

SOCIAL STUDIES STANDARDS FOR AIR QUALITY CURRICULUM

Social studies includes a variety of related content disciplines including:

1. History
2. Civics and Government
3. Economics
4. Geography

The Air Quality Curriculum materials and problem-based learning (PBL) provide educators with the opportunity to address many of these content areas simultaneously in the classroom. A sampling of the applicable national standards is listed below.

1. History

The National Council for History Standards (National Center for History in the Schools, 1996) provides the basic framework for many state and local standards in history. These can be retrieved on the World Wide Web at <http://www.sscnet.ucla.edu/nchs/standards>.

“Standards in history make explicit the goals that all students should have opportunity to acquire. In history, standards are of two types:

1. Historical thinking skills that enable children to differentiate past, present, and future time; raise questions; seek and evaluate evidence; compare and analyze historical stories, illustrations, and records from the past; interpret the historical record; and construct historical narratives of their own.
2. Historical understandings that define what students should know about the history of families, their communities, states, nation, and world. These understandings are drawn from the record of human aspirations, strivings, accomplishments, and failures in at least five spheres of human activity: the social, political, scientific/technological, economic, and cultural (the philosophical/religious/aesthetic), as appropriate for children.”

Five types of historical thinking are included in these standards; skills related to these types of thinking can be developed in PBL classrooms, including:

Standard 1: Chronological Thinking

- A. Distinguish between past, present, and future time.
- B. Identify the temporal structure of a historical narrative or story.
- E. Interpret data presented in time lines.
- F. Create time lines.
- G. Explain change and continuity over time.

Standard 2: Historical Comprehension

- D. Appreciate and evidence historical perspectives.
- E. Draw upon data in historical maps.
- F. Draw upon visual and mathematical data presented in charts, tables, pie and bar graphs, flow charts, Venn diagrams, and other graphic organizers.

G. Draw upon visual, literary, and musical sources.

Standard 3: Historical Analysis and Interpretation

- B. Compare and contrast differing sets of ideas, values, personalities, behaviors, and institutions.
- D(C). Distinguish between fact and fiction.
- G(D). Consider multiple perspectives.
- J. Hypothesize the influence of the past.

Standard 4: Historical Research Capabilities

- B. Obtain historical data.
- C. Interrogate historical data.

Standard 5: Historical Issues: Analysis and Decision-Making

- A. Identify problems and dilemmas in the past.
- B. Analyze the interest and values of the various people involved.
- C. Identify causes of the problem or dilemma and relevant historical antecedents.
- D. Propose alternative choices for addressing the problem.
- E. Formulate a position or course of action on an issue.
- F. Identify the solution chosen.
- G. Evaluate the consequences of a decision.

2. Civics and government

The National Standards for Civics and Government (Center for Civic Education, 1994) provides the basic framework for many state and local K - 12 educational standards in civics and government. These can be retrieved on the World Wide Web at <http://www.civiced.org/stds.html>.

"The goal of education in civics and government is informed, responsible participation in political life by competent citizens committed to the fundamental values and principles of American constitutional democracy. Their effective and responsible participation requires the acquisition of a body of knowledge and of intellectual and participatory skills. Effective and responsible participation also is furthered by development of certain dispositions or traits of character that enhance the individual's capacity to participate in the political process and contribute to the healthy functioning of the political system and improvement of society."

I. What Are Civic Life, Politics, and Government?

- Defining civic life, politics, and government
- Rule of law
- Nature of representation

II. What Are the Foundations of the American Political System, including the Basic Values and Principles of American Democracy?

Fundamental values and principles
Prevention and management of conflicts
Diversity in American society

III. How Does the Government Established by the Constitution Embody the Purposes, Values, and Principles of American Democracy?

Organization and major responsibilities of national, state, and local governments
Sharing of powers between governments
Criteria for evaluating rules and laws in American society
Forming and carrying out public policy

IV. What Is the Relationship of the United States to Other Nations and to World Affairs?

Interactions among nation-states
Political, demographic and environmental developments
Economic, technological, and cultural developments

V. ***What Are the Roles of the Citizen in American Democracy?***

Rights and responsibilities of individuals
Dispositions that facilitate thoughtful and effective participation in public affairs
Differences between political and social participation
Political leadership and public service

3. ***Economics***

In 1997, the National Council on Economic Education (in partnership with the National Association of Economic Educators and the Foundation for Teaching Economics) has produced a set of curriculum standards based on the essential principles of economics, titled Voluntary National Content Standards in Economics. These are available on-line at <http://www.economicamerica.org/standards/index.html>

“Learning how to reason about economic issues is important also because the analytic approach of economics differs in key respects from approaches appropriate for other related subjects such as history and civics. Yet valid economic analysis helps us to master such subjects as well, providing effective ways to examine many of the “why” questions in history, politics, business, and international relations.

Skills, as well as content, play an important part in economic reasoning. The key skills students must develop in economics include an ability to: (a) identify economic problems, alternatives, benefits, and costs; (b) analyze the incentives at work in an economic situation; (c) examine the consequences of changes in economic conditions and public policies; (d) collect and organize economic evidence; and (e) compare benefits with costs.”

Standard 1: Productive resources are limited. Therefore, people cannot have all the goods and services they want; as a result, they must choose some things and give up others.

Standard 2: Effective decision-making requires comparing the additional costs of alternatives with the additional benefits. Most choices involve doing a little more or a little less of something; few choices are "all or nothing" decisions.

Standard 4: People respond predictably to positive and negative incentives.

Standard 6: When individuals, regions, and nations specialize in what they can produce at the lowest cost and then trade with others, both production and consumption increase.

Standard 7: Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

Standard 15: Investment in factories, machinery, new technology, and in the health, education, and training of people can raise future standards of living.

Standard 16: There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also redistribute income.

Standard 17: Costs of government policies sometimes exceed benefits. This may occur because of incentives facing voters, government officials, and government employees, because of actions by special interest groups that can impose costs on the general public, or because social goals other than economic efficiency are being pursued.

4. Geography

The Geography Education Standards Project has published *Geography for Life: National Geography Standards* (1994). The document provides 18 standards articulated for grades K-4, 5-8, and 9-12. The standards are organized under six areas: The World in Spatial Terms, Places and Regions, Physical Systems, Human Systems, Environment and Society, and The Uses of Geography. These are available on-line at: <http://www.ncge.org/publications/tutorial/standards>

The World in Spatial Terms:

Standard 1: How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information.

Standard 2: How to use mental maps to organize information about people, places, and environments.

Standard 3: How to analyze the spatial organization of people, places, and environments on Earth's surface.

Places and Regions:

Standard 4: The physical and human characteristics of places.

Standard 6: How culture and experience influence people's perception of places and regions.

Physical Systems:

Standard 7: The physical processes that shape the patterns of Earth's surface.

Standard 8: The characteristics and spatial distribution of ecosystems on Earth's surface.

Human Systems:

Standard 9: The characteristics, distribution, and migration of human populations on Earth's surface.

Standard 11: The patterns and networks of economic interdependence on Earth's surface.

Standard 12: The process, patterns, and functions of human settlement.

Standard 13: How forces of cooperation and conflict among people influence the division and control of Earth's surface.

Environment and Society:

Standard 14: How human actions modify the physical environment.

Standard 15: How physical systems affect human systems.

Standard 16: The changes that occur in the meaning, use, distribution, and importance of resources.

The Uses of Geography:

Standard 17: How to apply geography to interpret the past.

Standard 18: How to apply geography to interpret the present and plan for the future.