Placing Advanced Placement® Human Geography: Its Role in U.S. Geography Education

Sarah Witham Bednarz

Abstract
This article examines Advanced Placement Human Geography (AP HG) in the context of its place in efforts to reform geography education. It presents a critical analysis of the AP program and its curriculum, asserting that it represents "powerful knowledge" as conceptualized by Young. It concludes with a call for research in AP HG aligned with recommendations to focus geography education research. Geographers in higher education are encouraged to embrace AP HG as a mechanism to recruit students and majors.

Key Words: *AP Human Geography, geography education, powerful knowledge*

Sarah Witham Bednarz is a professor of geography at Texas A&M University, College Station, Texas, USA, with research interests in geography education and spatial thinking.

Introduction

The Advanced Placement® (AP) program is the gold standard of American high school education. According to conventional wisdom, taking an AP course affords students with myriad opportunities: experience in an academically rigorous class; an enhanced grade point average essential for college admission; college credit if successful in the examination; access to the best teachers; and preparation for college. Taking AP classes is prestigious for students just as teaching them is for teachers. Subjects offered in the AP program are considered the most essential, important, and foundational. History and social sciences courses include World History, European History, U.S. History, U.S. Government and Politics, Micro- and Macro-Economics, and Psychology. The sciences feature Biology, Chemistry, Environmental Science, and three varieties of physics courses. There are no technical courses beyond two computer science offerings. While AP traditionally has been for the elite, in recent years, facing significant criticism, College Board, the AP parent organization, has promoted the program as a strategy to increase access to higher education for underrepresented students, particularly African Americans and Latinos.The "All In Campaign" is an effort to make the AP program more inclusive. In sum, in general AP is a big deal. To the discipline of geography in the United States, Advanced Placement Human Geography (AP HG) is more than a big deal—it is massively important.

The purpose of this article is to examine AP HG, its evolution, and role as a catalyst for geography. First, I recount the history of the development of AP HG in the context of reforms in geography education. Next, I present a critical analysis of AP and the course using the framework of powerful knowledge (Young 2008). After asserting the intellectual value of AP HG, I call for research on AP Human Geography, making the point that it offers tremendous opportunities for the discipline to recruit undergraduate students. To conclude, I make some recommendations for how geographers can further capitalize on the positive energy generated by AP HG.

Marran's Vision

The geography education community has long characterized itself using the progressive rhetoric of renaissance and reform (Bednarz, Downs, and Vender 2003). Certainly geography education has seen a renaissance or marked improvement since a low point in the late 1970s. A succession of activities, projects, and publications signaled progress decade by decade (Table 1). It began when a group of geographers under the shared auspices of the Association of American Geographers and the National Council for Geographic Education published *Guidelines for Geographic Education: Elementary and Secondary Schools* (Joint Committee on Geographic Education 1984). This booklet presented geography as a unified scientific discipline that teachers and the public could understand via five core/organizing themes: (1) location; (2) place; (3) relationships between humans and environments; (4) movement; and (5) regions. It laid the foundation for and initiated the campaign to improve geography education in the United States largely through the concerted dissemination efforts of the National Geographic Society's Network of Alliances for Geography Education, begun in 1986 (Dulli 1994; Grosvenor 1995).

Two factors are notable about this early period in the renaissance. First, a key characteristic of the state alliances was grassroots collaboration between K–12 teachers and college and university faculty. Second, much of this development

Journal of Geography 115: 84–89

Table 1. Progress in geography education.

Date	Activity/Document	Key Characteristics
1984	*Guidelines for Geographic Education*	Introduction of an instructional framework organized around five themes: Location, Place, Relationships within Places; Movement; Regions.
1986	National Geographic Society Network of Alliances for Geography Education	Teacher-professor partnerships to enhance the quality and quantity of geography education.
1991	NAEP Assessment Framework	Three content dimensions: Space and Place; Environment and Society; Spatial Dynamics and Connections. Three cognitive dimensions: Knowing, Understanding, Applying.
1994	*Geography for Life: National Geography Standards*	Six essential elements: World in Spatial Terms; Places and Regions; Physical Systems; Human Systems; Environment and Society; Uses of Geography. Core skills emphasize doing geography.
2000–2001	Advanced Placement Human Geography	Institutionalized human geography in high schools.
2012	*National Geography Standards: Geography for Life*	Update to reflect growth and importance of geospatial technologies and emphasis on inquiry, problem solving, and other practices of geography.
2013	*Road Map for 21st Century Geography Education*	Reports on assessment, professional development and instructional materials, and geography education research required to build capacity in geography.

was facilitatedby the Geography Education National Implementation Project (GENIP). The purpose of GENIP was to coordinate education projects among the four professional geography associations: the American Geographical Society; the Association of American Geographers; the National Council for Geographic Education; and the National Geographic Society. Salvatore Natoli, director of education at the AAG, organized the first GENIP steering committee and served as both its chair and coordinator. He was followed in both roles by James Marran, a geography teacher at New Trier Township High School in Winnetka, Illinois, a Chicago suburb.

Jim Marran began his efforts persuading the education community that geography is an essential school subject across the grade levels in the mid-1960s when he was involved in the High School Geography Project (HSGP). As project coordinator for GENIP, Jim and members of the GENIP steering committee managed outreach and collaborative efforts to move geography education forward at a time when the education community was introduced to the National Education Goals promoting systemic changes needed to ensure equitable education opportunities and high levels of educational achievement for all students. The National Education Goals, as a nonpartisan and broadly popular initiative of the nation's governors (including the rising governor of Arkansas, Bill Clinton) and supported by President George H. W. Bush in 1989, established six goals for educational improvement and identified a core of five academic subjects to provide curricular coherence; notably, geography was included. Goal four stated that "American students will leave grades four, eight, and twelve having demonstrated competency in challenging subject matter, including English, mathematics, science, history, and geography." To achieve this goal, world class national content and student performance standards were to be developed in the core subject areas, resulting in the *Geography for Life: National Geography Standards* (Geography Education Standards Project 1994; Heffron and Downs 2012). To measure achievement in the subjects and progress toward the six goals a national voluntary assessment system (National Assessment of Educational Progress or NAEP) was established. Several members of the GENIP steering committee were key players in writing the NAEP assessment framework as well as the National Geography Standards. With these achievements as context, developing an Advanced Placement course in geography was the next challenge.

As a teacher in a nationally recognized public high school, Marran understood the power of AP. At every GENIP meeting he worked to persuade the four member organizations that an AP geography course would elevate the status of the discipline. It was the kind of institutionally significant change that would be the cornerstone to

continued growth in geography education. Geography had a national assessment in NAEP and national standards in *Geography for Life*, but it was generally regarded as a middle school subject. The discipline needed an entrée into high schools. Although some leaders in geography education were not convinced, Marran continued to correspond with the College Board and others on a regular basis. Finally, under the GENIP chairmanship of Roger Downs (of Pennsylvania State University's geography faculty), GENIP met with College Board and received an invitation to proceed. With GENIP's assistance and perseverance Jim Marran had won the day.

The shaping of an AP geography course became controversial at the point when market studies suggested Human Geography would be more appropriate to the secondary school curriculum than a world regional or a mixed human/physical course. When College Board hesitated at funding a new course, GENIP secured a loan from its four member organizations to continue the work.

The creation of AP HG maintained two characteristics of the renaissance in geography education: it was a collaboration between high school teachers and college professors, and it was shared across geography organizations. And Marran was right: AP HG has become a cornerstone for geography education. Without Marran's vision and persistence, the discipline of geography would not have such a large and vibrant high school presence. It is a bright spot in the story of geography education.

Criticisms of Advanced Placement

Criticisms of the AP program abound, focusing largely on student learning, rigor, access, and curriculum (Tierney 2012). One sweeping claim made for AP is that it prepares students for success in college (Sadler 2010). There is no evidence to support that assertion; simply taking an AP course does not guarantee college readiness or preparation to perform at a college academic level. However, a recent study conducted by independent researchers did find that students who received college credit for AP exams (typically a score of a 3, 4, or 5) were more likely to complete their college degrees on time (Smith, Hurwitz, and Avery 2015). In terms of rigor, it must be remembered that AP programs across subjects are not uniform, despite some effort on the part of College Board to audit course syllabi. Teachers are often assigned to teach an AP course without adequate academic preparation, and professional development in AP subjects is limited. Thus, there is tremendous range in the nature of AP courses. Simply having a rigorous course outline does not mean that the class will match it.

Interms of access, the AP program has seen phenomenal growth in the last fifteen years, largely because AP is being used as a strategy to increase the quality of instruction in high schools. What was once an opportunity primarily for wealthy suburban students is now an opportunity for urban students as well. This has led to growth in the numbers of African American and Hispanic AP students; from 2013 to 2014 there was a 7 percent increase in traditionally underrepresented students taking an AP exam. Yet, gaps exist in both participation and performance on the tests, serious concerns, particularly to College Board (Adams 2015).

AP courses have also been criticized as being too superficial, offering too much breadth and not enough depth, and for ignoring contemporary research on learning and student-centered curriculum design (Parker *et al.* 2013). The National Research Council (2002, 1) recommended that AP courses be redesigned to address these issues. "The inclusion of too much accelerated content can prevent students from achieving the primary goal of advanced study: deep conceptual understanding of the content and unifying concepts of a discipline." This presents a special problem for AP HG because it is offered frequently to ninth and tenth graders (80% of test-takers in 2014), many of whom have only nascent intellectual skills and rather shallow prerequisite knowledge. While younger students do not score as well as eleventh and twelfth graders, the average scores for them (2.57 out of 5) are not remarkably below the national average for eleventh and twelfth graders (2.87). Figure 1 shows changes over time in ninth and tenth grade performance.

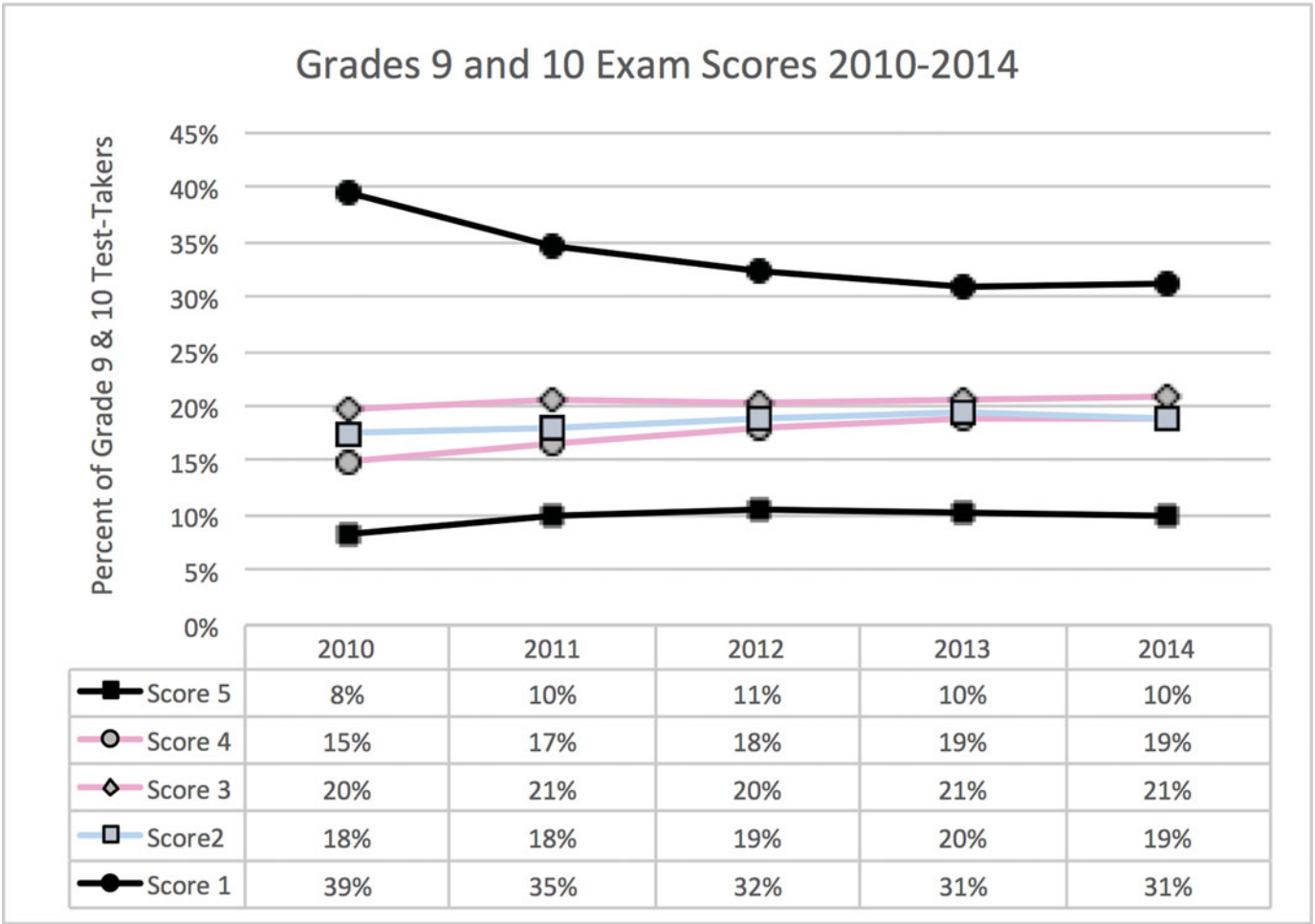
But Is It Good Geography?

The British sociologist of education Michael Young has suggested a compelling idea distinguishing between powerful knowledge and knowledge of the powerful (Young 2008, 2012; Beck 2013). Knowledge of the powerful, he explains, "refers to the knowledge authorized by those in power—and leads to questions about who has the power? Is it legitimate and on what basis?" (Young 2010, 4). Roughly paraphrased, it asserts that the ideas of the ruling class are the ruling ideas. The implication is that what knowledge is specified as worth knowing, such as in an AP course outline, is that which the powerful deem is most worth knowing. The curriculum is in the hands of the elite. Powerful knowledge, in contrast, is knowledge that affords its holder with useful and important understandings. Young (2010, 4) writes:

> The concept of powerful knowledge has a very different focus—on the knowledge itself—its structure, what it can do and how it is organized for both the production of new knowledge and acquisition of existing knowledge that is new to the student.

He proceeds then to define powerful knowledge as that which:

> provides reliable and in a broad sense "testable" explanations of ways of thinking; is the basis for suggesting realistic alternatives; enables those who acquire it to



	2010	2011	2012	2013	2014
Score 5	8%	10%	11%	10%	10%
Score 4	15%	17%	18%	19%	19%
Score 3	20%	21%	20%	21%	21%
Score2	18%	18%	19%	20%	19%
Score 1	39%	35%	32%	31%	31%

Figure 1. Change in ninth and tenth grade scores, 2010 to 2014. (Color available online.)

> see beyond their everyday experience; is conceptual as well as based on evidence and experience; is always open to challenge; is acquired in specialist educational institutions, staffed by specialists; is organized into domains with boundaries that are not arbitrary and these domains are associated with specialist communities such as subject and professional associations; and is often but not always discipline-based. (Young 2010, 4)

Certainly, AP HG is the knowledge of the powerful: The original committee that wrote the outline, led by Alexander Murphy, professor of geography at the University of Oregon, consisted of an elite group of geographers. That the course outline follows the table of contents of leading texts further shows that the content conforms to traditional norms of human geography. New concepts are periodically added to the outline (alas, not much is removed!), but even those decisions are made by an elite.

However, examining the outline with its focus on the nature, principles, and perspectives of geography, on spatial patterns and processes across a range of topics and scales, and on the use of models as a key tool for students to conceptualize the complexity of Earth, it is clear that the content is powerful. Students taking AP HG under the guidance of specialist teachers learn to see "beyond their everyday experience" to understand why things are where they are. They learn to systematically observe their worlds in new ways and to interpret what they see through the lens of powerful explanatory principles and models. They learn geography and about geography as a unique, singular discipline. And they are inculcated to the practices of geographic inquiry to test ways of thinking and to challenge assumptions about the places they study. In many ways, AP HG, well taught, is the epitome of powerful knowledge, offering students myriad opportunities to both acquire and produce new knowledge in novel ways. So yes, AP HG is good geography, and good and worthwhile for students.

KWL: Call for Research

Educators are familiar with the pedagogic device of a KWL chart. What do we know about something (K); what do we want to know (W); and at the conclusion of the exercise, what did we learn (L). *A Road Map for 21st Century Geography Education, Geography Education Research* (Bednarz, Heffron, and Huynh 2013) called for research in geography education focused around four key questions: (1) How do geographic knowledge, skills, and practices develop across individuals, settings, and time? (2) How do geographic knowledge, skills, and practices develop across different elements of geography? (3) What supports or promotes the development of geographic knowledge, skills, and practices? (4) What is necessary to support the effective and broad implementation of the development of geographic knowledge, skills, and practices? AP HG offers a tremendous opportunity for a range of research. Other AP subjects have been studied and there are numerous ways that research could be replicated. I suggest several key groups of questions of particular interest. Each is aligned with the four broad questions suggested by the *Road Map:*

1. How do students learn the knowledge, skills, and practices encompassed in AP HG? And how do they translate that into success on the examination? What are the learning progressions to acquire geographic knowledge and skills? Is there a *better* or *best* way to arrange the sequencing of concepts or to structure the course for maximum effect? What roles do course organization, field or lab experiences, and uses of geospatial technologies play in student achievement? What are the interactions between individual students, their educational settings, and time spent in learning? Are there particular pedagogic strategies that are effective with ninth and tenth graders that will close the age/performance gap?
2. Whatare the unique aspects of AP HG that confound students, the misconceptions that prevent them from grasping the concepts and principles of geography? Are the misconceptions related to innate naïve understandings or are these perpetuated by nonspecialist teachers?
3. What are the characteristics of AP HG teachers? What is the relationship between teaching methods and student AP exam performance? What kinds of professional development best support AP HG teachers? Previous research conducted with STEM AP courses (Dede 2014) indicates that participation in the online AP Teacher Community has the largest positive impact on teacher practices and student achievement. Is that the case for AP HG? What role does social media play in supporting AP HG teachers and how could that be made more effective? What effect do individual differences in teachers (e.g., age, years or experience, background in geography) play in their preparation and in student success? Since geography is a unique discipline, how do teachers familiar with more traditional social studies subjects learn geographic perspectives? Dede (2014) suggests STEM teachers engage in "unlearning" to acquire new teaching practices and that by "mirroring" master teachers in online communities they find the models they need. Is that the process for AP HG teachers becoming subject specialists?
4. What is the impact of AP HG on the discipline of geography? Anecdotally, university professors believe we are seeing a slow increase in freshman geography majors. What is the evidence? How have we in higher education capitalized on the phenomena of AP HG?

Carpe AP HG

Geography is finding new strength and vigor through interdisciplinary research, new interest in things spatial, the geospatial revolution, and by its ability to address significant global issues in meaningful and generative ways (National Research Council 2010). At the same time, the discipline faces challenges to its unique and singular identity. We need to grow and capture new young minds from across our diverse population. This year (2015) more than 162,000 students took Advanced Placement Human Geography. They were supervised and coached by a large and growing number of teachers, most of whom came to geography as converts, not college majors.

I wish to conclude by urging geographers to reach out to AP HG teachers and their classes. About a fifth of students who take AP HG indicate they are interested in taking another geography course in college. Some are your future geography majors. Adopt them; nurture them; use them as your pipeline to your majors; engage your senior majors to mentor the AP students. You will find that you learn a lot about innovative teaching from interacting with AP HG teachers and they can hone their geographic perspective by talking with you.

Editor's Note

AP, Advanced Placement, and Advanced Placement Program are registered trademarks of the College Board, which was not involved in the production of and does not endorse this commentary.

References

Adams, C. 2015. As achievement lags among students of color, AP potential works to address gap. *Education Week* March 18. http://blogs.edweek.org/edweek/college_bound/2015/03/as_achievement_lags_among_advanced_students_of_color_ap_potential_works_to_address_gap.html (accessed September 7, 2015).

Beck, J. 2013. Powerful knowledge, esoteric knowledge, curriculum knowledge. *Cambridge Journal of Education* 43 (2): 177–193.

Bednarz, S. W., R. M. Downs, and J. Vender. 2003. Geography education. In *Geography in America at the Dawn of the 21st Century*, ed. G. J. Gaile and C. Willmott, pp. 463–480. Oxford, UK: Oxford University Press.

Bednarz, S. W., S. Heffron, and N. T. Huynh, eds. 2013. *A Road Map for 21st Century Geography Education: Geography Education Research*. Washington, D.C.: Association of American Geographers.

Dede, C. 2014. Unlearning and mirroring: Transforming instruction. *Education Week* July 30. http://blogs.edweek.org/edweek/learning_deeply/2014/07/unlearning_and_mirroring_transforming_instruction.html?qs=Dede+inmeta:Pub_year%3D2014 (accessed September 7, 2015).

Dulli, R. E. 1994. Improving geography learning in the schools: Efforts by the National Geographic Society. In *A Decade of Reform in Geographic Education*, ed. R. S. Bednarz and J. F. Petersen, pp. 121–124. Indiana, Pennsylvania: National Council for Geographic Education.

Geography Education Standards Project. 1994. *Geography for Life: National Geography Standards*. Washington, D.C.: National Geographic Research & Exploration.

Grosvenor, G. M. 1995. In sight of the tunnel: The renaissance of geography education. *Annals of the Association of American Geographers* 85 (3): 409–420.

Heffron, S. G., and R. M. Downs, eds. 2012. *Geography for Life: National Geography Standards*, 2nd ed. Washington, D.C.: National Council for Geographic Education.

Joint Committee on Geographic Education. 1984. *Guidelines for Geographic Education: Elementary and Secondary Schools*. Washington, D.C.: Association of American Geographers and National Council for Geographic Education.

National Research Council (NRC). 2002. *Learning and Understanding: Improving Advanced Study of Mathematics and Science in U.S. High Schools*, Executive Summary. Washington, D.C.: National Academies Press.

———. 2010. *Understanding the Changing Planet: Strategic Directions for the Geographical Sciences*. Washington, D.C.: National Academies Press.

Parker, W. C., J. Lo, A. J. Yeo, S. W. Valencia, D. Nguyen, R. D. Abbott, S. B. Nolan, J. D. Bransford, and N. J. Vye. 2013. Beyond breadth-speed-test: Toward deeper knowing and engagement in an Advanced Placement course. *American Educational Research Journal* 50 (6): 1424–1459.

Sadler, P. M. 2010. Advanced Placement in a changing educational landscape. In *A Critical Examination of the Advanced Placement Program*, ed. P. M. Sadler, G. Sonnert, R. H. Tai, and K. Klopfenstein, pp. 3–16. Cambridge, Massachusetts: Harvard Education Press.

Smith, J., M. Hurwitz, and C. Avery. 2015. Giving college credit where it is due: Advanced placement exam scores and college outcomes. National Bureau of Economic Research. http://www.nber.org/papers/w21147 (accessed September 7, 2015).

Tierney, J. 2012. AP classes are a scam. *The Atlantic*, October 13. http://www.theatlantic.com/national/archive/2012/10/ap-classes-are-a-scam/263456/ (accessed September 7, 2015).

Young, M. F. D. 2008. *Bringing Knowledge Back In*. New York: Taylor and Francis.

———. 2010. Educational policies for a knowledge society. Keynote, Goethe Project, University of Tubingen, http://www.goete.eu/news/events/101-reflection-keynote-lecture-at-the-goete-kick-off-meeting-by-michael-young (accessed June 16, 2015).

———. 2012. The curriculum: An entitlement to powerful knowledge. http://www.newvisionsforeducation.org.uk/2012/05/03/the-curriculum-'an-entitlement-to-powerful-knowledge'-a-response-to-john-white/ (accessed June 16, 2015).