GLOBE ZIKA EDUCATION AND PREVENTION

Video Technique Course

Sponsored by: NASA   Supported by: NSF   NOAA   Department of State   Implemented by: UCAR

GLOBE Zika Education and Prevention Video Technique Course

Goal

Create a 2-minute video documenting your experience using the GLOBE Observer Mosquito Habitat Mapper Tool and how it has impacted you and your communities in the context of Zika education and prevention.

Guiding prompts for your videos:

- How is your local environment affected by Zika and mosquitoes?
- What is the social importance of studying Zika and mosquitoes?
- How does Zika affect your community?
- Why is it important to educate about and prevent Zika?
- How was the Virtual Exchange experience important to you?
- How has the Zika Education and Prevention project benefited you/your community?
- How has the GLOBE Observer Mosquito Habitat Mapper Tool benefited you/your community?
- How do you see the effects of eliminating mosquito breeding sites in your community?
- How has this project helped you help your community?
- How has this project impacted you and your community's environmental awareness?

Project Checklist

- Canon Vixia HF R800 camcorder, battery pack, memory card, and charging cable
- OpenShot software: https://www.openshot.org/download/
- Project website: https://www.globe.gov/mosquitoes-students

Where will my video go?

Videos may be uploaded to a YouTube playlist. Some videos may even be placed on the GLOBE Implementation Office YouTube channel!

Introduction to Your Camera

1. **Setting Up the Camera**

   - ☐ Label your memory card
   - ☐ Label your camera
   - ☐ Label your battery
   - ☐ Open the "Live Preview / Touch Screen" and insert your memory card
   - ☐ Attach the battery
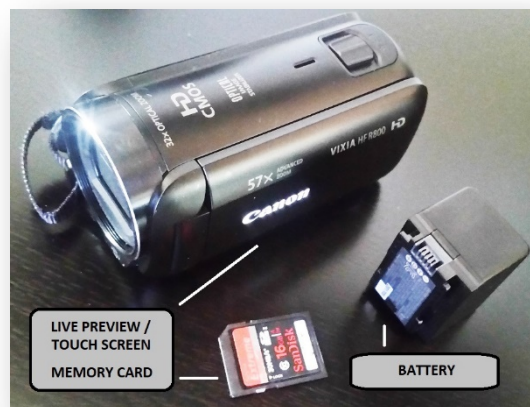
2. **Programming the Camera**

   - ☐ Turn camera on by opening the "Live Preview / Touch Screen" or pressing the "ON/OFF" button
   - ☐ Set language to English
   - ☐ Set date and time
   - ☐ Press the "Home" button and swipe left to "Video Quality"
   - ☐ Select 4Mbps "Long Play" at the GLE *and up to 24Mbps "High Quality" when recording at home*
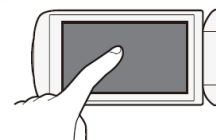
3. **Using the Camera**

   - ☐ Turn the camera on
   - ☐ Open the lens cover
   - ☐ Practice holding the camera at eye level with one hand
   - ☐ Practice holding the camera at waist height with two hands
   - ☐ Practice zooming in and out on a faraway object (tap the screen to focus)
   - ☐ Practice panning side to side and up and down
   - ☐ Practice recording a video by pressing the red "START/STOP" button to the right of the battery
   - ☐ Practice taking a photo by pressing the "Photo" button in the lower left corner of the "Live Preview / Touch Screen" screen
   - ☐ Review your video and photo by pressing the "Playback" button on the side of the camera
   - ☐ Press the "Home" button to switch between "Movie Playback" and "Photo Playback"
   - ☐ Press the "Playback" button again to switch back to recording mode
   - ☐ Complete the "Practice Using Your Camera" activity with a partner

Camera Names of Parts

Back view

1 LCD touch screen
2 ACCESS indicator
3 ZOOM (W: wide angle / T: telephoto)
4 POWER/CHG (charge) indicator:
Green - On; Red - Charging
5 Battery attachment unit
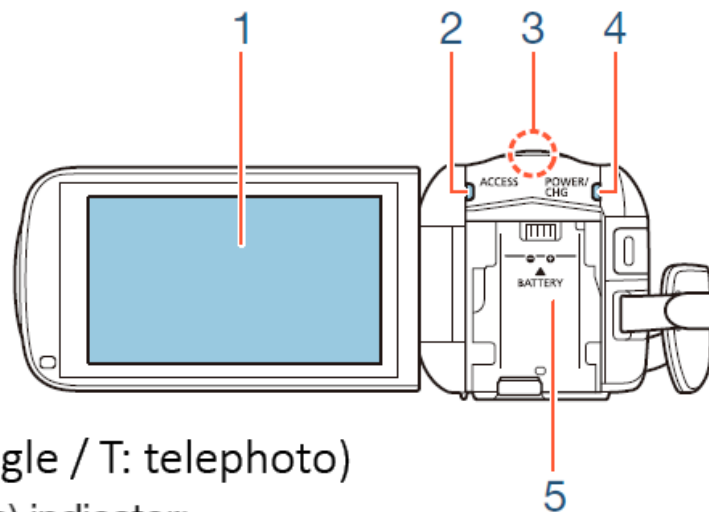
VIXIA
HF R800
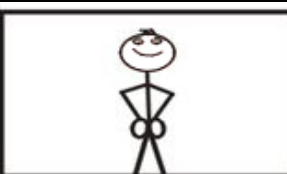
Left side view
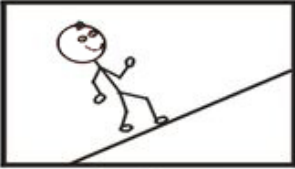
1 ▶ (playback mode) button
2 ON/OFF button
3 Memory card slot cover
4 Memory card slot
5 MIC (microphone) terminal
6 AV OUT terminal/∩ (headphones)
7 HDMI OUT terminal
8 USB terminal
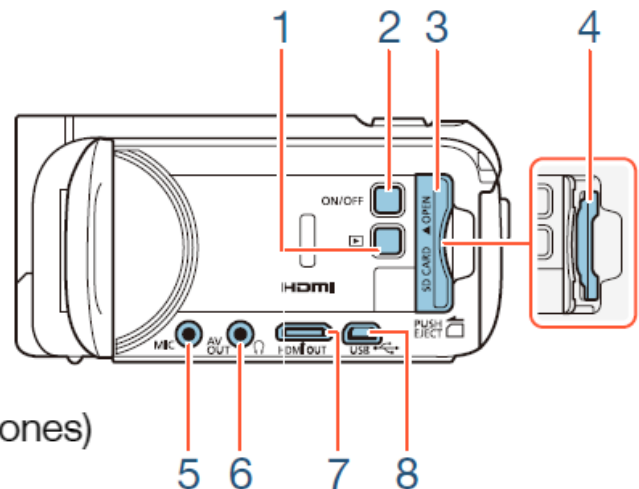
Practice Using Your Camera

1. Pick a subject (another student, an object in the room, etc.)
2. Practice recording a variety of shots of your subject

Shot Type	How to Take the Shot and Why	Example	Done?
Wide	*How*: Show the subject from a distance. *Why*: Helps to establish the scene and space of an area.		☐
Medium	*How*: Frame your subject from the waist up. *Why*: Good for interviews and for capturing action.		☐
Close-up	*How*: Fill the frame with part of your subject. *Why*: Shows expressions and directs attention.		☐
Extreme Close-up	*How*: Fill the frame with a small area or detail of the subject. *Why*: Creates intimacy and connection.		☐
High Angle	*How*: Shot is taken from above eye level. *Why*: Can make the subject look small and vulnerable.		☐
Low Angle	*How*: Shot taken from below eye level. *Why*: Can make the subject look large and more powerful.		☐

Slanted (Dutch tilt)	***How***: Shot is not lined up horizontally. ***Why***: Can add a feeling of drama or excitement.		☐
Center Composed Interview	***How***: Person stands in the center of the frame and speaks directly to the camera. ***Why***: Good for explanations or to make a strong emotional connection.		☐
Long Sided Interview (and Rule of Thirds)	***How***: Frame your subject on the left or right third of the screen and have them look toward the long side of the frame as they speak. ***Why***: Allows the background to add to the person's story. Feels less confrontational.		☐
Over the Shoulder	***How***: Medium shot of subject while looking over the shoulder of another person. ***Why***: Shows dialogue and community interaction. Can involve more than two people.		☐

Special Video Techniques		
Still	***How***: Practice using an object, such as a table, chair, or handrail, to stabilize the camera so there is no movement. ***Why***: Good for set up shots or for extreme close ups to avoid shake.	☐
Pan	***How***: Medium or wide shot moving left or right. ***Why***: Good for tracking a moving subject or creating a sense of place.	☐
Tilt	***How***: Medium or wide shot moving up or down. ***Why***: Creates a dynamic sense of place.	☐
Zoom	***How***: Do a slow, steady, and consistent zoom in or out. ***Why***: Can help create a dynamic sense of place or direct attention.	☐
Follow	***How***: The camera follows behind a person as they walk around. ***Why***: Helps establish connection by seeing the subject in action.	☐
Walk and Talk	***How***: Walk with a person while they talk. ***Why***: Emphasizes how active and busy the subject is.	☐
Point of View	***How***: Position the camera between the subject and what the subject is looking at. ***Why***: Brings the viewer into the subject's reality. Good to pair with a shot of the subject's reaction.	☐
Flip the LCD	***How***: Turn the LCD viewfinder 180 degrees to let your subject see themselves on the screen. ***Why***: Can create an emotional reaction of surprise, smiling, or laughter.	☐

Video Recording Tips

There is a lot to pay attention to when recording video. Here are some tips to help you capture good usable footage.

Think like a Videographer.

- **Be respectful**: Ask permission before recording another person and stay out of the way. The camera should not be the subject or interfere with the action.
- **Develop awareness**: Anticipate the moment! Capturing great footage is about being in the right place at the right time. Story always beats technique.
- **Get close:** Recording people can feel embarrassing and intimidating. Try to overcome this discomfort and get closer to your subject. It will help tell a more personal story.
- **Use your body:** Bend your knees, use both hands, twist your waist.
  - Your body is an extension of your camera. Use it to get your camera in the right place!
  - Zoom can make getting far away shots easier but too much zoom can create a distracting and disorienting feeling. Use your feet instead!
- **Shoot for the edit:** Planning your shots can save lots of time when you sit down to edit.
  - Use your shot list and plan to get specific shots that will help tell a story. You don't need to record everything!
  - Record a few extra seconds before and after your shot. This will help to avoid abrupt transitions when editing.

Technical Tips.

- **Audio:** LISTEN! Bad audio can be more distracting than bad video. _Get close_ and pay attention to distracting sounds like wind, cars, and dogs barking.
- **Lighting:** Use natural light whenever possible.
  - Avoid harsh shadows (midday) and backlighting (shooting towards the sun).
  - Shoot during the "Golden Hour", the hour just before sunset or just after sunrise, to give a warm color and pleasing feel to the footage.
  - Shoot during the "Blue Hour", the hour just after sunset or just before sunrise, to give a cold color and rough feel to the footage.

- **Stability:** Shaky video can be distracting.
  - Shooting hand held adds a natural feel and allows for interesting framing, but use both hands and shoot with a wide angle to avoid shake.
  - When possible, use a tripod or other object to keep the camera from moving. Stability is extremely important when using zoom!
  - Zoom can make getting far away shots easier but too much zoom can create a distracting and disorienting feeling. Try to avoid using zoom!
- **Composition**: Look for different types of lines in your frame. Lines can direct attention and help create certain emotions.
  - Vertical lines emphasize strength and power.
  - Horizontal lines emphasize stability and security.
  - Diagonal lines can add drama and excitement.
  - Curved lines emphasize nature and relaxation.
- **Depth**: Think about what is in the frame in front of your subject or behind your subject. Adding objects to the foreground or background can help tell a more complex story.
- **Rule of Thirds:** Unless intended, avoid putting the subject directly in the middle of the shot. Frame your subject on either the left or right third of the screen so that more of the background can fit into the picture and help tell the story.

- **Photography**: Video is photography too! Sometimes still images can capture a moment better than video so don't forget to use the photo feature on your camcorder. Smart phones can also capture photos and video. Just remember to turn them sideways!
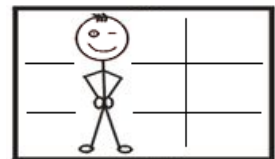
LIKE THIS
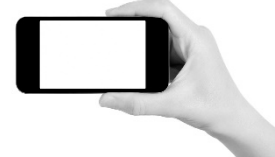
These are motor skills so PRACTICE!!!

The Basic Film Paradigm

A good story has a set-up, a challenge, and a conclusion. Can you identify these three parts?

The Basic Film Paradigm

Plot Point #1   Plot Point #2

Ascending Action   Decending Action

Set Up
Introduces the situation, characters, and guides us into the main body of the conflict of the story.

Confrontation
The real "meat" of the conflict of the story.

Resolution
The outworking of the story.
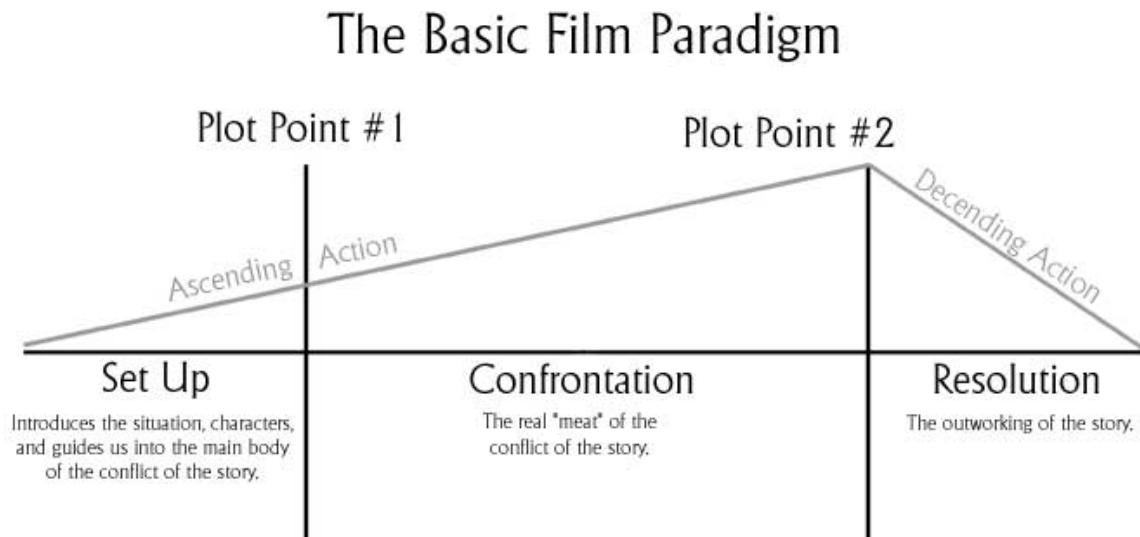
Where is the video taking place? Who is involved and what are their challenges?

Describe the Set Up of the video.

What is the challenge, or confrontation, faced by the person, or community, in your video?

Describe the Confrontation of the video.

What will be the end of your video? What have you learned? Has anything been resolved?

Describe the Resolution of the video.

Practice Shot List

Make a short video to practice using the camera!

Monday

Initial remarks	Wide Shot	Medium Shot	Close-up	Post- remarks

Tuesday

Initial remarks	Wide Shot	Medium Shot	Close-up	Post- remarks

Wednesday

Initial remarks	Wide Shot	Medium Shot	Close-up	Post- remarks

Edit Your Video with OpenShot

1. **Download footage**
   a. Connect a USB cable from the camera to laptop
   b. Turn on camera and press the Playback button
   c. Navigate to the Windows desktop on your laptop
   d. Create a folder titled "FOOTAGE"
   e. Click on Canon VIXIA HF R800 from the side menu and open the DCIM folder
   f. Drag all the folders to the FOOTAGE folder
2. **Import footage**
   a. Click on "File" from the top menu and select "Import Files"
   b. Navigate to your desktop and open the folder titled "FOOTAGE"
   c. Select all the media files and click "Open"
3. **Add footage to timeline**
   a. Select "Video" from the Project Files menu
      i. Right click on each video file and select Preview File
      ii. Select the video files you want to use and drag them to Track 1
   b. Select "Image" from the Project Files menu
      i. Right click on each image file and select Preview File
      ii. Click on the image files you want to use and drag them to Track 2
4. **Arrange footage**
   a. Click and drag the video and image clips on their timelines until you have them arranged in an order you prefer (make sure there are no empty spaces)
5. **Add audio to timeline**
   a. Select "Audio" from the Project Files menu
   b. Right click on each audio file and select Preview File
   c. Select the audio file you want to use and drag it to Track 0
6. **Cut the footage**
   a. Click and hold the edge of each clip and drag left and right to adjust its length
   b. Adjust the length of each media clip until you have one minute of content
7. **Add transitions**
   a. Click on "Transitions" from the timeline menu
   b. Select a transition and drag it to the break between two video and/or image files
   c. Click on the edge of the transition and drag left or right to adjust its length
8. **Export the video**
   a. Click on File from the top menu and select "Export Video"
   b. In the Export Video window that appears select the following options:
      i. Enter a File Name for the video
      ii. Change the Folder Path by clicking on "Browse…" and selecting the desktop
   c. Select "Profile: All Formats"
   d. Select "Target: MP4 (h.264)"
   e. Select "Video Profile: HD 720p 30 fps (1280x720)"
      f. Select "Quality: High"
      g. Click on Export Video
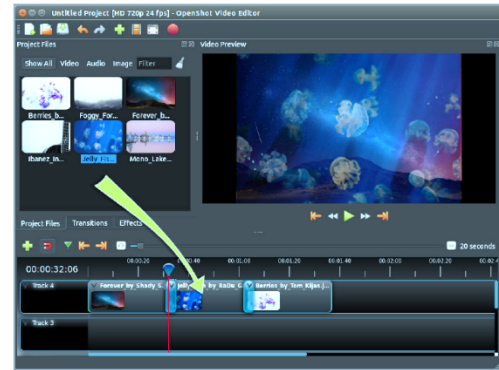
OpenShot Video Editor Overview
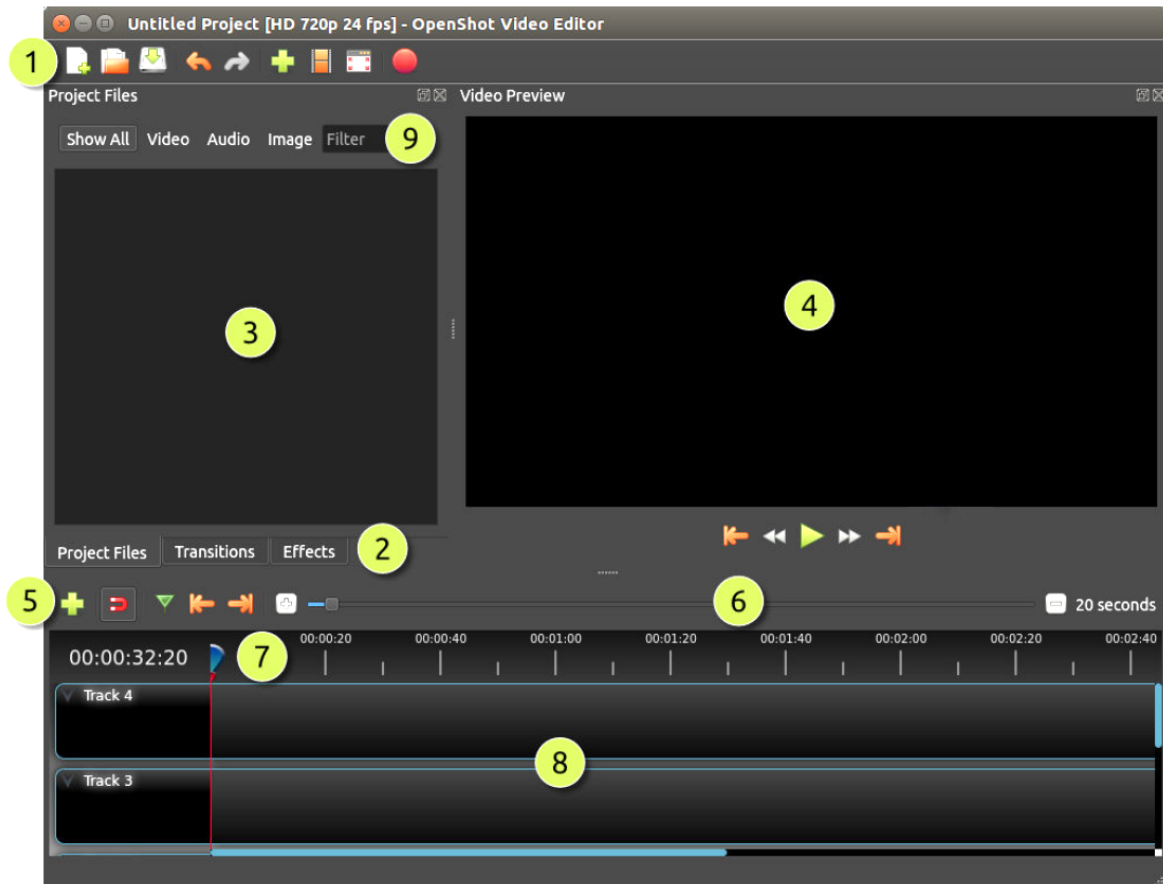
#	Name	Description
1	Main Toolbar	Contains buttons to open, save, and export your video project.
2	Function Tabs	Switch between Project Files, Transitions, and Effects.
3	Project Files	All audio, video, and image files that have been imported into your project.
4	Preview Window	This is the area that the video will playback on the screen.
5	Edit Toolbar	This toolbar contains buttons used for snapping, inserting markers, and jumping between markers.
6	Zoom Slider	This slider will adjust the time-scale of your timeline.
7	Play-head / Ruler	The ruler shows the time-scale, and the red line is the play-head. The play-head represents the current playback position.
8	Timeline	The timeline visualizes your video project, and each clip and transition in your project.
9	Filter	Filter the list of items shown (project files, transitions, and effects) by using these buttons and filter textbox. Enter a few letters of what you are looking for, and the results will be shown.

Create a Storyboard

Draw and describe the different scenes in your video.

Set Up		
Scene 1	*Scene 2*	*Scene 3*
Description:	Description:	Description:

Confrontation		
Scene 4	*Scene 5*	*Scene 6*
Description:	Description:	Description:

Resolution		
Scene 7	*Scene 8*	*Scene 9*
Description:	Description:	Description:

Storytelling with Video

The goal of your video is to describe your experience using the GLOBE Observer Mosquito Habitat Mapper and how it has impacted you and your communities in the context of Zika education and prevention.

Let's begin by identifying your community.

List places in your community.	*List people in your community.*

Describe the challenges faced by the people in your community because of the Zika virus.

Challenges faced by the community.	*Challenges faced by people in the community (pick a specific person).*

How can use of the GLOBE Mosquito Habitat Mapper help resolve these challenges?

Describe how using the Mapper will help/has helped the community.	*Describe how you will use the Mapper to help your community.*

Planning Your Shots

Type of Shot	Video Technique
Wide	Still
Medium	Pan
Close-up	Tilt
Extreme Close-up	Zoom
High Angle	Follow
Low Angle	Walk and Talk
Slanted (Dutch tilt)	Point of View
Center Composed Interview	Flip the LCD
Long Sided Interview	
Over the Shoulder	

A-Roll: This is footage of the main character, or characters, in your video. Your confrontation and resolution should have plenty of A-Roll footage.

Describe the A-Roll footage you will use in your video.

What types of shots and video techniques will you use to capture A-Roll footage?

B-Roll: This is footage that helps describe the place and the challenge. Your B-Roll footage will help create the set up and move the story along. It will also help create transitions when editing.

Describe the B-Roll footage you will use in your video.

What types of shots and video techniques will you use to capture B-Roll footage?

Shot List (use this page at home!)

Plan and document the video you want to record.

Day 1   Date:

Initial remarks	Wide Shot	Medium Shot	Close-up	Post- remarks

Day 2   Date:

Initial remarks	Wide Shot	Medium Shot	Close-up	Post- remarks

Day 3   Date:

Initial remarks	Wide Shot	Medium Shot	Close-up	Post- remarks

Day 4   Date:

Initial remarks	Wide Shot	Medium Shot	Close-up	Post- remarks