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Geography's Expanding Place in American Education

By Alexander B. Murphy

The addition of Human Geography to the College Board's AP Program reflects growing interest in this venerable but innovative discipline

For many Americans, the term *geography* conjures up images of long lists of capital cities, mountains, and rivers. Memorize these and you are said to be geographically literate. Ignore them and risk embarrassing yourself when playing trivia games. Such images of geography are often forged in elementary and secondary school classrooms where cursory attention (at best) is given to where things are located—and then only as a prelude to discussions of social, historical, or environmental issues. Geography comes across as dry; it is something to be dispensed with before the interesting material can be studied.

Yet these images of geography are becoming harder to sustain. If geography is such a static, pedantic field, why are undergraduate and graduate students flocking to geography courses in record numbers? Why are geographers working in planning offices evaluating land use regulations in cities? Why is geography critical to the development of models of the global climate system? Why are Geographic Information Systems (GIS) cropping up in corporate boardrooms and government offices all over the country? The very relevance of such questions challenges the image of geography as a dry, boring subject, and answering them requires jettisoning the notion that “where” questions are simply informational.

Geography's importance and appeal are rooted in the insights that come when we consider not just where something is located but why it is there, how it relates to other things in the same place, and what the implications of particular geographic situations might be. Such queries are at the heart of geography—a subject with roots in the ancient world that has gained a place in the modern academy because of the need for an integrative discipline centrally concerned with the nature and significance of the patterns, places, and landscapes that make up the earth's surface. What can shifting vegetation patterns tell us about climate change? Why has the spread of Islam been more rapid in some parts of sub-Saharan Africa than in others? Which Amazonian peoples have been most affected by accelerated deforestation in parts of Brazil? How does the changing character of the French-German political boundary along the upper Rhine affect peoples' sense of place and their approach to common problems? Questions such as these are at geography's core—and they are arguably critical to understanding the world in which we live.

The recent clamor surrounding the state of geography education in elementary and secondary schools shows that many people have at least a generalized sense of the importance of the discipline. Yet the clamor is too often driven by surveys highlighting the inability of Americans to locate countries and oceans on a map. What does it mean not to know where Mexico is located? About the same thing as not knowing that World War I occurred during the second decade of the twentieth century. Place names, like dates, are trivial facts in isolation. The real problem with not knowing Mexico's location is what it suggests about a larger understanding of how the world is organized and how

places are related to one another. It is the quest for this sort of understanding that is transforming the face of geography education.

Geography's Rising Profile

A number of indicators show geography's growing status in education.¹ A report emanating from a 1989 summit, involving the governors of all 50 states and then-President Bush, identified geography as a core subject on a par with mathematics, science, and history. Subsequently, geography was listed as one of a small number of basic subjects deserving emphasis in schools in *Goals 2000: The Educate America Act*—passed by Congress in 1994. That same year Congress authorized the National Assessment of Educational Progress (NAEP) to conduct an assessment of geography in the schools. In framing the assessment, NAEP's governing board stated categorically that it was “guided by the conviction that a broad knowledge of geography is an essential part of a full education.”²

The past 15 years has also seen the development of several important initiatives designed to further geography education at the elementary and secondary school levels. In the second half of the 1980s, the National Geographic Society supported the development of a network of state geography alliances focused on expanding the teaching and learning of geography. Currently, there are alliances in all 50 states, the District of Columbia, Puerto Rico, and many Canadian provinces. Well over 10,000 teachers have participated in programs sponsored by these alliances, and their activities are expanding. Moreover, in the wake of the national education standards movement of the early 1990s, a coalition of geographers produced a detailed, challenging set of standards for

geography at the fourth, eighth, and twelfth grade levels.³ Although not in use everywhere, these standards were endorsed by a wide range of geographers, and they provide interested schools and teachers with a strong sense of the nature and analytical potential of geography.

Changing educational requirements in a number of states are further advancing the geography education cause. Outcome assessments that include geography have been adopted, or are being considered for adoption, in a number of states including Arizona, Colorado, Florida, Illinois, Maryland, Michigan, Minnesota, and Texas. Moreover, several states, including Texas and Colorado, require geography either before admission to state universities or before graduation from college. In response to these developments, high schools in many parts of the country are experiencing increasing enrollment in geography courses.

The effect of the new environment for geography education is particularly dramatic at the college and university level. A study commissioned by the National Research Council in the mid 1990s found that between the academic years 1986-87 and 1993-94 the number of undergraduate majors in geography increased by an estimated 47 percent nationwide. Enrollment in Ph.D.-granting departments increased by 60 percent. Similarly, between 1985 and 1991, the total number of students in geography graduate programs grew by 33.4 percent—a remarkable figure considering that, during the same period, graduate programs in the social sciences as a whole increased by only 15.3 percent and those in the environmental sciences decreased by 5.4 percent.⁴

The rising profile of geography education is not just a product of changing requirements in high schools and colleges, however. It is more fundamentally tied to

three overlapping developments: first, growing recognition of the importance of spatial perspectives in the environmental and social sciences; second, expanding employment opportunities for individuals with geographical training; and finally, mounting interest in the subject in the face of increasing globalization and heightened awareness of environmental issues. Together, these circumstances have produced what Bruce Alberts, Chairman of the National Research Council, describes as a renaissance of American geography over the past decade.⁵

Changing Intellectual Trends

Significant intellectual trends throughout much of the twentieth century worked against the discipline of geography. The trend toward increased specialization and the widening gap between the social and environmental sciences did not favor the kinds of integrative, place-based perspectives associated with geography. Moreover, the social science agenda came to be dominated by a search for normative explanations of social arrangements and human behavior, leading many to see differences from place to place simply as idiosyncrasies of declining significance.⁶

The shifting intellectual terrain of the last two decades has fundamentally altered this state of affairs. Growing evidence of human despoliation of the environment has prompted new interest in perspectives that cut across the natural science--social science divide. The shortcomings of many social and economic models have led researchers to consider more seriously the nature and significance of variations across space. And the impact of new communication technologies and shifting political arrangements on the perceptual and functional ordering of the earth's surface have prompted many to see

geographic arrangements as both dynamic and an integral part of changing social, economic, and environmental circumstances.

Against this backdrop, it is not surprising that researchers and commentators from a variety of disciplines have turned their attention to geography. Drawing on the work of human geographers, Anthony Giddens has highlighted the inadequacies of social theories that lack a spatial component.⁷ John G. Ruggie has taken international relations theory to task for failing to deal seriously with the territorial underpinnings of international political life.⁸ Economist Paul Krugman has criticized the ageographical assumptions of international trade theory, pointing to the role of historically rooted regional inequalities in the development of economic differences.⁹ Collectively, these works, and others like them, have moved geography toward the intellectual center—fueling expanded interest in the discipline.

Complementing such developments is the rapidly expanding use of GIS and other geographic tools in the private and public sectors. GIS can be thought of most broadly as “computer system(s) capable of assembling, storing, manipulating, and displaying geographically referenced information.”¹⁰ The expanding application of such systems is nothing less than dizzying. They are in use by governments and private entities involved in such diverse undertakings as locating new places of business, planning transportation arteries, charting the dissemination of pollutants through ecological systems, assessing the accessibility of health care facilities, redrawing congressional districts, and developing responses to flood events. The accompanying employment opportunities for individuals with knowledge and skills in geography have fueled considerable interest in

the field among students, as well as a demand for more geography training by professionals.

The growth of GIS programs in community colleges provides a dramatic example of the concrete educational implications of these developments. A major private sector GIS firm, ESRI, has helped establish GIS courses in over 200 community colleges, and the program is likely to be expanded to many more colleges in the near future. Moreover, the National Science Foundation's Advanced Technology Program has supported a substantial number of projects designed to develop community college GIS programs, as well as projects aimed at training community college faculty in GIS. Developments of this sort are likely to grow rapidly as the power and uses of GIS continue to expand.

To understand fully geography's rising profile, it is also important to consider the interest the subject generates among those who explore it seriously. Despite the growing presence of geography in the precollege curriculum, relatively few students arrive on college campuses declaring geography as a major. Yet a number of geography programs end up with a sizeable number of graduates. This happens because students walk into geography classes for a variety of pragmatic reasons and then encounter issues and perspectives that help them make sense of the world in which they live. Their interest may be piqued by a physical geography class that allows them to understand why hurricanes are more likely to threaten the eastern seaboard of the United States than the western seaboard. They may be drawn to an environmental geography class that provides insights into how changes in land use can increase flood danger. Or they may be intrigued by a human geography class that sheds light on the ways in which changing patterns of connectivity among people are affecting the place in which they live.

The likelihood of capturing student interest is enhanced by the changes that are unfolding in the world around us. The news is dominated by stories of economic globalization, changing political alliances, ethnic conflicts in various parts of the world, and the impacts of human alteration of the environment. A discipline that seeks to make sense of the spatial organization of the planet, and of the places and landscapes that are distributed across the earth's surface, has obvious relevance in this context. Geography helps people to understand the nature and implications of changing patterns of social organization and the interaction and particular interconnections among physical and human phenomena that give places their distinctive character. In short, the study of geography provides some of the insights and understandings that are critical both to intelligent participation in a democratic society and to the advancement of knowledge.

New Initiatives

These considerations are behind a number of recent initiatives concerned with the role of geography in education, research, and policy making. Significantly, the National Research Council (NRC), a part of the National Academy of Sciences, commissioned a comprehensive assessment of geography at a time when the NRC was moving away from disciplinary studies. The resulting publication—*Rediscovering Geography: New Relevance for Science and Society*—highlights the growth in interest in the discipline and sets forth recommendations aimed at strengthening both geography's external profile and its institutional base.¹¹

New initiatives are also emerging in education. Several colleges and universities have founded new Ph.D. programs in geography during the 1990s, including the

University of Southern California, Florida State University, the University of Connecticut, Southwest Texas State University, Kansas State University, and San Diego State University. Moreover, new geography programs have sprung up at both small colleges (e.g., the University of St. Thomas, in St. Paul, Minnesota) and large universities (e.g., George Mason University, in Fairfax, Virginia, which established a new Institute for Geographical Sciences).

Reflecting, and soon to be promoting, these developments is the decision by the College Board to add Human Geography to its Advanced Placement program (AP). A task force was first convened in 1995 to consider the possibility of developing an AP Geography course and Exam. After looking at both the importance of geography education and its expanding institutional base, the task force strongly endorsed the initiative. An initial challenge was to decide which kind of introductory geography course to develop as an AP course. A variety of institutional and pedagogic reasons led to a decision to begin with a Human Geography course, but with a recommendation for the subsequent development of a Physical Geography course.¹² A development committee went to work, AP summer institutes were offered starting in the summer of 1997, and AP Human Geography is now slated for official introduction during the 2000-01 academic year.

The AP Human Geography initiative has several significant implications. First, it is likely to sustain and strengthen the momentum of the geography education movement while providing a next step forward for those seeking to build on the National Geography Standards discussed previously. It will allow participating high schools to develop stronger, more analytically grounded, geography programs, and it will help to dispel

misconceptions about the nature and importance of geography. It will also bring a growing number of students to colleges and universities with significant training in geography. This, in turn, is likely to swell enrollments in geography classes and ultimately promote an increasingly sophisticated approach to geography instruction at the college level. Second, the initiative has implications for the AP Program itself. The addition of Human Geography will bring to the AP Program a subject that is global in scope and that deals with such critical contemporary issues as ethno-cultural diversity and human-environment relations. It will thus complement existing AP subjects such as U.S. and European History and Environmental Science, while offering significant new material that goes beyond the scope of those subject areas.

During the decades following World War II there is no question that geography became marginalized in the U.S. education arena—and by extension in the popular imagination. Yet a society cannot prosper for long without a fundamental understanding of the spaces, places, and landscapes that frame its existence and shape its relationships to other societies and to the natural environment. Geography's expanding place in U.S. education reflects growing recognition of this fact. The ultimate potential of that recognition is to enable us to better understand who we are and how we live on earth, for these are inextricably related to where we are.

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¹¹ National Research Council 1997.

¹² Alexander B. Murphy, "Advanced Placement Geography: Opportunities and Challenges for Geographers." *Journal of Geography*, 97 (3, 1998): 132-36.