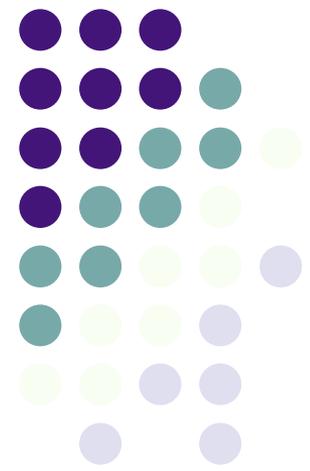




Obtaining, Evaluating and Communicating Information



Agenda



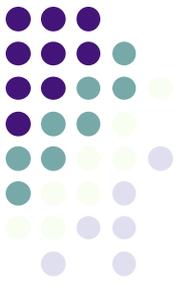
1. Introduction
2. Unpacking the Science Practice
3. Reading Activity
4. Introduction to NEWSELA & Lexile Levels
5. Article Quest

Introduction



Think-write-pair-share:

- What does “Obtaining, Evaluating, and Communicating Information” mean to you?
- What do you think this science practice looks like in a classroom?
 - What are students doing?
 - What is the teacher doing?



Unpacking the Science Practice

NGSS Appendix F describes “Obtaining, Evaluating and Communicating Information” as:

- *Being a critical consumer of information about science and engineering requires the ability to read or view reports of scientific or technological advances or applications and to recognize the salient ideas, identify sources of error and methodological flaws, distinguish observations from inferences, arguments from explanations, and claims from evidence.*
- *Communicating information, ideas and evidence can be done in multiple ways: using tables, diagrams, graphs... as well as orally, in writing, and through extended discussions*

Continuum for Student Performance



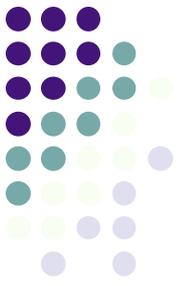
INSTRUCTIONAL LEADERSHIP FOR SCIENCE PRACTICES (ILSP)
www.sciencepracticesleadership.com

Science Practices Continuum – Students’ Performance

This continuum is intended for teachers and administrators to use in guiding and evaluating student performance in the science practices. The levels reflect increasingly sophisticated engagement in the practices and are not grade-level specific; K-8 students can engage in the practices in developmentally appropriate ways at any of these levels. Appendix F in the NGSS provides significantly more detail for each practice (that should be integrated as both students and teachers develop greater fluency with each practice). The practices are grouped into the “Investigating” “Sensemaking” and “Critiquing” practices.

		Level 1	Level 2	Level 3	Level 4
Critiquing	8. Obtaining, evaluating, and communicating information	Students do not read text for scientific information.	Students read text to <i>obtain</i> scientific information, but do <i>not evaluate</i> this information. Students also do <i>not</i> compare or combine information from multiple texts considering the strengths of the information and sources.	Students <i>read and evaluate</i> text to obtain scientific information. Students do <i>not</i> compare or combine information from multiple texts considering the strengths of the information and sources.	Students <i>read and evaluate</i> text to obtain scientific information. Students <i>compare and combine</i> information from multiple texts considering the strengths of the information and sources.
	Classroom Culture Prioritizing Science Practices				
Less -----More					
Connected to the Natural World Focused on Scientific Evidence Student Directed and Collaborative Informed by Critique					

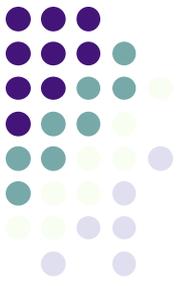
Unpacking the Science Practice



After reading the NGSS Appendix F description of this science practice, as well as looking through the Science Practices Continuum, answer the following questions on your handout:

- How is the description of this science practice similar and/or different from how your students work with scientific information in the classroom?
- Are there specific activities you already do or places in your curriculum that students are given the opportunity to engage in this practice?

Reading Activity



You will be reading a scientific text about moose. As you read the article:

- Underline evidence
- Put a star next to science ideas

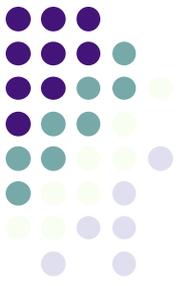


Source of image: Wikipedia

Consider the following questions as you read:

- Does the text have a clear claim?
- Does the text use scientific evidence to support the claim?
- Does the text have enough scientific evidence to support the claim?
- Does the text explain *how* the scientific evidence supports the claim?

Reading Activity



Discussion questions:

- Do you feel this strategy engages the reader and supports them with this science practice? Why or why not?
- What other instructional strategies might you use to encourage your students to interact with and evaluate scientific text?

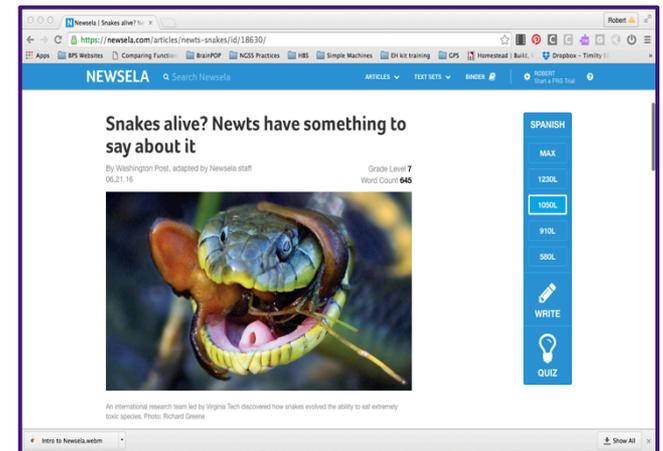


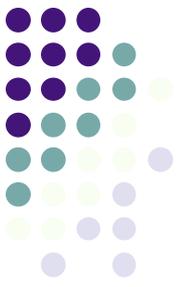
Source of image: Wikipedia

Introduction to NEWSELA & Lexile Levels



- NEWSELA (newsela.com) is a free online resource that provides articles from news publications written at five different Lexile levels (i.e. levels of reading difficulty)
- Students and classes can access articles that you assign through this website
- The moose article that we used in the previous activity came from this resource
- Watch the video below for a short overview of this resource, and how to use it





Article Quest

- Use NEWSELA to find 1 or 2 science texts that you might use in an upcoming lesson.
- Complete the guiding questions on the handout to plan how you might use the article you find. Key aspects to consider:
 - What key information do you want students to obtain from this article?
 - What aspects of this article might your students evaluate?
 - Which strategy could you use to support students in “obtaining, evaluating and communicating information” in this lesson? Why might this strategy help your students better engage in this science practice?
- If time allows, share your finding with another teacher