

Appendix 1: Teaching Standards

Science as Inquiry (grade 6-8) – Science Methodology imbedded in the content

Traditional laboratory experiences provide opportunities to demonstrate how science is constant, historic, probabilistic, and replicable. Although there are no fixed steps that all scientists follow, scientific investigations usually involve collections of relevant evidence, the use of logical reasoning, the application of imagination to devise hypotheses, and explanations to make sense of collected evidence. Student engagement in scientific investigation provides background for understanding the nature of scientific inquiry. In addition, the science process skills necessary for inquiry are acquired through active experience. The process skills support development of reasoning and problem-solving ability and are the core of scientific methodologies.

English Language Arts Standards » Science & Technical Subjects » Grade 6-8

<http://www.corestandards.org/ELA-Literacy/RST/6-8>

Key Ideas and Details

[CCSS.ELA-Literacy.RST.6-8.1](#) Cite specific textual evidence to support analysis of science and technical texts.

[CCSS.ELA-Literacy.RST.6-8.2](#) Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.

[CCSS.ELA-Literacy.RST.6-8.3](#) Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

Craft and Structure

[CCSS.ELA-Literacy.RST.6-8.4](#) Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 6–8 texts and topics*.

[CCSS.ELA-Literacy.RST.6-8.5](#) Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.

[CCSS.ELA-Literacy.RST.6-8.6](#) Analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.

Integration of Knowledge and Ideas

[CCSS.ELA-Literacy.RST.6-8.7](#) Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).

[CCSS.ELA-Literacy.RST.6-8.8](#) Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.

[CCSS.ELA-Literacy.RST.6-8.9](#) Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.

Range of Reading and Level of Text Complexity

[CCSS.ELA-Literacy.RST.6-8.10](#) By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently