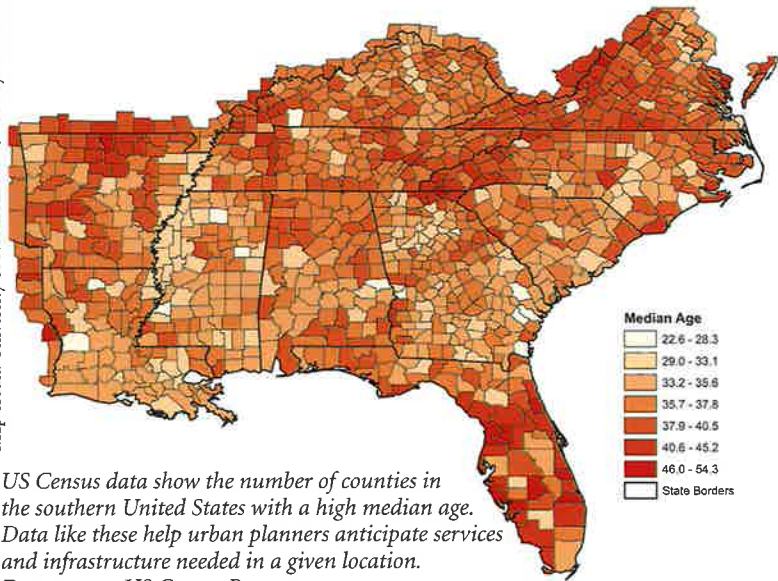


GEOGRAPHY STANDARD 18: How to apply geography to interpret the present and plan for the future

Map credit: University of North Alabama/Lisa Keys-Mathews



US Census data show the number of counties in the southern United States with a high median age. Data like these help urban planners anticipate services and infrastructure needed in a given location. Data source: US Census Bureau.

The geographically informed person

must understand that the study of geography is critical to understanding the world, now and in the future, and is not simply an exercise for its own sake. As the world becomes more complex and interconnected—as a result of globalization, improvements in transportation and communication technologies, changes in physical systems, and increased cooperation and conflict—the need for geographic knowledge, skills, and perspectives increases among the world’s people. While Standard 17 focuses on the importance of geography to understanding the events of the past, Standard 18 emphasizes the value and power of geography in comprehending current events and planning for the future in geographically-appropriate and sustainable ways.

Therefore, Standard 18 contains these themes: Using Geography to Interpret the Present and Plan for the Future, Changes in Geographic Contexts, and Perceptions of Geographic Contexts.

Knowing geography is a key to nations, peoples, and individuals being able to develop a coherent understanding of the causes, meanings, and effects of the physical and human events that occur—and are likely to occur in the future—on Earth. Consequently, the practical application of geography empowers students to participate as responsible citizens and leaders of tomorrow. Creating effective, ethical, and lasting solutions to the world’s problems requires that today’s students mature into adults who can make skilled and informed use of geographic knowledge, skills, and perspectives to identify possible solutions, predict their consequences, and implement the appropriate solutions.

Students must understand that the world in which they live is dynamic and that actions they take, both as individuals and collectively, can help to shape the future in both positive and negative ways. They also should understand that their perceptions of geographic contexts influence their decisions. Students must continually pose and answer geographic questions about the world in which they live and the world in which they wish to live.

Geographic context plays an integral role in creating the world of the future. Understanding these themes enables students to solve significant problems, make informed decisions, and take positive action on a variety of issues.

Image credit: D.J. Zeigler



Pointing the way to London’s future, a high-rise dormitory in “The City” contrasts sharply with the low-rise structures characterizing traditional neighborhoods.

Essential Element: The Uses of Geography

GEOGRAPHY STANDARD 18: How to apply geography to interpret the present and plan for the future

4th GRADE

the student knows and understands:

Using Geography to Interpret the Present and Plan for the Future

1. Geographic contexts (the human and physical characteristics of places and environments) are the settings for current events

Therefore, the student is able to:

- A. Analyze geographic contexts in which current events and issues occur, as exemplified by being able to
 - ▶ Describe the geographic factors that would influence the decision on where to locate a new school in the local community (available land, proximity to student populations, proximity to dangerous roads or industries).
 - ▶ Describe the services a city government needs to provide due to the specific geographic characteristics of the community (e.g., big snow removal equipment in lake-effect locations, frequent brake replacement for San Francisco streetcars, wind screens for tennis courts in Great Plains locations, evacuation plans in flood-prone areas).
 - ▶ Analyze a current environmental issue in the region (e.g., building or demolishing a dam, building or expansion of freeway system, creation of parks and open spaces, regulatory legislation on industry to prevent further air, water, and land pollution) and describe ways in which people and the environment interact to affect the issue positively and negatively.



Image credit: D.J. Zeigler

8th GRADE

the student knows and understands:

Using Geography to Interpret the Present and Plan for the Future

1. Geographic contexts (the human and physical characteristics of places and environments) provide the basis for problem solving and planning

Therefore, the student is able to:

- A. Describe and analyze the influences of geographic contexts on current events and issues, as exemplified by being able to
 - ▶ Explain the role of the geographic context in a current global conflict (e.g., boundary dispute, resource allocation, land-use issues) and identify strategies that might be used to settle the conflict.
 - ▶ Describe and analyze the challenges a region's physical geography offers in making policy decisions about present and future needs (e.g., planning military operations in remote or rugged areas of the world, determining the advisability of extracting natural resources from environmentally fragile areas).
 - ▶ Describe the geographic context and resulting challenges in monitoring and maintaining a secure southern US border.
- B. Describe and analyze the influences of geographic contexts on the process of planning for the future, as exemplified by being able to
 - ▶ Identify areas in a community with potential for growth and describe the geographic considerations for planning for future transportation and city services (e.g., schools, parks, sewage treatment plants, water and energy services).
 - ▶ Analyze areas of a community most prone to potential flooding from rivers, thunderstorms, and storm surges and suggest possible mitigation strategies.
 - ▶ Analyze the current pattern of interstate highways and based on projections of population growth suggest where new highways might be needed.

In Virginia Beach, Virginia, and cities everywhere, geography can be used by coastal populations in planning for evacuation and disaster preparedness.

12th GRADE

the student knows and understands:

Using Geography to Interpret the Present and Plan for the Future

1. Geographic contexts (the human and physical characteristics of places and environments) provide the basis for analyzing current events and making predictions about future issues

Therefore, the student is able to:

- A. Explain and evaluate the influences of the geographic context on current events and issues to make informed decisions and predictions about the future, as exemplified by being able to
 - ▶ Identify different views regarding contemporary social and environmental challenges and analyze the geographic factors influencing the stakeholders and their preferred policies (e.g., visions from local citizens about the relative importance of privacy versus security, opinions from residents of multiple states about a shared resource and about mechanisms for seeking resolution, viewpoints from around the world about relationships between economic development, resource consumption, population, and environmental alteration).
 - ▶ Evaluate the current zoning policies for high-crime areas in a metropolitan area and predict changes in zoning and land use that may positively affect the community.
 - ▶ Analyze the geographic consequences on different continents of strategies for responding to a global health pandemic (e.g., effects of closing international airports, quarantine of ships or cargoes, implementation of immunization plans for susceptible populations).
- B. Analyze and evaluate the connections between the geographic contexts of current events and possible future issues, as exemplified by being able to
 - ▶ Evaluate the feasibility and long-range impacts in a series of scenarios for dealing with social and environmental issues (e.g., absorbing and dispersing refugees, responding to threats from global warming, managing the future of Antarctica).
 - ▶ Analyze the geographic implications of storing low-level nuclear material in a given state or region (e.g., suitability of sites, distribution of population, transportation network and routes).
 - ▶ Analyze the effects of current rates of population growth on long-term sustainability in different regions of the world.

GEOGRAPHY STANDARD 18: How to apply geography to interpret the present and plan for the future

4th GRADE*the student knows and understands:***Changes in Geographic Contexts****2. Places, regions, and environments will continue to change***Therefore, the student is able to:*

- A. Describe current changes in places, regions, and environments and predict how these locations may be different in the future, as exemplified by being able to
- ▶ Describe how to plan for the environmental future of a place by completing the following statements: “I will keep...” “I will change...” and “I will remove...”
 - ▶ Describe the effects that building a new subdivision might have on the local environment (e.g., loss of farms or green space, increased traffic, more run off from additional paved surfaces).
 - ▶ Describe the effects of opening or closing schools (e.g., gain or loss of playgrounds, fewer or more students needing buses to get to school).

Perceptions of Geographic Contexts**3. People’s perceptions of the world—places, regions, and environments—are constantly changing***Therefore, the student is able to:*

- A. Explain how people’s perceptions of the world can change with new information and new experiences, as exemplified by being able to
- ▶ Describe a recent trip and explain what preconceived thoughts were about the place compared with how it turned out to be in reality.
 - ▶ Explain how the depiction of a place in movies or on television can affect how people perceive that place.
 - ▶ Describe and explain how a student’s view of his or her home community can be different from someone who is only visiting the community.

8th GRADE*the student knows and understands:***Changes in Geographic Contexts****2. Change occurs in the geographic characteristics and spatial organization of places, regions, and environments***Therefore, the student is able to:*

- A. Describe and explain current changes in the geographic characteristics and spatial organizations of places, regions, and environments and predict how they may be different in the future, as exemplified by being able to
- ▶ Identify environmental issues in a region and describe the consequences of these issues on the region and the appearance of the environment in the next 30 years if no action is taken, limited action is taken, or with considerable intervention.
 - ▶ Describe how the increasing demand for water resources will affect the physical environment and suggest ways to replenish and conserve water resources.
 - ▶ Explain why the majority of emerging megacities will continue to be located in South and East Asia.

Perceptions of Geographic Contexts**3. People’s perceptions of the world affect their views of the present, and expectations about the future***Therefore, the student is able to:*

- A. Explain the role perception plays in planning for the present and the future, as exemplified by being able to
- ▶ Identify the top five states a student would choose and not choose to live in and explain the reasons for the choices.
 - ▶ Explain how the views of different stakeholder groups would need to be considered in the development of a new local facility (e.g., school, park, hospital, reservoir).
 - ▶ Describe how changes in the economy of a community may affect personal perceptions of that place and people’s plans for their futures.

12th GRADE*the student knows and understands:***Changes in Geographic Contexts****2. The current and possible future causes and processes of change in the geographic characteristics and spatial organization of places, regions, and environments***Therefore, the student is able to:*

- A. Identify and explain the causes and processes of current and possible future changes in the geographic characteristics and spatial organization of places, regions, and environments, as exemplified by being able to
- ▶ Identify areas where people are engaged in nationalistic movements and analyze the potential of these groups to change the current political geographies of their nation states.
 - ▶ Describe and explain the possible effects of new electronic communication technologies on everyday life (e.g., location-based services on purchasing, telecommuting on the demand for commercial real estate and traffic volume and patterns, outsourcing of technological services).
 - ▶ Describe and explain the possible effects of new routes and technologies on world trade patterns (e.g., the effects of increasing the size of the Panama Canal, opening the route through the Arctic Ocean, the development of increasingly larger supertankers and cargo ships).

Perceptions of Geographic Contexts**3. Multiple and diverse perceptions of the world must be taken into account to understand contemporary and future issues***Therefore, the student is able to:*

- A. Evaluate how perceptions vary and affect people’s views of contemporary issues and strategies for addressing them, as exemplified by being able to
- ▶ Explain how and why residents of different regions of the country might evaluate energy policy proposals differently (e.g., Alaska and Arctic National Wildlife Refuge [ANWR] oil drilling, California and off-shore oil production, mid-Atlantic states and the Marcellus Oil Shale Field).
 - ▶ Explain how perceptions of immigration differ among people depending on their location, socioeconomic status, or occupation.
 - ▶ Identify and compare different perspectives about international climate change agreements regarding carbon emissions from the points of view of the developed countries and the less-developed countries.