

STEM Curriculum to Support Energy Literacy

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The National Science Education Standards (NSES) from the National Research Council and Benchmarks for Science Literacy from the American Association for the Advancement of Science (AAAS) are two commonly referenced tools for K-12 science curriculum design. In NSES, standards such as Science and Technology, and Science in Social and Personal Perspectives present a vision of a scientifically literate population. The Benchmark standards for the Nature of Technology, Human Society and the Designed World provide an equally compelling pathway for science literacy.

NSES: http://www.nap.edu/openbook.php?record_id=4962

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

The National Science Foundation has supported the development of research-based science and mathematics curricula for decades, with special emphasis on curricular projects that reflect NSES and Benchmarks in their design. Within the band of S in STEM, a few curricula have also addressed the T and E in STEM. Specifically, two current curriculum development projects address energy literacy as part of a more comprehensive version of science education: The Science Education for Public Understand Program (SEPUP) and The Geographic Data in Education Initiative (GEODE). Both SEPUP and GEODE curricula follow an inquiry design framework and offer a compelling, coherent bridge to future energy literacy curricula projects.

SEPUP: <http://lawrencehallofscience.org/sepup/>

GEODE: <http://www.geode.northwestern.edu/>