Why Geography Education Matters

People have always been fascinated with investigating their home—the Earth. For centuries, the study of geography and the maps geographers have created have stirred imaginations and inspired explorations of the unknown. Geography was advanced by ancient scholars in Rome, Greece, and China over 2,500 years ago. Today, geography is more relevant than ever before, as issues of climate change, cultural diversity, economic globalization, urban sprawl, biodiversity loss, sustainable agriculture, water quality and quantity, crime, energy, tourism, politics, and natural hazards grow in importance on a global scale and affect our everyday lives. To grapple with these issues requires a populace that has a firm foundation in geography, a populace that can see the “big picture” but that understands how different patterns and trends are related from a global scale down to the local community.

Despite the long history and contributions that geographers have made over the centuries, geography has been so neglected over the past century in American primary and secondary education that most people do not understand what geography is. Many equate geography to memorizing imports, exports, mountain ranges, and place names. While it is important to know where things are to provide a framework, geography is concerned with all of the relevant issues of our time, because all of these issues have a geographic component.

What is the relationship between birth rate and life expectancy? How does acid mine drainage in a mountain range affect water quality downstream? How will climate change affect global food production? Geography explores the spatial relationships between people, climate, land use, vegetation, river systems, aquifers, landforms, soils, natural hazards, and much more.

Geography is a science with methods, tools, and a theoretical base, concerned with cultural and physical processes. Geography is not only a body of content knowledge, but provides a way of looking at the world. The geographic perspective informs other disciplines. When epidemiologists study the spread of diseases, scientists study climate change, or businesspersons determine where to locate a new retail establishment, they use spatial thinking and analysis. In each case, geography provides critical tools for studying these issues and for solving very real problems on a daily basis.
Geographic questions begin with the “whys of where”—why are cities, ecoregions, earthquakes, and other objects located where they are, and how are they affected by their proximity to nearby things and by invisible global interconnections and networks? After asking geographic questions, students acquire geographic resources and collect data, such as maps, satellite imagery, spreadsheets, and data from their own fieldwork. They analyze these geographic data and discover relationships across time and space. Geographic investigations are often value-laden and involve critical thinking skills. For example, after examining a map of cotton production in the USA, students investigate the relationship between altitude, latitude, climate, and cotton production. After discovering that much cotton is grown in dry regions that must be irrigated, they can ask “Should cotton be grown in these areas? Is this the best use of water and other natural resources?” Finally, students present the results of their investigations using geographic tools such as Geographic Information Systems (GIS) and multimedia. Their investigations usually spark additional questions, and the resulting cycle is the essence of geographic inquiry.

Our world is constantly changing. These changes include those brought about by physical forces such as erupting volcanoes, meandering rivers, and shifting plates, but also those brought about by human forces, such as urbanization. Many changes are increasingly a combination of the two. Soil erosion, a natural process, can be exacerbated by human agricultural practices. Coastal erosion may be hastened by sea level rise and climate change brought about by human impact on the biosphere. River flooding may be more widespread due to the construction of artificial levees along the banks.

Students study geography to understand that the Earth is changing, think scientifically and analytically about why it is changing, and then dig deeper: Should the Earth be changing in these ways? Is there anything that I should be doing or could be doing about it? This captures not only the heart of spatial thinking, inquiry and problem-based learning, but also empowers students as they become decision-makers to make a difference in this changing world of ours.

Geography is not simply a “nice to have” subject for an already crowded educational curriculum. It underpins the critical thinking skills, technology skills, citizenship skills, and life skills that underpin all other disciplines. It is essential for grappling with the essential issues of the 21st Century. If we continue to ignore geography education, we do so at our own peril.

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