Technology Connects / Technology Divides
An Inquiry Lesson for 7th – 12th Grades
By Ethan Delavan

Objective: Students will apply metacognition to conduct an inquiry into the effects of technology as a unifying or divisive force in their relationships with others, while critiquing source information and supporting a call to action with visual displays.

Inquiry Question: Does the technology we've created bring us together as a society, or does it push us apart?

Materials: Internet research access and digital presentation tools.

Preparation:

Create a digital presentation for your students which demonstrates either that technology pulls us together as a global community or that it tears us apart. Your presentation should model how they might present their own findings. It should be visually engaging, relevant to the age group you are trying to reach and controversial.

For example, you might highlight conclusions from the Kaiser Family Foundation about youth media consumption. Their research found an inverse proportion between hours of media consumption and personal contentedness. Or you might document the work of William Kamkwamba, a rural African youth who used any media he could find to create a hand-built, wind-powered electric generator for his village. (See **Resources**.)

Be sure to address the authority of your sources and the limits of your findings. Why should we believe the people whose research you're quoting? What does their research demonstrate and **not** demonstrate? What action should we take based on these findings? Ideally, the action you suggest will require your audience to take responsibility for something they took for granted, such as new limits on their media consumption or addressing real needs in their own community.

Activities:

1. Open your topic to discussion and questions. Validate views that disagree with your conclusions and your call to action. When a student is able to articulate a specific objection to or corroboration of your findings, elicit discussion by asking for a show of hands for agreement and for disagreement. Don't try to reach consensus. Ideally, move to the next stage **before** students seem to feel the topic is fully explored.
2. Shift the discussion to your presentation itself. Ask the students to discuss what parts of your presentation were most effective and least effective. Did any of them change their point of view or have an "aha" during your

presentation? In what part of the presentation did they have that experience, and what specific piece of your presentation triggered their reconsideration? Did their realization feel like surprising news about a certain statistic, or did it trigger a new understanding of their own experience? Did any parts of the presentation seem contrived or unconvincing? Challenge them to articulate why those parts were ineffective. Depending on the personality of your group, it may be necessary to frame discussion of the ineffective parts with the goal of making the presentation better.

3. Inform the students they will each present before the class. Using an example, they will need to show either that technology connects us or that it divides us. They will lead a discussion of their chosen issue, and they will invite critique of their own presentation.

4. Have students make a list of what interests them most about technology. This may be specific media content, such as a band or a show. It may be the difference between how they and their parents/grandparents use technology or feel about the use of technology. It may be how technology is used (or prohibited) at their school. Or it may be how technology has been used to include or exclude others from peer groups. Their list should include 3-5 ideas about which they feel strongly.

5. Have them circle their favorite and begin research. What documentation can they find on this issue? If possible, work with a librarian to enrich the variety and authority of the sources. Have them fill out the Source Critique Worksheet (below) for each source they want to use. Depending on your available time, they might work with one strong source or many sources.

6. Challenge them hone in on visual materials that demonstrate what they want to convey. How will each chart, diagram, photo, artwork or cartoon help them reach the imagination of their audience? How will it help their call to action become more compelling?

7. As they put together their digital presentation, have them practice it silently in class, in a private space or at home. Ask them to consider what is most compelling when shown on screen and what is most compelling when spoken aloud, using gesture and tone of voice. How can their voice and body draw effective attention to the meaning of their visuals? What technical considerations do they need to put in place for their presentation?

8. Help the students decide who will go first. During the presentations, sit at the back of the room if possible. Encourage each student to open post-presentation discussion on his/her own. Have the presenter restate what audience members are saying to facilitate specificity and understanding.

9. Help each presenter to sense an appropriate time to shift discussion to his/her presentation itself. It may be necessary to require audience members to rephrase their comments toward the goal of making the presentation better.

10. After each of the presentations is done and while the experience is fresh in his/her mind (possibly as homework), have each presenter fill out the Roundup Questions, below.

Extensions:

To use this as a media production unit, have the class produce all of their visual materials from scratch. This might include a banner, background or icon that "brands" their presentation, offering an impression of unity and authority. Discuss the effectiveness of this branding.

To deepen the research component of this unit, introduce search operators for the search engines and/or databases you'll have them query. Have them visualize their ideal search result and what specific terms it would likely contain. Have the students compile a brief profile of each of their source's authors. Have them keep a bibliography as their final slide.

To finalize the students' work as a standalone media piece, have them write a brief essay based on their talk and discussion. Then use a word processor, publishing software or web-based framework to compile all the text and visuals as a collected survey of technology's potential as a divisive and unifying force.

Resources (possible issues for the teacher's presentation):

- Kaiser Family Foundation
    - Generation M2: Media in the Lives of 8- to 18-year-olds
        - http://www.kff.org/entmedia/upload/8010.pdf
    - http://www.kff.org/entmedia/index.cfm
- William Kamkwamba: The Boy Who Harnessed the Wind
    - http://williamkamkwamba.typepad.com/williamkamkwamba/
    - http://movingwindmills.org/documentary
- Digital media and the Arab spring
    - http://blogs.reuters.com/great-debate/2011/02/16/digital-media-and-the-arab-spring/
- Contagion and suicide among the young
    - http://abs.sagepub.com/content/46/9/1269.short
- Media influence and body image in 8–11-year-old boys and girls
    - http://onlinelibrary.wiley.com/doi/10.1002/1098-108X(200101)29:1%3C37::AID-EAT6%3E3.0.CO;2-G/abstract
- Guyland: The perilous world where boys become men
    - http://www.guyland.net/
- Reviving Ophelia: Saving the selves of adolescent girls (video interview)
    - http://www.marypipher.net/Mary_Pipher/Revvid.html

Worksheets:

The worksheets below should be fairly informal. They could be in the form of a blog post, an email to the teacher or even a chat with a fellow student.

Source Critique Worksheet

What is the URL of your source?

Who authored this source? What experience and/or training makes them knowledgeable about this issue?

Who is paying for their work?

Are they trying to convince you of something? Of what? How are they trying to convince you?

What kind of evidence would **rebut** what they're trying to say?

<u>Roundup Questions</u>

Your answers to these questions may be something very moving to you, or something quite small. Either way is fine. The main thing is to be specific about your journey through this work.

What was the most surprising thing that happened during your presentation and discussion? What did you learn from that?

What did you find in your research that was unexpected? What was it in your mindset before that that made it surprising?

What was easy to show in your presentation? What was difficult?

How have your feelings about technology in your world changed over the course of this assignment? What prompted the change?