NGSS

ECOSYSTEMS: INTERACTIONS. ENERGY, AND DYNAMICS

High School

Students who demonstrate understanding can:

HS-LS2-2. Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales.

HS-LS2-7. Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.

EARTH'S SYSTEM

High School

Students who demonstrate understanding can:

HS-ESS2-2. Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth's systems.

EARTH AND HUMAN ACTIVITY

High School

Students who demonstrate understanding can:

HS-ESS3-1. Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.

HS-ESS3-4. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

HS-ESS3-6. Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.

CCSS – ELA/LITERACY

High School

RST.11-12.1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

RST.11-12.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

RST.11-12.8 Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.

RST.9-10.8 Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem.

RST.11-12.8 Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.

CCSS – ELA/LITERACY *Continued*

RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

WHST.9-12.1 Write arguments focused on discipline-specific content.

WHST.9-12.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.

WHST.9-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

NCSS

CULTURE

High School Learners will understand:

How culture develops and changes in ways that allow human societies to address their needs and concerns;

That behaviors, values, and beliefs, of different cultures can lead to cooperation or pose barriers to crosscultural understanding;

That awareness and knowledge of other cultures is important in a connected society and an interdependent world;

That the cultural values and beliefs of societies influence their analysis of challenges, and their responses to these challenges.

Learners will be able to:

Construct reasoned judgments about specific cultural responses to persistent human issues;

Analyze historic and current issues to determine the role that culture has played;

Explain and apply ideas, theories, and modes of inquiry from anthropology, sociology, history, geography, and economics in the examination of persistent issues and social problem.

TIME, CONTINUITY, AND CHANGE

High School Learners will understand:

The importance of knowledge of the past to an understanding of the present and to informed decisionmaking about the future.

Learners will be able to:

Use historical facts, concepts, and methods to evaluate an issue of importance today, and make informed decisions as responsible citizens to propose policies, and take action on it.

NCSS Continued

PEOPLE, PLACES, & ENVIRONMENTS

High School

Learners will understand:

The theme of people, places, and environments involves the study of the relationships between human populations in different locations and regional and global geographic phenomena, such as landforms, soils, climate, vegetation, and natural resources;

Concepts such as: location, physical and human characteristics of national and global regions in the past and present, and the interactions of humans with the environment;

Consequences of changes in regional and global physical systems, such as seasons, climate, and weather, and the water cycle;

The causes and impact of resource management, as reflected in land use, settlement patterns, and ecosystem changes;

The social and economic effects of environmental changes and crises resulting from phenomena such as floods, storms, and drought;

Factors that contribute to the cooperation's and conflict among peoples of the nation and world, including language, religion, and political beliefs.

Learners will be able to:

Evaluate the consequences of human actions in environmental terms.

INDIVIDUAL DEVELOPMENT AND IDENTITY

High School

Learners will understand:

That complex and varied interactions among individuals, groups, cultures, and nations contribute to the dynamic nature of personal identity;

That each individual has personal connections to time and place.

Learners will be able to:

Discuss the nature of stereotyping, bias, altruism, and conformity in societies, and their implications for personal, group, and national relationships.

INDIVIDUAL, GROUPS, AND INSTITUTIONS

High School Learners will understand:

How various forms of groups and institutions change over time;

The impact of tensions and examples of cooperation between individuals, groups, and institutions, with their different belief systems;

How the beliefs of dominant groups tend to become norms in a society;

How groups and institutions work to meet individual needs, and can promote the common good and address persistent social issues.

Learners will be able to:

Examine the belief systems of specific contemporary and historical movements that have caused them to advocate public policies;

Investigate how groups and institutions work to meet individual needs, promote or fail to promote the common good, and address persistent social issues.

NCSS Continued

POWER, AUTHORITY, AND GOVERNANCE

High School Learners will be able to:

Examine, persistent issues involving the rights, responsibilities, roles, and status of individuals and groups in relation to the general welfare;

Analyze and evaluate conditions, actions, and motivations that contribute to conflict and cooperation among groups and nations.

PRODUCTION, DISTRIBUTION, AND CONSUMPTION

High School

Learners will be able to:

Ask and find answers to questions about the production and distribution of goods and services in the state and nation, and in a global context;

Evaluate the possible economic consequences of proposed government policies.

SCIENCE, TECHNOLOGY, AND SOCIETY

High School Learners will understand:

Science and technology have had both positive and negative impacts upon individuals, societies, and the environment in the past and present;

That the world is media saturated and technologically dependent;

Consequences of science and technology for individuals and societies;

Decisions regarding the uses and consequences of science and technology are often complex because of the need to choose between or reconcile different viewpoints;

Prediction, modeling, and planning are used to focus advances in science and technology for positive ends;

Science, technology, and their consequences are unevenly available across the globe;

Developments in science and technology may help to address global issues.

Learners will be able to:

Use diverse types of media technology to access, analyze, evaluate, create, and distribute messages;

Identify the purposes, points of view, biases, and intended audience of reports and discussions related to issues involving science and technology;

Identify and analyze reactions to science and technology from the past or present and predict ongoing effects in economic geographical, social, political, and cultural areas of life;

Formulate possible solutions that utilize technology, address real-life issues and problems, weigh alternatives, and provide reasons for preferred choices and plans of action.

NCSS Continued

GLOBAL CONNECTIONS

High School Learners will understand:

The solutions to global issues may involve individual decisions and actions, but also require national and international approaches (e.g. agreements, negotiations, policies, or laws);

Conflict and cooperation among the peoples of the earth influence the division and control of the earth's surface;

The actions of people, communities, and nations have both short – and long-term effects on the biosphere and its ability to sustain life;

Individuals, organizations, nations, and international entities can work to increase the positive effects of global connections, and address the negative impacts of global issues.

Learners will be able to:

Describe and explain conditions and motivations that contribute to conflict, cooperation, and interdependence among groups, societies, and nations;

Analyze the cause and consequences of persistent, contemporary, and emerging global issues, and evaluate possible solutions;

Analyze the relationships and tensions between national sovereignty and global interests, in matters such as territorial rights, economic development, the use of natural resources, and human rights;

Identify concerns, issues, conflicts, and possible resolutions related to issues involving universal human rights.

CIVIC IDEALS AND PRACTICES

High School Learners will understand:

The theme of civic ideals and practices helps us recognize where gaps between ideals and practices exist, and prepares us to work for social justice;

That seeking multiple perspectives is required in order to effectively grasp the complexity of issues involving civic ideals and practices;

The importance of becoming informed as the basis for thoughtful and positive contributions through civic action.

Learners will be able to:

Ask and find answers to questions about how to become informed and take civic action;

Research primary and secondary sources to make decisions and propose solutions to selected civic issues in the past and present;

Identify assumptions, misconceptions, and biases in sources, evidence, and arguments used in presenting issues and positions;

Develop a position on a public policy issue and defend it with evidence.