



# Photography Out of the Box

Diane Lea - Rio Rancho HS  
[www.highwayflower.com](http://www.highwayflower.com)

# Me...

BFA Graphic Design, 1993, University of Illinois Chicago

MA Art Education, 1999, University of New Mexico

21 years teaching experience @ Rio Rancho High School

RRHS Leadership Council, PLC leader for the Visual Arts,  
Instructional Leader for the Electives and World Languages,  
sponsor of NAHS chapter and Photography Club

Subjects taught: Graphic Art, Photography, Intro to Art, Drawing  
and Painting, AP Studio Art, museum and community arts classes  
in Albuquerque and Chicago

Member of NAEA/NMAEA since 2001. Attended and presented  
several workshops at NMAEA and CAEA (Colorado)

Served as High School Division Director for three years on the  
board of the NMAEA, 2013 - 2016

2012 NM Art Educator of the Year

2018 NMAEA President's Award of Distinction



# Me...

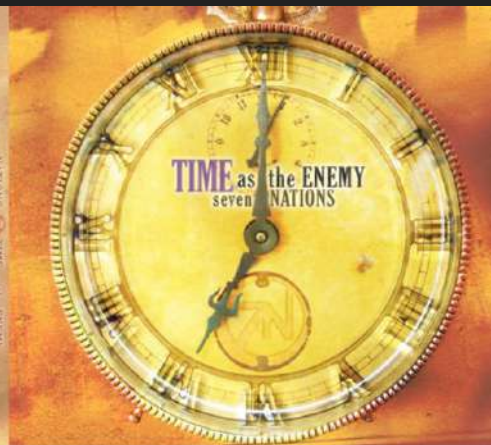
And when I grow up, I aspire to be a freelance  
designer/photographer.

Here's some of my photography:





And some of my graphic design:



### The Goal

The mission and outreach was building a community and the ultimate goal is to stop only the use of dogs in research, but all animals. Whether by policy passed or by law, the BFP's primary objective is to end the use of dogs in research and the related institutionalized animal experimentation in all its forms.



### Take Action

Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing.



Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing.

Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing.

Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing.

Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing.

Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing.


Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing. Be a Truther: True Beagles: They don't see speed as a virtue or against animal testing.




## BFP Fact Sheet



HAPPY THAT YOU'RE HERE  
ALLEN STREET  
IN DIFFERENT COMPANY  
PLANET  
FIDDE SET  
DISAPPOINTED  
MAYBE  
NO BATH  
MEXICO  
OFFERS  
NECESSARILY  
PPE SET  
LEARN TO LOVE  
ONE LAST CLIP  
HAPPY THAT YOU'RE HERE



## TALES FROM THE EIGHTH NATION



SEVEN NATIONS


I've been teaching photography for 10 of my 21 years.  
The following is an outline of the Intro to Photography  
class I have developed over those 10 years

Of the 12 semester-long course sections I teach each year,  
7 to 8 are Intro to Photo.


I restructured the existing program at RRHS to include the following courses. All levels use digital technology and every course above Intro also use analog processes:  
(all .5 credit)

Introduction to the Photographic Arts  
Photography 1  
Photography 2  
Photography 3  
Independent Study in Visual Arts  
AP Studio Art 2D Design

## INTRODUCTION TO THE PHOTOGRAPHIC ARTS



INTRO TO PHOTO GIVES STUDENTS AN INTRODUCTION TO THE TOOLS, PROCESSES AND IDEAS SPECIFIC TO THE PHOTOGRAPHER. DISCOVER YOUR INNER PHOTOJOURNALIST, COMMERCIAL, FOOD, SPORTS, ARCHITECTURAL OR ACTION PHOTOGRAPHER IN THIS CLASS, LEARN ABOUT PHOTO HISTORY AND CRITICISM, AND LEARN TO USE A DSLR CAMERA LIKE A PRO! PARTICIPATE IN A SCHOOL-WIDE ART SHOW AT THE END OF THE SEMESTER!



INTRO TO PHOTO OPENS THE DOOR TO THESE ADDITIONAL COURSES AT RRHS:

- \*PHOTOGRAPHY 1, 2 & 3
- \*INDEPENDENT STUDY IN VISUAL ART

COMPETE IN THE SCHOLASTIC ART COMPETITION, AS WELL AS OTHER DISTRICT, STATE AND NATIONAL ART COMPETITIONS!

# Intro to Photo (all-digital course)

## What is photography?

What does “exposure” mean? Lenses, shutter, aperture, filters.

Camera formats and types (35mm, DSLR, medium and large format, pinhole cameras, smartphones)

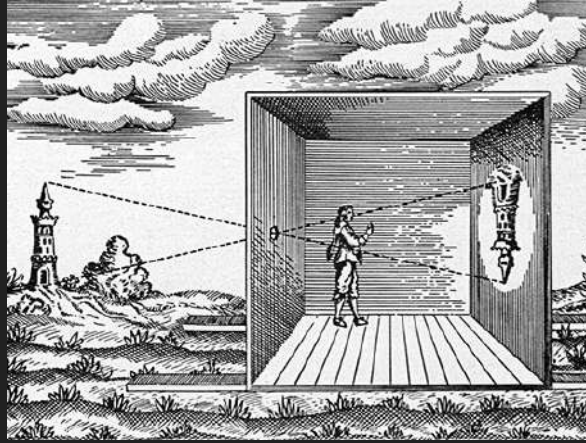




# Intro to Photo

## Photo history

Beginnings - Daguerre and Niepce - camera obscuras, calotypes by Henry Fox Talbott, the development of mass-produced cameras and film, color photography, different types of contemporary photography (photojournalism, portrait, commercial, architectural/landscape, scientific, art, etc.), 20th century, contemporary.





# Intro to Photo

## Composition

“You don’t take a photograph,  
you make it.” - Ansel Adams

How to look for elements and  
principles in your scenes and  
use them creatively to  
communicate your ideas



# Intro to Photo

## Composition

“You don’t take a  
photograph, you make it.”  
- Ansel Adams

COOPH®



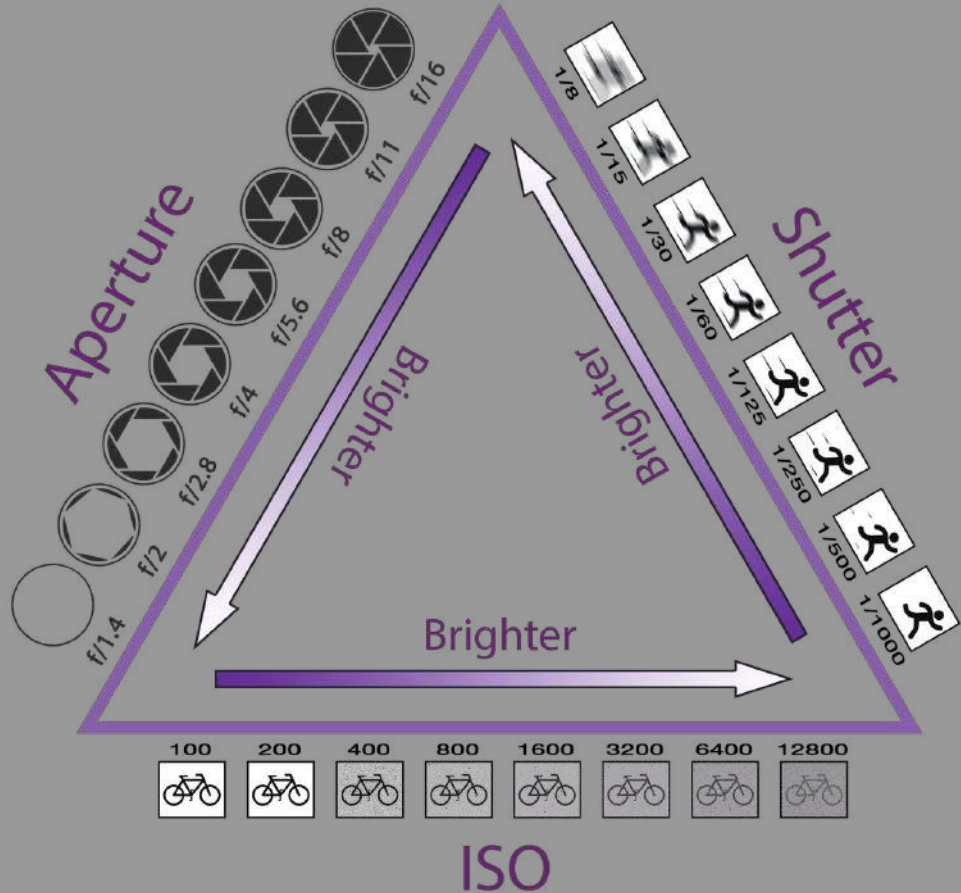
# Intro to Photo

## Basics of Exposure

Yes, the exposure triangle - so very important for kids to learn, even if they only camera they will ever use again is their smartphone

Exposure Modes:

M, Av, Tv, P, Auto



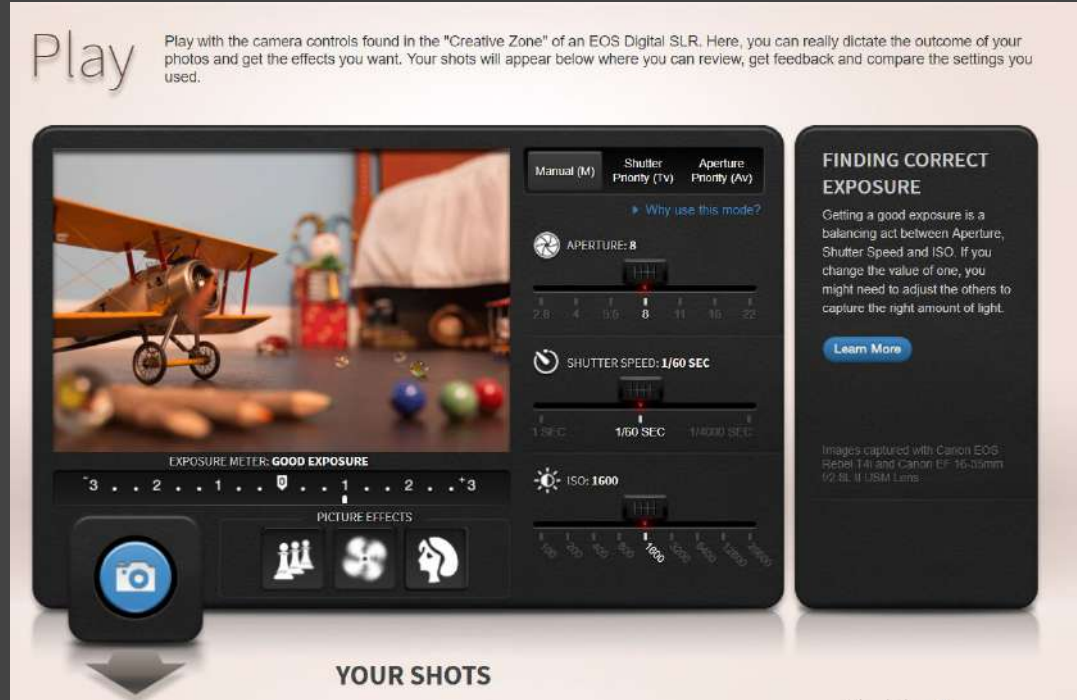
# Intro to Photo

Use a DSLR camera simulator to help kids practice using different shutter, aperture and ISO settings to learn exposure concepts

<http://www.canonoutsideofauto.ca/play/>

<http://bethecamera.com/>

<https://camerasim.com/camera-sim-free-web-app/>





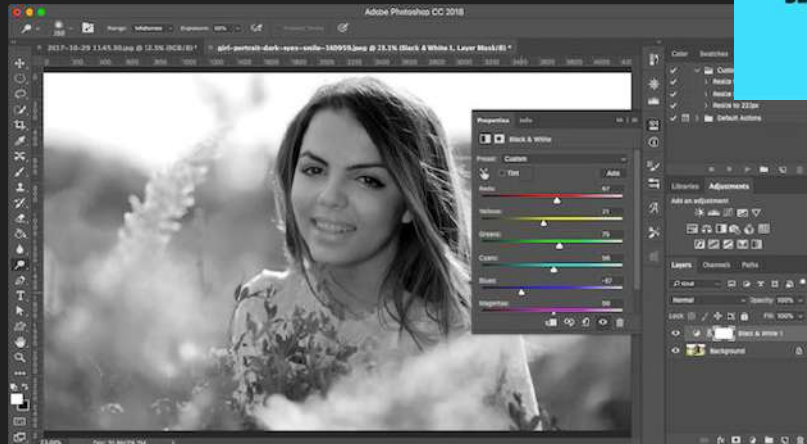
# Intro to Photo

## Digital photography

Camera types, imaging sensors, megapixels, file types, digital workflow (Photoshop and Lightroom).

This course take the state Digital Photography EOC

Students earn .5 Fine Arts or .5 Tech credit, both of which are required for graduation in RRPS



# Projects

## Bracketing

What it teaches:

How to read a light meter  
How to adjust exposure to  
take photos at ideal, over and  
under exposure





# Projects

## Composition

What it teaches:

Look for visual elements and principles that will eventually become second nature when you are shooting photos

Have them look for certain elements, or maybe a scavenger hunt to find them all.



# Projects

## Macro

What it teaches:

Using an automatic shooting mode  
(Close Up)

Using special effect lens filters -  
Macro/magnifying filter sets

Importance of depth of field and  
shutter speed

Looking at subjects in a unique way





# Projects

## Cyanotype/Sun Prints

What it teaches:

Witness the process of photo exposure right in front of your eyes

Gives digital natives a connection to the earliest days of analog photography and an eyewitness account of how a light sensitive surface responds to exposure.

# Cyanotypes

No darkroom needed

Some preparation required: prep chemicals (easy to do, indoors in low-light), brush on to surface (heavy weight paper, like watercolor or printmaking papers), allow to dry and store in light proof bags until exposure

Exposes in UV light; takes about 10 minutes on a sunny day - much longer on cloudy days (see my example); rinse in running water for about 5 minutes.

Can be created from a digital image made into a negative and printed on transparency

Chemicals can be purchased in powdered and liquid form. The Photographer's Formulary kit pictured to the right is easy to find. Jacquard also makes a liquid Cyanotype kit.



Powdered chemicals can be purchased and are more shelf-stable than pre-mixed liquid chemicals

- Jacquard
- Flinn Chemical Supply

For Potassium Ferricyanide solution:  
100ml room temperature water  
10 grams Potassium Ferricyanide  
Mix thoroughly

For Ferric Ammonium Citrate solution:  
100ml room temperature water  
25 grams Ferric Ammonium Citrate  
Mix thoroughly

Mix equal amounts of each to make cyanotype emulsion. Once the emulsion is prepared, use within a few hours.



# SolarFast

Jacquard also makes cyanotype chemicals and pre-treated cyanotype fabric.

They have another product called Solar Fast that is similar to cyanotype but is faster (the emulsion is exposed while wet) and comes in an array of colors. It can be used on a number of surfaces, from paper to cloth.

They have also developed a website where you can convert images to negatives, print via bluetooth or save to Google Drive.

<https://www.jacquardproducts.com/solarfast.html>

<https://www.jacquardproducts.com/cyanotype.html>





<http://www.jacquardsolarfast.com/>

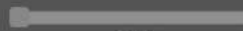
# JACQUARD SOLAR FAST™ *Negative Generator*



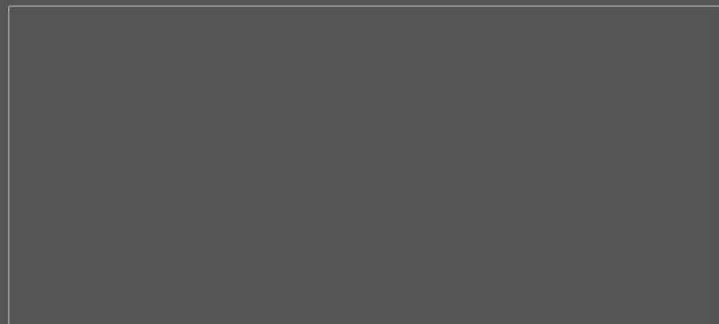
Brightness



Contrast



Scale



Digital Original



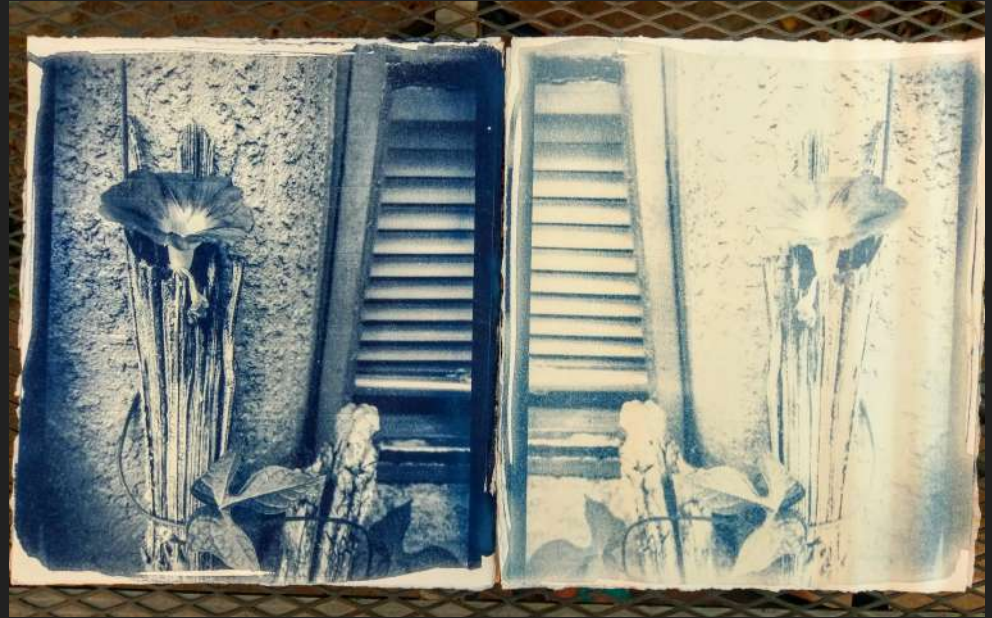
Negative on transparency



# Cyanotype after exposure



# Final Cyanotype Image



Left, a 10 minute exposure on a sunny day.

Right, a 20 minute exposure on an overcast day.

This process is much quicker when you have ample sunlight, but indoor UV lamps can also be used.



More Cyanotypes from Digital Negatives



Solar Fast Print from same negative





# Sunprints

No darkroom needed

Paper is pre-treated and ready to expose - this is MUCH easier with larger numbers of students

Faster process - exposes in UV light; takes about 2 minutes on a sunny day - longer on cloudy days; rinse in running water for about 1 minute.

Can be created from a digital image made into a negative and printed on transparency. You can also have students collect leaves and other natural objects around campus and make photograms, or cut out a design from paper (use a dark color - black if possible- to prevent exposure to areas being covered by the paper.



# Sunprints

## Supply list:

Sunprint paper, pre-treated

Cardboard (about 8x10")

Pins or glass/plexi to hold objects down  
(make sure glass/plexi is not UV  
protective)

Trays (placed in sinks is most ideal since  
running water is best) for rinsing prints

Objects to create shadow print

OR

Acetate with drawing created on it with  
sharpie OR

Photographic negative on transparency  
OR

Design cut out of paper



# Student Work: Cyanotypes from smartphone photos, Intro to Photo





# Student Work: Cyanotypes from smartphone photos, Intro to Photo





# Student Work: Cyanotypes from scanned film negatives, Photo 1



# Student Work: Sunprints from found objects, Intro to Photo





Questions, comments, keep in touch!

[diane@highwayflower.com](mailto:diane@highwayflower.com)

[www.highwayflower.com](http://www.highwayflower.com)

Instagram: [highwayflower\\_art](https://www.instagram.com/highwayflower_art)

