

A Deeper Look at Common Core State Standards:

Standards for Literacy in Science

Session 1: *Reading and Writing in the Science Classroom*

Time: Approximately 45 minutes

Goal:

Participants will engage in an activity and discussion about Reading and Writing in the Science classroom (across grades 6-12 and all Science content areas).

Who:

Educators: Teachers and Administrators; Science Curriculum Development Team; Science/School Leadership Teams

What:

[Common Core State Standards for Literacy in History/Social Studies, Science, and Technical Subjects, Grades 6-12](#)

When:

Collaborative Planning Time: i.e., Common Planning Time, Grade Level Teams, Content Department Meetings, after school curriculum meetings, leadership team meetings, etc.

How:

Participants will engage in a “**Consensogram**” activity.

Session Preparation

Suggested reading: Prior to the Collaborative Time ask participants to read the [Common Core State Standards for Literacy in History/Social Studies, Science, and Technical Subjects, Grades 6-12](#) (pages 59-66; specifically pages 60, 62, 63-66 relate to Science and Technical Subjects).

Meeting space preparation: Prior to the Collaborative Time write the following statements at the top of a piece of chart paper. At the bottom of the chart paper, write “Strongly Agree, Agree, Disagree, and Strongly Disagree.” [Examples of these charts are provided.](#)

Please keep all chart papers and responses for use during Session 2.

- *Students use challenging texts to make extensive use of elaborate diagrams and data to convey information and illustrate concepts.*
- *Students read complex informational text with independence and confidence because the vast majority of reading in college and workforce training programs will be sophisticated nonfiction.*
- *Students take purpose and audience into careful consideration when writing scientific texts, choosing words, information, structures and formats deliberately.*

- *Students become adept at gathering information, evaluating sources, and citing material accurately, reporting findings from their research and analysis of sources in a clear and cogent manner.*
- *Students demonstrate flexibility, concentration, and fluency to produce high-quality first-draft text under a tight deadline and the capacity to revisit and make improvements to a piece of writing over multiple drafts when circumstances encourage or require it.*

-Adapted from the *CCSS for Literacy in History/Social Studies, Science, and Technical Subjects*

At the Session

Consensogram Activity

A chart that shows the frequency of distribution of responses, measuring a group's perceptions and allows individuals to view their responses in relation to the entire group by having participants place stickers where they feel they are.

Post the Chart paper around the room.

- Read the statements on the chart paper aloud to whole group.
- Ask participants to "Please indicate how strongly you agree with the statements posted around the room (on the chart paper) in the context of a science classroom for students to be college and career ready."
- Ask participants to place a sticky note or a sticker above one of the agreement categories listed on each of the statement charts.

Reflection:

- Once participants have indicated how they feel about each of the statements take time to reflect on the distribution of responses. For example: Did the majority of the group agree or disagree with the statements? Or was the distribution even?
 - Remember the goal of a "**Consensogram**" is to assess the needs, attitudes, or knowledge, build consensus, focus the group, explore multiple perspectives and rate participants understanding of a given topic. By observing where most of the stickers are, you can tell if there is group consensus on the issue.
- Review the distribution of responses for the statements.
 - *What do you notice about the frequency of responses?*
 - *Is literacy already in the science classroom based on the frequency of responses?*
- *What do these statements "look like," in a science classroom" (may be more specific depending on the population of participants).*
 - *For example:*
 - *How are these statements evident in a middle school physical science classroom?*
 - *What would you observe in an honors biology high school classroom? What resources would be needed? How would you assess? How would instruction change?*
- After completing the "**Consensogram**" activity gather participants in small groups. Groupings should be appropriate for the population of participants; therefore, grouping may be cross-content, same content, cross-grade level, or same grade level.

- Share this statement with participants:

Reading and writing standards are meant to compliment the specific content demands of the disciplines, not replace them.

- Ask participants to discuss in small groups.
- Ask participants to share out a summary of small group discussions.

At the end of the session

- Ask participants to recall (a copy of the lesson is not necessary for this activity) their most recent lesson and identify areas in the lesson where students are already using the *CCSS for Literacy in History/Social Studies, Science, and Technical Subjects, Grades 6-12*. If they are absent, then identify where the CCSS Science Literacy standards could be used.
- Ask participants to bring a lesson(s) to Session 2.



Overview of Session 2

A Deeper look at the Common Core State Standards and the place Literacy has in a Science classroom

- Participants will look at the standards and identify where the CCSS for Literacy in Science naturally compliment the skills they are already building in science classrooms.
- Share ideas, activities, lessons in which the CCSS for Literacy in Science could be included.