



Science and Engineering Practices

Common Core Reading Anchors

Grades 6-12 Literacy in Science and Technical Subjects

SCIENCE AND ENGINEERING PRACTICE: PLANNING AND CARRYING OUT INVESTIGATIONS

Students should have opportunities to plan and carry out several different kinds of investigations during their K-12 years. At all levels, they should engage in investigations that range from those structured by the teacher—in order to expose an issue or question that they would be unlikely to explore on their own (e.g., measuring specific properties of materials)—to those that emerge from students’ own questions. (NRC *Framework*, 2012, p. 61)

Supporting CCSS Literacy Anchor Standards and Relevant Portions of the Corresponding Stands for Science and Technical Subjects	Connection to Science and Engineering Practice	Connection to Eco-Schools USA Pathways
<p>CCR Writing Anchor #8: Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.</p> <ul style="list-style-type: none"> • WHST.6-8.8: “... quote or paraphrase the data and conclusions of others...” • WHST.9-10.8: “...assess the usefulness of each source in answering the research question...” • WHST.11-12.8: “...assess the strengths and limitations of each source in terms of the specific task, purpose, and audience...” 	<p>Collecting relevant data across a broad spectrum of sources in a systematic fashion is a key element of this scientific practice. Writing Standard 8 spells out the importance of gathering applicable information from multiple reliable sources to support claims.</p>	<p>Addressing sustainability on campus and within the community requires students to use multiple resources from multiple sources in order to gather the data and evidence needed to draw conclusions, make informed decisions, fundraise, and facilitate service learning and community service opportunities.</p>



Science and Engineering Practices Literacy in Science and Technical Subjects

PLANNING AND CARRYING OUT INVESTIGATIONS – CONTINUED

Supporting CCSS Literacy Anchor Standards and Relevant Portions of the Corresponding Stands for Science and Technical Subjects	Connection to Science and Engineering Practice	Connection to Eco-Schools USA Pathways
<p>CCR Speaking & Listening Anchor #1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.</p> <ul style="list-style-type: none"> • SL.8.1: “Come ...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...define individual roles as needed.” • SL.9-10.1: “Come...having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas...make new connections in light of the evidence and reasoning presented.” • S1.11-12.1: “determine what additional information or research is required to deepen the investigation or complete the task.” 	<p>Carrying out investigations in collaborative settings is crucial to learning in science class and engineering settings. Speaking and Listening Standard 1 speaks directly to the importance of exchanging theories and evidence collaboratively to carrying out investigations.</p>	<p>Eco-Action teams work with a wide range of people including, peers, teachers, facilities staff, and community partners, thus having the opportunity to build skills through meaningful, authentic learning experiences.</p>