TEACHING PHYSIOLOGICAL CONCEPTS BY ENHANCING STUDENT VISUAL LITERACY

KATIE JOHNSON
ASSOCIATE PROFESSOR OF BIOLOGY
BELOIT COLLEGE, BELOIT, WI
KATIE

Mint Chip
VISUAL LITERACY

Accurate and intentional observation followed by critical analysis of images or objects.
Are you ready?
How was it?
Hard?
Easy?
Why?
Young kids are REALLY GOOD at this exercise!

Are you ready?
IN SMALL GROUPS...

1. Move chairs to surround a plastic bag
2. Introductions
3. Assign roles
   a) Recorder
   b) Enforcer
   c) Reporter
1. What do you see?
1. **What do you see?**

2. **What can you conclude?**
1. What do you see?
2. What can you conclude?
3. What are the assumptions that contributed to your conclusions?
1. What do you see?
2. What can you conclude?
3. What are the assumptions that contributed to your conclusions?
4. How did your personal experience shape these assumptions and your conclusions?
1. What do you see?
2. What can you conclude?
3. What are the assumptions that contributed to your conclusions?
4. How did your personal experience shape these assumptions and your conclusions?
5. What does this have to do with being a scientist?
What are the learning outcomes for these activities?
1. Practiced reflection (understanding our own learning process)

2. Apply concepts to novel situations (critical thinking, pattern recognition)

3. Creating and defending an argument

4. Articulate how past experiences, social identity, and diversity affect
   A. team dynamics
   B. learning
   C. data interpretation
   D. decision-making

5. “Practiced” creativity?
How does this transfer to the physiology classroom?
What do you see?

What do you conclude?

What are your assumptions?

Deaths from Cardiovascular Disease
United States: 1900–2006

Source: NCHS.
Note: Cardiovascular disease does not include congenital heart disease.
What about your classroom?
Questions?
Comments?