### Review:

Students have watched several videos and they have created lists of things that they love and things that break their heart. We have discussed lots of different ideas and brainstormed types of projects that would go with those ideas. During the 2nd session, students made a list of 5 different ideas that they are interested in and various presentations they could create from those ideas.

# Modeling:

I will share my top 5 ideas with the class. I then narrow it down to the one idea that I am most interested in exploring. I draw a concept map with my idea in the middle. Finally, I come up with 4 different categories that branch off of that bigger idea and some of the specifics that branch off of those categories. (My topic was sports photography and I was able to narrow it down to areas such as lens, sports, types of photos taken, best aperture, etc. We then added specific details inside of each of those areas: sports (basketball, soccer, football..., types of photos: still shots, action photos, posed...)

## Independent Work:

Students will refer back to their "Personal Brainstorming" worksheet (see Session Two), which lists 5 different topics that they have some interest in researching. They will choose the one topic they are the most interested in to create a concept map. This may take them some time. Encourage them to discuss their topics with their teammates and to browse areas on the internet for ideas (pinterest, twitter, blog posts through feedly.com, etc.).

# Narrowing down topic:

Now that they have a general view of their topic, they need to narrow it down for research. Ask them to start by highlighting one of the smaller clouds (details) that most catches their interest. On the back of their concept maps, I asked students to write "I wonder" statements. This is just what it sounds like, statements that show what they really wonder about regarding their topic. (For example, I am most interested in learning more about taking action photos during soccer games. My I wonder questions were: I wonder how I can control the amount of blur in photos. I wonder what controls I should learn more about so I can take better pictures at night versus sunlight.)

### **Essential Questions:**

Finally, we discussed what essential questions are and how helpful it will be to have an essential question during this project. I met with students individually following this mini-lesson to discuss their personal essential questions.