

Integrating the Common Core Literacy Skills in Science Classes

Common Core is not just for English teachers. All subjects need to integrate writing into their classes. In Science we commonly use two main types of writing that align with Common Core- Informational and Argumentative writing- often in the form of lab write-ups. We also use reading of informational text extensively via our textbooks, news articles and journal articles.

So how do I make sure my students are actually using Common Core writing strategies? You can look up the writing and reading standards for integrating CCSS into Science here:

<http://www.cde.ca.gov/be/st/ss/documents/finaelaccsstandards.pdf>

(pg 89-90 reading and pg 92-95 writing) This shows where we, as science teachers, can assist in teaching literacy skills across the curriculum in our science classes. Below are some strategies and ideas to integrate more writing into your science classes that align with Common Core literacy standards.

how to add more writing to science class:

research papers, projects, formal lab reports, science articles

Scientific writing

science lab writeup guide:

https://docs.google.com/document/d/19Mhp5xWbms_xN9ZcnTJU2jqCcLG5JGeKL5WfM4fV-VA/edit?usp=sharing

- headings for each subsection (like a formal article submission to a journal)
- cite references within text, then expand on quote in writing..
- focus on one or two sections for each lab- ex: procedure on experimental design lab, conclusion on another lab, introduction on another...
- write good summaries of the procedure followed...(peer feedback training them, then writer rewrites for more clarification)
- shift cookie cutter labs- ask the question: How would I prove this given this equipment- (more STEM/NGSS aligned)

Integrating close reading strategies: (beyond reading the textbook- but this can be taught as well! how to read a science text and take effective notes!)

- weekly science article- annotate and summarize (can be student found or teacher provided)

example lesson on this:

https://docs.google.com/document/d/1xt1A_lo1FtoEQrReV0dTpqaqktJbH3fOaUBQqtu6b9Y/edit?usp=sharing

good journals I use for CP Geology and AP Environmental: Science, Earth, EnerG, On Cue... Chemistry: ACS.org and has articles by topic. Smithsonian, National geographic- NatGeokids, spider, physorg.com,. Students have to find articles, annotate and summarize articles.

how do I grade all this writing???

- Ask English department for rubrics they use for informational/argumentative writing.

Integrating the Common Core Literacy Skills in Science Classes

- Focus on parts of the formal lab write up throughout year, leading up to grading entire lab write up.
- use google drive for group projects... (show examples from APES) comments enabled..
- rubric maker!!! <http://rubistar.4teachers.org/index.php?screen=NewRubric>

Reading and Writing strategy links on this website:

<https://sites.google.com/site/cpgeology/group-discussion-1>

additional resources:

NGSS pd online:

<http://myboe.org/portal/default/Content/Viewer/Content?action=2&scld=506599>

Front-Page Science: Engaging Teens in Science Literacy:

http://www.amazon.com/gp/product/1936137143/ref=oh_details_o07_s00_i00?ie=UTF8&psc=1

Science Stories: Using Case Studies to Teach Critical Thinking:

http://www.amazon.com/gp/product/1936137259/ref=oh_details_o01_s01_i00?ie=UTF8&psc=1

Best Science Writing online:

http://www.amazon.com/Best-Science-Writing-Online-Laboratory/dp/B00DJZIEHE/ref=sr_1_1?ie=UTF8&qid=1383144960&sr=8-1&keywords=best+science+online