching student photogs

- arrive early
- know your subject
- bring extra batteries, cards
- get close
- stay out of the action
- take notes
- move around
- get the safe shots first
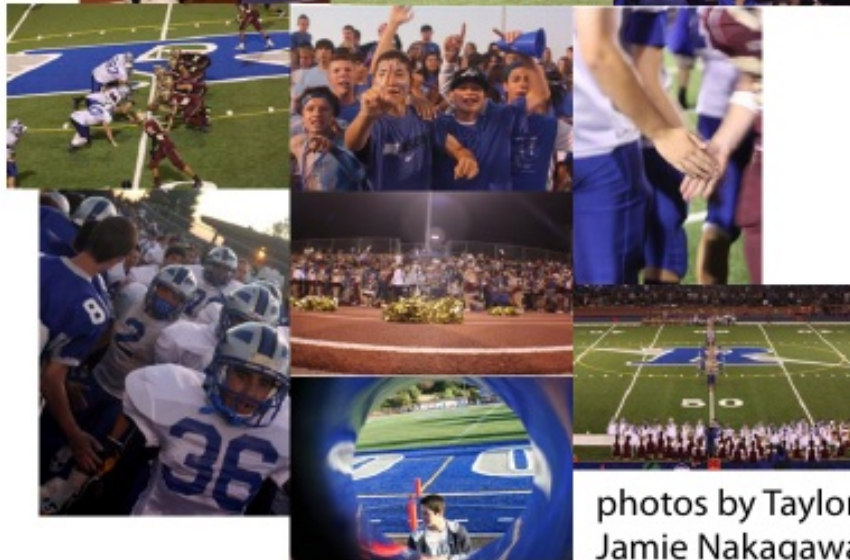
photo by Lisa Aerts

Telling the whole story

telling the whole story

- **angles:** bird's eye view (high), normal eye view, worm's eye view (low)

- **distances:** close-up, medium range, wide angle

photos by Taylor Howse, Jamie Nakagawa, Kara Stone

+ Action photos

action

photo by Justin Pugh

+ Reaction photos

reaction

photo used with permission from Jostens

Mug shot, bad

Mug shot, better

+ Mug shot, best

Environmental portraits

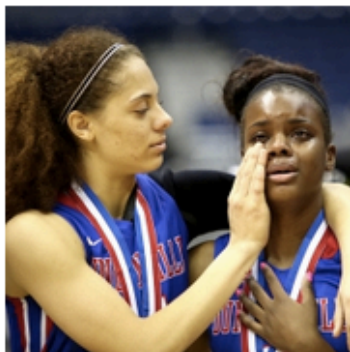# Take a look at some of the finalists in this year's NSPA photo contest.
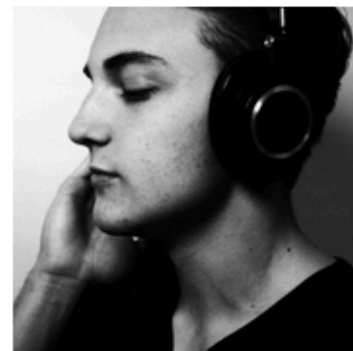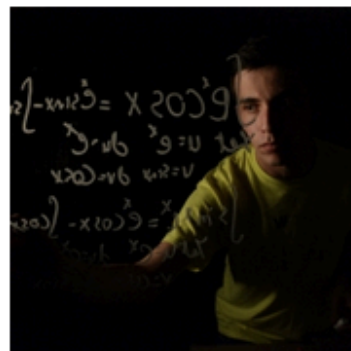
Sports Action

Sports Reaction

Environmental Portrait

Important concepts

- Aperture

- Depth of field

- Shutter speed

- Sensitivity to light (ISO)

- Exposure

- Equivalent exposures

Aperture (f/stops)

aperture (f-stops)

| f/2 | f/2.8 | f/4 | f/5.6 | f/8 | f/11 | f/16 | f/22 |

most light
least depth of field

least light
most depth of field

- the part of the lens that controls the amount of light reaching the film, like the pupil of the eye

- each f-stop lets in twice as much light as each higher f-stop and half as much light as each lower f-stop. For example, f/5.6 lets in twice as much light as f/4 and half as much light as f/8.

- the less the light available, the lower the number f-stop (wider aperture) necessary

graphic used with permission from Bradley Wilson

Depth of field

- The area in front of and behind the focal point that stays in focus

- Lower numbered f/stops have a shallow depth of field (only the main focal point is in focus, blurred out background)

- Higher numbered f/stops have higher depth of field

+ Depth of field

depth of field

photo by Andrew Dowd

a low aperture, such as f/2.8, gives this photo
a shallow depth of field

+ Shutter speed

shutter speed

| 1 | 1/2 | 1/4 | 1/8 | 1/15 | 1/30 | 1/60 | 1/125 | 1/250 | 1/500 | 1/1000 | 1/2000 |

more light
stops less action

FRACTIONS OF A SECOND

less light
stops more action

- how long the lens of the camera stays open
- each shutter speed lets in half as much light as the next slower shutter speed and twice as much light as the next faster shutter speed
- need to balance with the amount of light available

graphic used with permission from Bradley Wilson

Shutter speed

shutter speed

photos by Liz Grover

a fast shutter speed will stop the action

+ Sensitivity to light

sensitivity to light

ISO (International Standards Organization)

| 25 | 100 | 125 | 200 | 400 | 800 | 1000 | 3200 |

low sensitivity to light
less grain

high sensitivity to light
more grain

- International Standards Organization
- the measure of the film's or images sensors' sensitivity to light
- the higher the number, the more sensitive the film or the image sensors are to light
- the higher the number, the more grainy (film) or noise (digital)

graphic used with permission of Bradley Wilson

+ Sensitivity to light

sensitivity to light

using a higher ISO helps in low-light situations but can cause photos to have too much grain (film) or noise (digital)

photo by Renzo Giusti, from Flickr with Creative Commons licensing

Exposure

- Camera exposure modes (most digital cameras)
  - **P or Program or Auto**: camera sets both aperture and shutter speed
  - **AV (Canon) or A (Nikon) for Aperture Priority**: user sets aperture, camera sets shutter speed
  - **TV (Canon) or S (Nikon) for Shutter Priority**: user sets shutter speed, camera sets aperture
  - **M or Manual**: user sets both aperture and shutter speed

Exposure

- Underexposing subject by using backlighting and dropping the f/stops down two levels creates a silhouette/backlighting

- Even automatic settings like program mode, you can achieve this by shooting directly into the light without using a flash

photo by Hailey Heikkenen

photo by Hannah Feagans

basic rule: In bright sunlight, at f/16 use a shutter speed closest to the ISO. This photo was shot using ISO 400 at f/16 with shutter speed 500 (closest to 400).

Equivalent exposures

equivalent exposures

f/2 @ 1/4000   f/4 @ 1/1000   f/8 @ 1/250

ALL OF THESE EXPOSURES ARE EQUIVALENT.

- two different exposures that allow the same amount of light to reach the film or image sensors, using a different aperture and shutter speed combination

- depending on what effect you want, for every f/stop you drop down, go up a shutter speed

graphic used with permission of Bradley Wilson

Composition

- Rule of thirds

- Fill the frame

- Leading lines

- Framing

- Creative angles

- Repetition

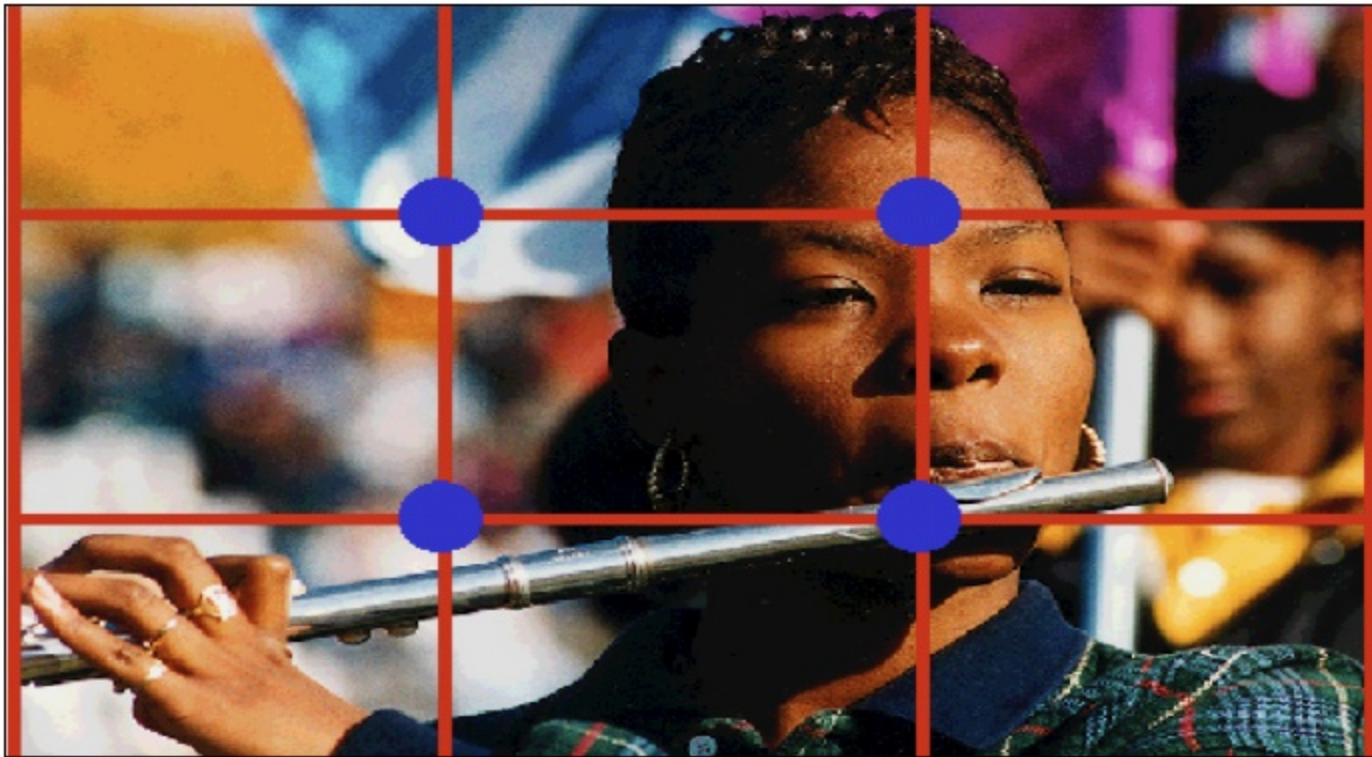- Center of visual interest

Rule of thirds

rule of thirds

points of interest should be at the intersection of the tic-tac-toe lines

graphic used with permission of Jostens

fill the frame

get in close
so that the center of
interest is obvious

photo by Elyssa Seals

+ Leading Lines and Leading Looks

leading lines and leading looks

use the natural lines in the setting to add visual interest; leading looks are based on the eyes or direction of the subject with implied rather than actual lines

photo by Kelsey Kehrees

+ Framing

framing

use an object to act as a picture frame for the subject

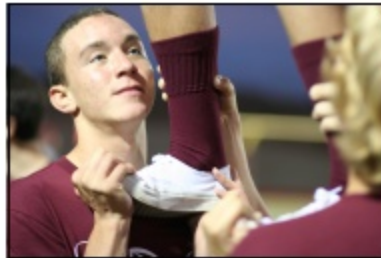
photo used with permission from Jostens

+ Creative angles

creative angles

up, down, behind the subject

photos by Jake Leech, Elyssa Seals

+ Repetition

repetition

capture
repeating
objects or a
pattern

photo by Brycen Guerrero

+ Center of visual interest

center of visual interest

clear focal point; obvious subject

photo by Margaret Tinker

Lighting basics

- **Key**: the main light on your subject

- **Fill:** the light that balances the key light; usually set on the opposite side of the key light, twice as far from the subject

- **Back:** lighting that lights the background behind the subject

- **Hair:** lighting the hair of the subject

- **Harsh:** a bright direct light that casts shadows

- **Soft:** a softer, indirect light that casts muted shadows

- **Diffused:** a light that has been dispersed by a cloth, material or frosted glass for example

- **Natural:** sunlight

- **Artificial:** lamplight

Basic studio lighting diagram
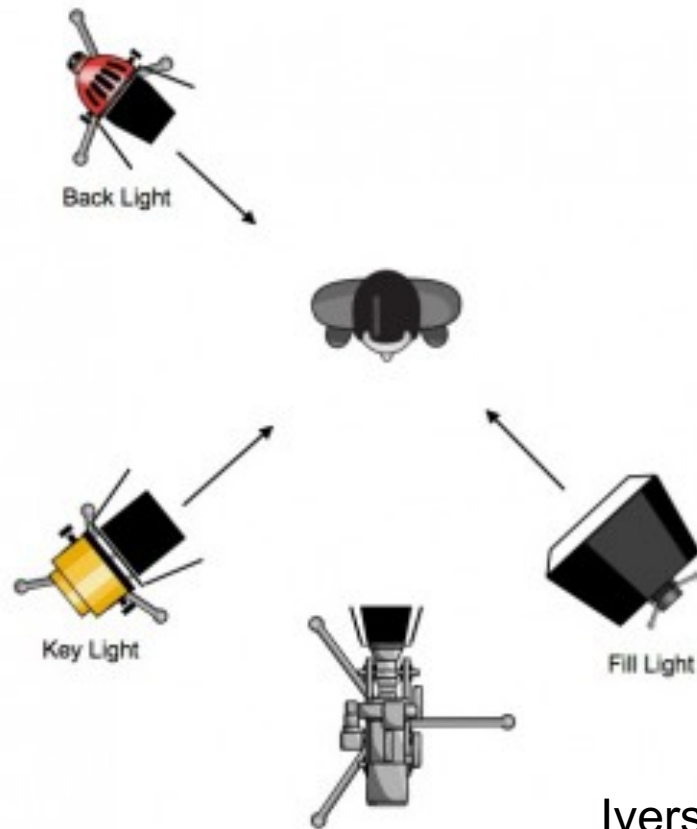
Iversity.org

Ideal lighting conditions

- **Outdoor sports:** natural light if possible

- **Indoor sports:** strobe flash if possible

- **Portraits:** key, fill, hair and back light if possible. If no article light kit available, use window as key and reflective surface as fill.

- **Indoor activities:** key and fill light

+ File Formats

file formats

the four most common file formats used are:

- **TIF** - Tagged Image File Format, uncompressed and compressed formats
- **PNG** - Portable Network Graphics, standardized compression
- **JPG** - Joint Photographic Experts Group, compressed format
- **GIF** - Graphics Interchange Format, compressed format dating back to CompuServe in the 1980s

The following table shows characteristics of each of these image formats:

Format	Color Depth	Compression	Loss of Detail on Saves	Web
TIF	variable	lossless	No	No
PNG	variable	lossless	No	Yes
JPG	24	- lossy -	- Yes -	Yes
GIF	- 8 -	lossless	No	Yes

File formats

- Compression comes in two forms: lossless and lossy
  - Lossless compression loses none of the image information during compression and decompression
  - Lossy compression as its name says removes some of the original photographic detail. Lossy compression can reduce the size of image files to a far great extent than lossless compression.

	Photographs	Photographs + edges	Line art, Drawings and Captured Screens
Image Type	Real world images in 24-bit color or 8-bit gray scale	Real world images with very sharp edges including text and lines	Text, blocks of the same color or lines and sharp edges
Preferred format for Master Copy	PNG or TIF	PNG or TIF	PNG or GIF or TIF
Master Copy ex Digital Camera	If the camera produces a *lossy* format then the original image ex the camera or the immediate conversion to a *lossless* format.	If the camera produces a *lossy* format then the original image ex the camera or the immediate conversion to a *lossless* format.	not applicable
> 24-bit color	PNG or TIF	PNG or TIF	PNG or TIF
EXIF retention	TIF or JPG	TIF or JPG	TIF or JPG
Greatest compression	JPG (JPG may not be suitable for master copy)	PNG or GIF, GIF reduces colors to 256 but improves text, lines and edges	PNG or GIF
Redistribution	JPG	PNG or GIF	PNG or GIF
Internet	JPG	GIF	GIF
Interchange compatability	TIF (not LZW)	TIF (not LZW)	TIF (not LZW)
Worst selection	GIF reduces colors to 256, and is larger than 24 bit JPG	JPG smears text, lines and edges	JPG adds smears to text, lines and edges

RAW file format

- Digital equivalent to negative in film

- Contains raw pixel information directly from camera's sensors

- Developed in several steps into a final JPEG or TIFF, each of which may contain several irreversible image adjustments

- RAW offers more control over how final JPEG or TIFF is generated

- Also takes up a lot of space on memory card or computer

Organization

- Encourages students to know and sort their own photos

- Keep your photos, just separate the good from the not-so-good

- If you change a format or alter the photo in Photoshop, it's a good idea to hold on to a copy of the original

- Use metadata to write captions and help editors and photographers find photos quickly

- Whether its Slack, Trello, Google Drive or whatever is invented next, have a system and involve students in the organization of it

Types of lenses

- Fisheye (15mm): extreme wide angle lens

- Wide-angle lenses (20-35 mm): good for moving close to subject but still getting a lot in the frame; distortion along the edges

- Normal (50mm): routine shooting

- Short telephoto (80-135mm): good for portraits, candids and some sporting events

- Long telephoto (200-400mm): when subject is distant; good for sporting events and wildlife photos

Legal/ethical issues

- Invasion of privacy

- Copyright infringement

- Digital manipulation

- Ethical dilemmas

- Photo vs photo illustration

Invasion of privacy

- Public disclosure of private and embarrassing facts

- Inclusion upon seclusion
  - Trespass
  - Secret surveillance
  - misrepresentation

- False light
  - Using someone's image in way that portrays them incorrectly

- Misappropriation
  - Using someone's image for commercial use without their consent

Copyright infringement
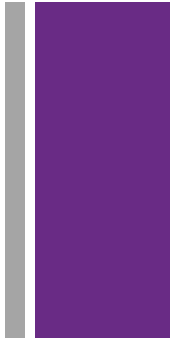
- Generally copyright can apply to the following:
  - Photos
  - Illustrations
  - Cartoons
  - Music
  - Logos
  - Most things on the internet

- Generally, copyright does NOT protect:
  - Facts/ideas
  - Most federal government records
  - Works of public domain (e.g. copyright expired)
  - Odds and ends (titles, slogans, short phrases, familiar symbols, etc)

Basic fair use rules

- If you did NOT create it and/or you don't own copyright to it, you MUST get permission to use it.

- Credit is not permission in the eyes of the law

- Except for the Fair Use rule:
  - Using a limited amount of copyrighted work for news, criticism, educational or informational purposes may be permissible as a "fair use."
  - Not every use by a student media organization is a fair use

+ Common fair use examples

+ Common fair use examples

common fair use examples

Peanuts' creator Charles Schulz dies

Charles Monroe Schulz, an iconic American cartoonist best known worldwide for his Peanuts comic strip, died at age 77 on Feb. 12, 2000. He was born in Minneapolis, Minn., in 1922, where he began his cartoon career. After returning from service in World War II, Schulz sold his comic panel "Li'l Folks" to the St. Paul Pioneer Press in 1947. By 1950, he had syndicated what became the Peanuts strip across the nation.

Source: www.snoopy.com

Top Five Favorite Cartoon Characters of the Class of 2010

#1 Bart Simpson
#2 Stewie Griffin
#3 Eric Cartman
#4 Homer Simpson
#5 Peter Griffin

Image source: www.thesimpsons.com

Survey based on poll of 210 members of Central High School Class of 2010 taken on April 11, 2007.

graphics created by the Student Press law Center, Media Law Presentations

Use images with a lesser extent of copyright

- Creativecommons.org

- MCT Campus (yearbook only at this point)

- Advanced Google search

- Pexels

- iStock photo

- Unsplash

- Be sure to use proper citation and check licensing

where to look

- **photo editing:** http://ncsu.edu/sma/instructional-material/photography-manual/camera-basics/ (copyright Bradley Wilson)

- **curriculum:** http://bradleywilsononline.net/handouts/photojournalism/ (copyright Bradley Wilson)

  http://jea.org/curriculum/photography/index.html

  www.poynter.org (Visual Journalism)

- **photo ethics:** http://www.sree.net/teaching/photoethics.html

Getting answers

- Commission Chair: Amy Sorrell, MJE: certification@jea.org

- Photojournalism: rod.satterthwaite@gmail.com

- JEA website >Certification