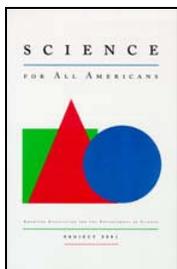


Introduction to CTS: Science Resource Book Overview

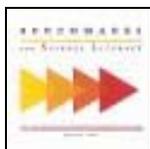


Science for all Americans, authored by James Rutherford and Andrew Ahlgren for AAAS, was first published in 1989. It represents the first phase of AAAS's science reform initiative, Project 2061. *SFAA* is a seminal document that defines the enduring, interconnected knowledge all adults should have acquired after their K-12 education to ensure basic science literacy. Science literacy as described in *SFAA* includes science, mathematics, technology, and social sciences and the interconnection among them.

<http://www.project2061.org/publications/sfaa/online/sfaatoc.htm>

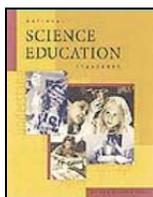


Science Matters, authored by two scientists, Robert Hazen and James Trefil, in 1991, describes the knowledge needed to be an informed, decision-making citizen around issues related to science in the public arena. The authors describe the knowledge adults should have as “of an eclectic mix of facts, vocabulary, and principles. It is not the specialized knowledge of the experts, nor does it rely on jargon and complex mathematics” (Hazen & Trefil, 1991, p. 44).



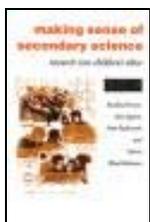
Benchmarks followed *Science for All Americans* in 1993 and corresponds to the sections in *SFAA*. It describes the specific steps along the way to achieving the literacy described in *SFAA* by listing specific goals for student learning at K-2, 3-5, 6-8, and 9-12. These benchmarks are specific ideas and skills that all students should learn at different grade levels.

<http://www.project2061.org/publications/bsl/online/index.php>



The **National Science Education Standards**, released in 1996, is similar to *Benchmarks* in presenting a vision of science literacy for all students. *Benchmarks* was used extensively to develop the *NSES* content standards, which were developed through the leadership of the National Research Council. The *NSES* includes six systemic categories of standards for science education; of these only the content standards are used in CTS.

<http://www.nap.edu/html/nses/>



Making Sense of Secondary Science, by Rosalind Driver, Ann Squires, Peter Rushworth, and Valerie Wood-Robinson, is a comprehensive summary of research into students' ideas in life and physical sciences, with some earth and space science.



Atlas was published in 2000, as a joint publication of AAAS and the NSTA. Atlas is a collection of conceptual strand maps, based on *Benchmarks* and *SFAA*, which show how students' ideas progress from K-12. The maps graphically depict connections among the ideas found in *Benchmarks*. For any particular topic, a map reveals the important connections to other topics and the conceptual strands or “storylines” that are part of that topic. There are now 2 volumes.

<http://strandmaps.nsd1.org/>