Chapter Five: National Standards

You may wish to use your own state standards, but these national standards are provided for those who may not have access to the web.

Language Arts Standards

READING FOR PERSPECTIVE - Students read a wide range of print and nonprint texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.

UNDERSTANDING THE HUMAN EXPERIENCE - Students read a wide range of literature from many periods in many genres to build an understanding of the many dimensions (e.g., philosophical, ethical, aesthetic) of human experience.

EVALUATION STRATEGIES - Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).

COMMUNICATION SKILLS - Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.

COMMUNICATION STRATEGIES - Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

APPLYING KNOWLEDGE - Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and nonprint texts.

EVALUATING DATA - Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.

DEVELOPING RESEARCH SKILLS - Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.

MULTICULTURAL UNDERSTANDING - Students develop an understanding of and respect for diversity in language use, patterns, and dialects across cultures, ethnic groups, geographic regions, and social roles.

APPLYING NON-ENGLISH PERSPECTIVES - Students whose first language is not English make use of their first language to develop competency in the English language arts and to develop understanding of content across the curriculum.

PARTICIPATING IN SOCIETY - Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.

APPLYING LANGUAGE SKILLS - Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

Mathematics Standards

http://www.educationworld.com/standards/national/toc/index.shtml#math

NUMBER AND OPERATIONS

- Understand numbers, ways of representing numbers, relationships among numbers, and number systems
- Understand meanings of operations and how they relate to one another
- Compute fluently and make reasonable estimates

ALGEBRA

- Understand patterns, relations, and functions
- Represent and analyze mathematical situations and structures using algebraic symbols
- Use mathematical models to represent and understand quantitative relationships
- Analyze change in various contexts

GEOMETRY

- Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships
- Specify locations and describe spatial relationships using coordinate geometry and other representational systems

- Apply transformations and use symmetry to analyze mathematical situations
- Use visualization, spatial reasoning, and geometric modeling to solve problems

MEASUREMENT

- Understand measurable attributes of objects and the units, systems, and processes of measurement
- Apply appropriate techniques, tools, and formulas to determine measurements

DATA ANALYSIS AND PROBABILITY

- Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer
- Select and use appropriate statistical methods to analyze data
- Apply transformations and use symmetry to analyze mathematical situations
- Develop and evaluate inferences and predictions that are based on data
- Understand and apply basic concepts of probability

PROBLEM SOLVING

REASONING AND PROOF

COMMUNICATION

CONNECTIONS

REPRESENTATION

Science Standards

http://www.educationworld.com/standards/national/toc/index.shtml#science

SCIENCE AS INQUIRY

- Abilities necessary to do scientific inquiry
- Understandings about scientific inquiry

PHYSICAL SCIENCE

- Properties and changes of properties in matter
- Motions and forces
- Transfer of energy

LIFE SCIENCE

- Structure and function in living systems
- Reproduction and heredity
- Regulation and behavior
- Populations and ecosystems
- Diversity and adaptations of organisms

EARTH AND SPACE SCIENCE

- Structure of the earth system
- Earth's history
- Earth in the solar system

SCIENCE AND TECHNOLOGY

- Abilities of technological design
- Understandings about science and technology

PERSONAL AND SOCIAL PERSPECTIVES

- Personal health
- Populations, resources, and environments
- Natural hazards
- Risks and benefits
- Science and technology in society

HISTORY AND NATURE OF SCIENCE

- Science as a human endeavor
- Nature of science
- History of science

Social Studies Standards

http://www.educationworld.com/standards/national/toc/index.shtml#soc

Culture and Cultural Diversity - including manifestations of culture; cultural diversity and cultural contact; the use of cultural artifacts; cultural preservation and transformation.

Time, Continuity, and Change - including use of timelines and maps; seeing the big picture.

People, Places, and Environments - including understanding how ideas influence history; historical perspectives of CA/US immigrant and indigenous peoples.

Individual Development and Identity - including the use of ethnographic research; working within the community; being responsive to the student's home language and culture; reaching out to parents

Individuals, Groups, and Institutions - including understanding from multiple perspectives; using simulations, case studies; doing group projects; including parents and community organizations in teaching/learning

Power, Authority, and Governance - including legal/social/power issues of CA/US immigrant and indigenous peoples; issues of equity (including gender, sexual orientation, and special ableness);

Production, Distribution, and Consumption - including understanding unequal distribution of resources and the role of government in economic policy-making varies over time and from place to place.

Science, Technology, and Society - including understanding how technology shapes human experience and the world around us.

Global Connections - including understanding the increasingly important and diverse global connections among world societies and possible solutions to persistent and emerging global issues in universal human rights.

Civic Ideals and Practices - learning civic responsibility; school as a socialization process.

Music Standards

Fine Arts - http://www.educationworld.com/standards/national/arts/index.shtml

1. Singing, alone and with others, a varied repertoire of music

2. Performing on instruments, alone and with others, a varied repertoire of music

3. Improvising melodies, variations, and accompaniments

4. Composing and arranging music within specified guidelines

5. Reading and notating music

6. Listening to, analyzing, and describing music

7. Evaluating music and music performances

8. Understanding relationships between music, the other arts, and disciplines outside the arts

9. Understanding music in relation to history and culture

Visual Arts Standards - Fine Arts

Website: http://www.educationworld.com/standards/national/arts/index.shtml

UNDERSTANDING AND APPLYING MEDIA, TECHNIQUES, AND PROCESSES

- Students select media, techniques, and processes; analyze what makes them effective or not effective in communicating ideas; and reflect upon the effectiveness of their choices
- Students intentionally take advantage of the qualities and characteristics of art media, techniques, and processes to enhance communication of their experiences and ideas

USING KNOWLEDGE OF STRUCTURES AND FUNCTIONS

- Students generalize about the effects of visual structures and functions and reflect upon these effects in their own work
- Students employ organizational structures and analyze what makes them effective or not effective in the communication of ideas
- Students select and use the qualities of structures and functions of art to improve communication of their ideas

CHOOSING AND EVALUATING A RANGE OF SUBJECT MATTER, SYMBOLS, AND IDEAS

- Students integrate visual, spatial, and temporal concepts with content to communicate intended meaning in their artworks
- Students use subjects, themes, and symbols that demonstrate knowledge of contexts, values, and aesthetics that communicate intended meaning in artworks

UNDERSTANDING THE VISUAL ARTS IN RELATION TO HISTORY AND CULTURES

- Students know and compare the characteristics of artworks in various eras and cultures
- Students describe and place a variety of art objects in historical and cultural contexts

- Students analyze, describe, and demonstrate how factors of time and place (such as climate, resources, ideas, and technology) influence visual characteristics that give meaning and value to a work of art

REFLECTING UPON AND ASSESSING THE CHARACTERISTICS AND MERITS OF THEIR WORK AND THE WORK OF OTHERS

- Students compare multiple purposes for creating works of art
- Students analyze contemporary and historic meanings in specific artworks through cultural and aesthetic inquiry
- Students describe and compare a variety of individual responses to their own artworks and to artworks from various eras and cultures

MAKING CONNECTIONS BETWEEN VISUAL ARTS AND OTHER DISCIPLINES

- Students compare the characteristics of works in two or more art forms that share similar subject matter, historical periods, or cultural context
- Students describe ways in which the principles and subject matter of other disciplines taught in the school are interrelated with the visual arts

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Health Standards

http://www.educationworld.com/standards/national/nph/index.shtml

HEALTH PROMOTION AND DISEASE PREVENTION - Students will comprehend concepts related to health promotion and disease prevention--

- Explain the relationship between positive health behaviors and the prevention of injury, illness, disease, and premature death.
- Describe the interrelationship of mental, emotional, social, and physical health during adolescence.
- Explain how health is influenced by the interaction of body systems.
- Describe how family and peers influence the health of adolescents.
- Analyze how environment and personal health are interrelated.
- Describe ways to reduce risks related to adolescent health problems.
- Explain how appropriate health care can prevent premature death and disability.
- Describe how lifestyle, pathogens, family history, and other risk factors are related to the cause or prevention of disease and other health problems.

HEALTH INFORMATION, PRODUCTS AND SERVICES - Students will demonstrate the ability to access valid health information and health-promoting products and services

- Analyze the validity of health information, products, and services.

- Demonstrate the ability to utilize resources from home, school, and community that provide valid health information.
- Analyze how media influences the selection of health information and products.
- Demonstrate the ability to locate health products and services.
- Compare the costs and validity of health products.
- Describe situations requiring professional health services.

REDUCING HEALTH RISKS - Students will demonstrate the ability to practice health-enhancing behaviors and reduce health risks--

- Explain the importance of assuming responsibility for personal health behaviors.
- Analyze a personal health assessment to determine health strengths and risks.
- Distinguish between safe and risky or harmful behaviors in relationships.
- Demonstrate strategies to improve or maintain personal and family health.
- Develop injury prevention and management strategies for personal and family health.
- Demonstrate ways to avoid and reduce threatening situations.
- Demonstrate strategies to manage stress.

INFLUENCES ON HEALTH - Students will analyze the influence of culture, media, technology, and other factors on health--

- Describe the influence of cultural beliefs on health behaviors and the use of health services.
- Analyze how messages from media and other sources influence health behaviors.
- Analyze the influence of technology on personal and family health.
- Analyze how information from peers influences health.

USING COMMUNICATION SKILLS TO PROMOTE HEALTH - Students will demonstrate the ability to use interpersonal communication skills to enhance health--

- Demonstrate effective verbal and non-verbal communication skills to enhance health.
- Describe how the behavior of family and peers affects interpersonal communication.
- Demonstrate healthy ways to express needs, wants and feelings.
- Demonstrate ways to communicate care, consideration, and respect of self and others.
- Demonstrate communication skills to build and maintain healthy relationships.
- Demonstrate refusal and negotiation skills to enhance health.
- Analyze the possible causes of conflict among; youth in schools and communities.
- Demonstrate strategies to manage conflict in healthy ways.

SETTING GOALS FOR GOOD HEALTH - Students will demonstrate the ability to use goal-setting and decision-making skills to enhance health--

- Demonstrate the ability to apply a decision- making process to health issues and problems individually and collaboratively.
- Analyze how health-related decisions are influenced by individuals, family, and community values.
- Predict how decisions regarding health behaviors have consequences for self and others.
- Apply strategies and skills needed to attain personal health goals.
- Describe how personal health goals are influenced by changing information, abilities, priorities, and responsibilities.
- Develop a plan that addresses personal strengths, needs, and health risks.

HEALTH ADVOCACY - Students will demonstrate the ability to advocate for personal, family, and community health--

- Analyze various communication methods to accurately express health information and ideas.
- Express information and opinions about health issues.
- Identify barriers to effective communication of information, ideas, feelings, and opinions about health issues.
- Demonstrate the ability to influence and support others in making positive health choices.
- Demonstrate the ability to work cooperatively when advocating for healthy individuals, families, and schools.

Physical Education Standards

MOVEMENT FORMS - Demonstrates competency in many movement forms and proficiency in a few movement forms.

MOVEMENT CONCEPTS - Applies movement concepts and principles to the learning and development of motor skills

PHYSICAL ACTIVITY - Exhibits a physically active lifestyle.

PHYSICAL FITNESS - Achieves and maintains a health-enhancing level of physical fitness.

RESPONSIBLE BEHAVIOR - Demonstrates responsible personal and social behavior in physical activity settings.

RESPECT FOR OTHERS - Demonstrates understanding and respect for differences among people in physical activity settings.

UNDERSTANDING CHALLENGE - Understands that physical activity provides opportunities for enjoyment, challenge, self-expression, and social interaction

Technology Standards

- Basic Operations and Concepts
- Social, Ethical, and Human Issues
- Technology Productivity Tools
- Technology Communications Tools
- Technology Research Tools
- Technology Problem-Solving and Decision-Making Tools

Example of an Advanced Technology Portfolio Organizer