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| **Title** | Making Your Point Without Making An Enemy |
| **Introduction** | This lesson is part 2 of a unit on Global Collaboration that uses the topic of Water Quality to teach the skills of a modern workplace.  Twenty-first Century Skills are focused on the universal proficiencies that all productive adults will need in their professional lives.  Foremost among these is the ability to communicate effectively within a group.  Students must be aware of, and take into consideration, the variety of personalities and viewpoints that their team members will bring to any conversation.  In this lesson, students take part in a digital conversation using the Voicethread web-based tool.  This web application offers students a place to create slideshows of images and videos, and then engage in multimedia conversations (text, audio, and/or webcam video) around that imagery. |
| **Curriculum Alignment** | *Eighth Grade Science Essential Standards*  8.E.1.3  Predict the safety and potability of water supplies in North Carolina based on physical and biological factors, including:   * Temperature * Dissolved oxygen * pH * Nitrates and phosphates * Turbidity * Bio-indicators   8.E.1.4  Conclude that the good health of humans requires:   * Monitoring of the hydrosphere * Water quality standards * Methods of water treatment * Maintaining safe water quality   *Eighth Grade Language Arts Common Core Standards*  SL.8.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others’ ideas and expressing their own clearly.   * Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. * Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. * Pose questions that connect the ideas of several speakers and respond to others’ questions and comments with relevant evidence, observations, and ideas. * Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented. |
| **Time Required and Location** | Two-three class periods (120-180 minutes total) |
| **Materials Needed** | * Computer folder of images for student use (optional). These images should stimulate conversation about water quality. Consider images of dirty water or dead fish, or of the causes for pollution. * 1 copy of the set of Discussion Samples per group * Poster paper, sticky notes, and glue/tape   Technology Resources   1. Internet-connected computers for students use 2. Microphones and/or webcams for commenting (optional) |
| **Participant Prior Knowledge** | Student must be familiar with Voicethread. It is recommended that student accounts be created in advance and that students get a chance to explore the tool before beginning this lesson. |
| **Activities** | *Exploration*   1. Using an LCD projector, show students the Voicethread that you have made with images about water quality and initial questions that you have composed to elicit conversation.  These questions should invite students to examine the images and comment on how they relate to what they’ve learned about water quality.  See the example for ideas: http://voicethread.com/share/2169503/. 2. Give students sufficient time, either in class (if enough computers are available) or at home, to add their own comments to each slide.  Comments must include three components: a reference to something in the image, an expression of the student’s thinking, and an open-ended question to stimulate further discussion.  For example, “This map looks interesting.  It looks like the coastal areas have more pollution.  Why would that be?” 3. During step 2, if possible, seed the conversation with examples of inappropriate comments using an alias.  Demonstrate rude behavior as well as irrelevant or unsubstantiated comments.  For example, responding to a student’s comment with “You don’t sound very smart.” or “I think like the man with the blonde hair because he looks like my uncle.” 4. After every student has had an opportunity to participate, ask students to complete the sentences “I know \_\_\_\_\_\_.” and “I wonder \_\_\_\_\_\_\_.” about online communication in a forum like Voicethread.  Their answer may be written in notebooks, discussing orally, or posted online.   *Model System*   1. Explain to students that for their next task, they will create their own Voicethreads individually.  They must find 4-6 images displaying human activities that affect water and the impacts of these activities (These images might be provided as part of a selected image bank, if the teacher would prefer).  Following your model from the Exploration activity, students must post an initial comment on each voicethread slide that asks a discussion question. 2. After the Voicethreads have been created, direct students to engage in the same commenting as they did earlier.  Each student must add a comment to at least one slide from at least three different Voicethreads. 3. As before, try to add example of inadequate or inappropriate comments to the slides, as well.  Note the responses of students to your comments.  This will be the topic of a subsequent discussion.   *Content Wrap-Up*   1. Students complete 3-2-1 activity, summarizing the outcome of the Voicethread conversations by writing out 3 rules that we should follow for respectful and constructive online communication, 2 things that they would do differently if asked to complete this task again, and 1 topic that they would like to discuss in this way in the future (science or non-science). 2. Each member of a group shares their 3-2-1 responses with the group, and group attempts to determine top 5 consensus Conversation Guidelines. 3. Groups report out Conversation Guidelines, and class chooses which ones (up to 5) will be used from now on in the class’ online conversations.   **Guided Practice**   1. Hand out the four Discussion Samples, one set per group.  Ask each group to read them carefully and then put them in order from the best example of appropriate discussion to the worst example.  Ask them to be prepared to explain and defend their ranking. 2. Give out large sheets of poster paper and ask students to mount the samples, with the best sample in the top left with a brief explanation to the right.  The next best sample should be mounted just below the first, and so on. 3. Have students do a Gallery Walk to read each of the posters and add sticky notes with their constructive comments. |
| **Assessment** | The best assessment of this activity is a written or oral explanation by each student of the reasoning and thinking behind the Conversation Guidelines. I suggest a brief “interview” with each student while they are working on the Content Wrap-up or Guided Practice. Or, collect a written response to the question “Why did we choose the specific Conversation Guidelines that we did, and how would we expect a digital conversation to look?” |
| **Modifications** | If using Voicethread is not possible, consider substituting presentation software (e.g. MS Powerpoint) with printed slides and “sticky note” comments.  Struggling learners will benefit greatly from the ability to comment using their voices, so every effort should be made to acquire computer microphones for this activity.  Voicethread has released an iOS application (for Apple iPod touch, iPhone, and iPad) that makes it possible to capture audio and video comments (as well as create voicethreads) in a mobile environment. This alternative would greatly enhance the activity for handicapped students. |
| **Critical Vocabulary** | respect: a feeling of deep admiration for someone or something elicited by their abilities, qualities, or achievements  criticism: the expression of disapproval of someone or something based on perceived faults or mistakes |
| **Websites and Resources** | Voicethread (http://ed.voicethread.com)  This site is the cornerstone of this lesson. It can be used by students to easily build interactive discussion around images, documents, and video. |
| **Comments** | This lesson is the second in a unit designed to teach collaborative skills within the context of the 8th grade science curriculum, culminating in a Project-Based Learning activity that involves a partnership with a foreign classroom. |
| **Author Info** | Paul Cancellieri is a middle school science teacher at Durant Road Middle School in Raleigh, North Carolina. He spent several years as a marine biologist before realizing his passion for teaching and transitioning to education in 2001. He earned his National Board certification in 2007, and a Kenan Fellowship in 2010. |