



ISN'T THAT SPATIAL? ■ Joseph J. Kerski

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 created stirred imaginations and inspired exploration of the unknown. Geography was advanced by scholars in Rome, Greece, and China more than 2,500 years ago.

Today, geography is more relevant than ever before. Climate change, cultural diversity, globalization, urban sprawl, biodiversity loss, sustainable agriculture, water quality and quantity, crime, energy, tourism, politics, and natural hazards are concerns from the local scale to the global scale. To grapple with these issues a

populace must have a firm foundation in geography, be able to see the “big picture,” and understand how different patterns and trends are related.

Despite the 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 even understand what geography is. Many equate geography to memorizing imports, exports, mountain ranges, and place names. Although knowing locations provides a framework, geography is concerned with the spatial component of critical issues of the twenty-first century. Geography explores the spatial relationships between people, climate, land use, vegetation, river systems, aquifers, landforms, soils, natural hazards, and much more. What is the relationship between birth rate and life expectancy? How does acidic runoff from a mine affect water quality downstream? How will climate change affect global food production?

Geography is a science with methods, tools, and a theoretical base concerned with cultural and physical processes. Geography has a body of content knowledge, but, even more importantly, it provides a way of looking at the world. The geographic perspective informs other disciplines. It provides tools for studying critical issues and solving real-world problems. Epidemiologists studying the spread of diseases, scientists studying climate change, and business managers selecting a location for a new store all use spatial analysis.

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Change can be brought about by physical forces such as erupting volcanoes, meandering rivers, and shifting plates, but change can also result from human actions such as urbanization. Many changes are caused by a combination of the two. Soil erosion, a natural process, can be exacerbated by 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.

Understanding and examining change is at the heart of spatial thinking, inquiry, and problem-based learning, and these skills empower students as they become decision-makers. Students need to study geography to understand *how* the Earth is changing, *why* it is changing, and *whether* it should be changing in these ways.

For students, learning to ask geographic questions begins with the “whys of where”—why cities, eco-regions, earthquakes, and other phenomena are located where they are and how they are affected by proximity or connections to other things. After asking a geographic question, students should learn to gather geographic resources such as maps, satellite imagery, and data which can be analyzed to discover relationships across time and space. Students need to know how to present the results of their investigations using tools such as geographic information systems and multimedia. Students will also discover that an investigation usually sparks additional questions, and the resulting cycle is the essence of geographic inquiry.

Geography is not simply a “nice-to-have” subject in an already crowded curriculum. It provides the critical thinking, technology, and citizenship skills that underpin all other disciplines. It is essential to prepare workers who will grapple with the essential issues of the twenty-first century. If we continue to ignore geography education, we do so at our own peril.

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