

# The Implementation of Standards-Based Geography Education in the United States

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## **I. Introduction**

It has been 10 years since *A Nation at Risk* (National Commission on Excellence in Education, 1983) set the United States off on a course to address the “mediocrity” of its public schooling. Seeking to promote systemic change, this “excellence” movement of educational reform (e.g., Finn, 1991) now struggles to stay the course despite competing economic, social, and political agendas. Suffice it to say, the goal of educational excellence has yet to be attained.

Political and social debates set excellence against equity. The excellence movement pushes to assure an “internationally competitive” citizenry, sometimes arguing for private competition to prod the public education system. The equity movement fears that the excellence strategy will leave many children behind (e.g., Viadero, 1993) and demands resources to create opportunities to learn for disadvantaged students. (With the political rhetoric, perfectly good words became codewords, e.g., “excellence” and “equity” came to be associated with right and left wing thought, respectively, thus obscuring much of the complexity of the issues.) The Clinton Administration negotiated between these two positions, and in April, 1994, Congress passed the education bill, the *Goals 2000: Educate America Act*, which carries forward from the Bush Administration several reforms, the most important of which in my view is standards-based education (SBE).

These political and social issues are reflected in educational debates, most of which turn on three questions: Who to teach?

What to teach? and How to teach? For example, the first question asks: Does excellence imply undue attention to education for the elite or can it mean better education for all? Debates about what to teach ask whether schools should specialize in traditional academic disciplines or rather emphasize an integrated and applied approach to knowledge. Injected into this content debate are various political agendas concerning "values education," e.g., does "values education" undermine "family values?" Third, how we teach is partly predicated upon what theory of learning we hold ("constructivism" is new, "transmissivism" is traditional), so debates continue about "best teaching practice" (Varanka-Martin, 1993). What to teach and how to teach conjoin in the reform movement to emphasize "higher-level thinking," problem-solving, and decision-making.

These broad educational debates and trends have found some expression in U.S. geography education, but the major focus of activity and thinking has been devoted to gaining a place for geography in the school curriculum (Hill, 1992; 1994a). Thus, it is inaccurate to say that geography education has undergone reform. But the subject has become perceived as more comprehensive because of the popularity of the five "fundamental themes" (Joint Committee on Geographic Education, 1984). But more than being reformed, geography education has been reborn, and its rebirth has been one of the consequences of the broader educational reform. The recent revolution in geography education in the US—moving from a position of virtual absence in the school curriculum to being named one of the five core disciplines in the National Education Goals—capitalized on the excellence movement. Throughout this period, most arguments for more geography in the curriculum stayed close to the mainstream excellence message: The nation needed a citizenry educated about the rest of the world (i.e., geographically literate) if it was to be internationally competitive (National Governors' Association, 1986; 1989; Southern Governors' Association, 1986; US Department of Education, 1991). In this paper, I offer evidence that geography education, having achieved a modicum of public acceptance, is moving into a new phase, one in which it is more substantively in touch with the educational reform movement. Standards-based education is

the principal vehicle carrying geography towards fundamental reform.

## **II. Standards-Based Education**

The core idea of the education-for-excellence reform is standards-based education (SBE). It would change the way we assess the educational system. Instead of measuring its inputs as we currently do (e.g., amount of time the student spends in school, number of advanced degrees of teachers, or number of dollars expended per pupil), the system would be measured by its outputs (what the student has learned). Two premisses of SBE are that students can learn more than they are now learning and that clarity about expectations will foster higher achievement. Thus, SBE requires unambiguous statements ("standards") of what students should know and be able to do. To achieve international competitiveness, the standards must be "world-class," that is, comparable in rigor to what is expected of students in the world's most economically successful countries. Students will not be certified until they have attained the standards.

Those arguing for equity are concerned that SBE will leave disadvantaged students, particularly those belonging to minority groups, even farther behind than they are already. Basic to the equity position is that the educational system must assure that all students have an equal opportunity to reach the standards. Proponents of SBE argue that given sufficient time—and effective and responsible parents and teachers cooperating in educationally-supportive communities—most students will do so. The current scarcity of these supporting—one might say environmental—conditions in some communities—especially minority communities—in the United States is a subject of great social concern. It is argued that without such conditions, educational reform will fail.

The implementation of SBE is vastly complex in the US where the idea of a national curriculum is anathema. The federal government is providing guidelines for SBE, but given budget cutting, it is not in a mood to pay for its implementation. Nor can the federal government mandate SBE. Only some states or

individual school districts have that constitutional power.

Theoretically, there are as many potential sources of standards as there are fields of study and levels of educational control, e.g., we could have a set of national geography standards as well as numerous sets of state and local standards. Federal grants are supporting standards-writing projects by several national-level disciplinary groups, including geography. (Geography's good fortune in having a federally-funded standards project derives from the fact that it was named as one of the five subjects given priority in the National Education Goals.)

Individual states or school districts could ignore standards developed by national projects or they could adopt them partly or fully. A likely scenario is that the standards emanating from national projects will be at least partly adopted in most states and districts because the National Assessment of Educational Progress, which will increasingly be influenced by national standards, will report state-by-state achievement and states will not want to look bad in these reports. Also, many state and local curriculum development groups, facing the daunting task of writing good standards, will see the wisdom of using the work already done by highly expert national-level groups.

Standards signal what the outcomes of education must be but they do not map out precise routes toward attaining them, i.e., standards do not constitute a curriculum much less detailed instructional materials. Thus, there is a gap between standards and curriculum and another gap between curriculum and instructional materials. Once standards are adopted, the states and local school districts will be responsible for developing their own curricula. And they will need to develop or purchase their own instructional materials.

### **III. Geography Education Standards Project**

Funded by the US Department of Education, the Geography Education Standards Project produced its third progress report in October of 1993 (Geography Education Standards Project, 1993). Its final report, which is scheduled for completion late in 1994 must be approved by the National Education Goals Panel

established by the US Congress. This and other federally-funded standards projects operate under mandates to work through a broad-based consensus process, which includes public hearings and vetting by numerous interest groups. Many of these groups are represented on the Standards Project's Oversight Committee. The Project's core writing group is advised by a cadre of teachers and by a Content Advisory Committee, Environmental Education Committee, and International Committee. I thank Dr. Manik Hwang, of Korea, for his service on the International Committee.

The Project has struggled with many of the central issues of educational reform: What is the audience (teachers, curriculum specialists, educational administrators, parents, the public?) for its product and how can it be best addressed? The standards must be "world-class," but they cannot be a set of elite standards for geographers. Rather, these must be standards for an informed, decision making citizenry, what the Project is calling "the geographically informed person." The Project must decide how much of the discipline is relevant to this charge—it can only include those essentials. The Project must answer the question: What should a student know and be able to do in order to be an informed, decision making citizen in an internationally competitive environment? Standards will be used throughout the full range of grade levels (K-12), so they must be developmentally appropriate. They must assure a cumulative, spiraling development of knowledge and skills. Since the teaching of beliefs, attitudes, and values raises a red flag in front of some conservative groups, the Project must take pains to discuss instead the importance of various "perspectives" in finding meaning and understanding in geography.

In addition to these general issues, the Project believes it must concern itself with describing the discipline of geography and promoting its importance. Disciplines that are traditionally entrenched in the school curriculum (e.g., science, English, and history), do not have to do this. But geography, despite its recent acceptance at the national level, still has no such firm foothold in most state and local curricula. The Project must describe the field in non-technical terms and must show how geography can be applied to solve real world issues because non-geographers must continually be convinced that geography is worth studying. The politics of selling geography have been very successful but

they must continue (Wilbanks, 1993).

Furthermore, the Geography Standards Project must describe how geography can be integrated with other disciplines because a large contingent of the nation's educators –including many of those in support of equity– do not want a discipline-focused curriculum. Although some progress has been made in adding geography courses, it is still typically hidden under the social studies rubric. Social studies advocates –a large and politically significant group– are developing social studies standards that they would like to see adopted ahead of or instead of history and geography standards. The most common pattern, although not the only one, is likely to be a synthesis of the social studies standards and the standards from several discipline-based projects into an integrated social studies curriculum.

The Geography Project's October 1993 progress report listed 18 Content Standards: broad statements of what students should learn from a K-12 geography education. Keyed to the 18 Content Standards are approximately 175 Performance Standards, which specify for grades 4, 8, and 12 what students should know and be able to do by the time they reach those levels.

If standards are adopted, they will only be enforced through assessment. Current, reform-minded educational practice argues that performance standards should be "authentically assessed" whenever possible. An "authentic assessment" is a performance task used to assess a student's attainment of the standard that has the following criteria: (1) students construct meaning and produce knowledge; (2) students use disciplined inquiry to construct meaning; (3) students aim their work toward the production of discourse, products, and performances that have value or meaning beyond success in school (Varanka-Martin, 1993).

#### **IV. Implementation and Support of Geography Standards**

The geography education community in the US is beginning to marshal its resources towards the implementation and support of the national geography standards. This was the major message coming from the Summit in Geographic Education, a

conference of some fifty geography educators held at Southwest Texas State University in May, 1993. Papers from that conference were published in the January/February 1994 issue of the *Journal of Geography*. The Geography Education Program of the National Geographic Society and its network of state geographic alliances, the Geographic Education National Implementation Project (GENIP), and the National Council for Geographic Education (NCGE) have begun to focus their resources on standards. For many of the reasons put forward in the preceding section, it is understood that without a multi-year, multi-level implementation program (to be orchestrated by GENIP), geography standards will not be adopted and used (de Souza and Munroe, 1993; Phillips, 1993).

The prospect of implementation raises other issues. There are complaints that if standards stimulate separate geography courses, they must replace other subjects. Moreover, a raft of standards from many discipline-based projects implies an increasing amount of instruction. Where will these fit in the time of the school day and year? And, especially in geography, where will the pre-service and in-service training come from that will be needed to prepare teachers to cope with the rigors of new standards (Boehm, Brierley, and Sharma, 1993)? None of these questions have been answered.

Most local schools do not have the geography expertise to create curricula and assessments required to address the geography standards. State-level development of standards-based model curricula may help to fill this gap, and new projects have received federal funding to do this in Colorado and Michigan. State model standards are mandated by a new Colorado law requiring the elected State Board of Education to establish state standards for reading, writing, geography, math, science, and history.

Colorado is moving forward to develop SBE. Following the National Geography Standards Project, Colorado's Task Force on Geography Standards has set the development of "the geographically informed person" as its goal for its geography standards. *This means being knowledgeable about people, places, and environments, and being confident and responsible in applying that knowledge. Geographically informed citizens understand and appreciate the many interdependent worlds in*

*which they live, and they make informed and ethical judgments to improve their community, state, nation, and world. To meet the challenges of the future, a geographically informed citizen should be able to:*

- \* Understand facts, concepts, and generalizations about world geography;*
- \* Apply geographic skills to observe, gather, organize, and present information; and*
- \* Use geographic perspectives to analyze, evaluate, make decisions about, and report on issues, processes, and events.*

Colorado has relied heavily on the 18 National Geography Standards, which it has collapsed into 6 Colorado Geography Standards, as shown here:

#### COLORADO GEOGRAPHY STANDARDS

Standard 1: Seeing the World Geographically.

Students know how to use maps, globes, and other tools to locate and derive information about people, places, and environments.

Standard 2: Places and Regions.

Students know the physical and human characteristics of places and can use this knowledge to define and study regions for the purpose of interpreting patterns of change.

Standard 3: Natural Systems.

Students understand how processes of nature interact to shape Earth's surface patterns and systems.

Standard 4: Human Systems.

Students understand how economic, political, cultural, and social processes interact to shape patterns of human populations, interdependence, conflict, and cooperation.

Standard 5: Environment and Society.

Students understand the effects of interactions between human and natural systems and recognize how the interpretation of these effects can change.

Standard 6: Applying Geography.

Students can apply knowledge of people, places, and environments to interpret the past and present and to plan for the future.

Source: Colorado Geography Standards, Draft 5/4/94

Minnesota moved ahead of the national standards project and of most other states with Minnesota Project Geography (Lanegran and St. Peter, 1993). In 1991, Minnesota mandated that "outcomes-based" (read standards-based) education be implemented by all school districts during the next 10 years. Geography is included in the state outcomes. The State University System funded a task force to define a high school geography course. This group produced a set of outcomes (Minnesota High School Geography Project, 1992) based on the Geography Assessment Framework for the 1994 National Assessment of Educational Progress (NAEP Geography Consensus Project, 1992; Salter, 1992). Subsequently adopted by the State University System in October, 1992, these outcomes essentially constitute Minnesota's set of standards for geography. Although completed prior to the work of GESP, the Minnesota standards are likely to be compatible with, but not identical to, the national standards.

The successes of a few states will not go far in achieving nationwide implementation of geography standards. Unfortunately, the tradition of state autonomy in the US means that the "reinvention of the wheel" will probably occur in many states. It may be necessary to set up implementation teams and to create one or more model programs in schools in each state (Bettis, 1993). Partnerships of school people, geographers, parents, educationists, and other "stakeholders" will be needed to accomplish even a modest level of inclusion of geography in the curriculum in a SBE framework. Given all the constraints, it is unlikely that we shall see geography sweeping nationwide into the curriculum of every state and school district.

## **V. Curriculum and Materials Development**

As states and local districts adopt geography standards, a

three-pronged effort will be needed to: (1) develop strong geography instructional materials; (2) use the alliance in-service network and new pre-service programs to train teachers to use those materials; and (3) ensure adoption of the materials by providing strong curricular guidance, especially linking materials and teacher training to national standards (Hill, 1994b). Expectations are escalating for strong geography materials, not only because of the surge in attention to geography in the curriculum, but more importantly because we shall soon be operating in a standards-based framework. Materials that do not provide specific and systematic help in reaching standards will be judged inadequate by the educational community. Where the Geography Standards are adopted, we might expect that they will help reform materials. But it will do little good to develop strong geography instructional materials unless they are widely adopted, used by well-trained teachers, and instrumental to the standards process.

There are 3 geography materials development projects in the US. Known by their acronyms of GIGI, ARGUS, and GeoLinks, all 3 projects were begun prior to the development of national geography standards. But these are reform-oriented projects that are likely to support the new geography standards.

**GIGI.** *Geographic Inquiry into Global Issues* (GIGI) is the foundation of the Britannica Global Geography System (BGGs), a multimedia learning system for secondary education published in 1994-95 by Encyclopaedia Britannica Educational Corporation of Chicago, Illinois. Developed at the University of Colorado with funding from the National Science Foundation, GIGI is 20 inquiry-oriented, data-based modules that examine critical global issues with case studies in every world region (Hill et al., 1992; Hill, 1994b; Hill, Dunn, and Klein, 1995). The print modules consist of Student DataBooks, Teacher's Guides, and laminated Mini-Atlases. The multimedia enhancement package includes a CD-ROM called Geopedia and three Videodiscs with barcode guides. The project aims to help meet the goals of teaching responsible citizenship, geographic content, skills, and perspectives, and critical and reflective thinking. Viewing its task as a process of translating the discipline of geography for educational purposes (Dunn, 1992; 1993), GIGI seeks to create challenging, useful, and relevant issues-oriented materials in

order to raise public awareness of geography and motivate students to become involved decision makers for the 21st century.

There is no necessary sequence for GIGI's modules. Each one is free-standing, so a teacher can use them in any desired order or put together smaller clusters to fit special needs. Based on Frances Slater's (1982; 1993) question-driven inquiry activity planning model, a leading question frames the issue of each GIGI module, and student inquiry proceeds through a sequence of lessons.

**ARGUS.** *Activities and Readings for the Geography of the U.S.* (ARGUS), is a project to develop materials for a high school course on the geography of the U.S. It is also funded by the National Science Foundation with a grant to the Association of American Geographers. Its major goals are to help students develop the ability to see meaning in the landscape, to use maps as analytical tools, and to learn to apply the spatial perspective to problems (ARGUS, 1993). ARGUS materials include a Text, Book of Readings, Student Activity Manual, and Teacher's Guide. The four components are complementary rather than interchangeable. The core is a short Text about some big geographic forces that shape the United States. Population geography, economic geography, political geography, and environmental geography provide the systematic dimensions that are uniquely combined with the regional dimension (Gersmehl and Young, 1992).

The U.S. geography focus of ARGUS complements GIGI's global perspective. GIGI's inquiry- and issues-orientations and modular form are its attractions. ARGUS's strength lies in its innovative combination of both regional and topical geography as well as the amount and range of geographic concepts and skills that it systematically treats.

The success of both GIGI and ARGUS will depend on the skills of well-trained geography teachers (which are unfortunately in short supply). Classroom observations of GIGI's trials (Klein, 1993; 1994) and Stoltman's (1993) observations from conducting ARGUS teacher workshops strongly support this conclusion. According to Stoltman, "those teachers out of university less than 5 years quickly grasped the material, but those out 10 years or more had difficulty seeing ARGUS as the

alternate treatment of geography and seemed wedded to the (traditional) regional approach." Evidence that both the GIGI and ARGUS developers are well aware of the critical role of the teacher is the careful teaching-the-teacher that permeates both projects' Teacher's Guides.

ARGUS and GIGI represent steps in the evolution of geography materials development in the US. No work of comparable magnitude has been done since the High School Geography Project (HSGP) in the 1960s. Nonetheless, as was mentioned above, materials development is merely a beginning. Without teacher training and adoption these innovations will languish. Just as did HSGP, ARGUS and GIGI emphasize content that challenges poorly trained teachers, e.g., sound physical geography as a basis for explaining environmental issues. And because learning the content is dependent upon the exercise of higher level thinking, teachers must become skillful in helping students speculate, hypothesize, analyze, interpret, and evaluate. (There is some reason to think that these new projects will be more widely adopted than was HSGP because support for geography is stronger today than it was in the 1960s and 1970s.)

**GeoLinks.** GeoLinks is supported by a US Department of Education grant to Macalester College and two Minnesota school districts. It is electronically assembling and editing teacher-produced lessons to support the Minnesota Geography Curriculum and to make the Curriculum usable nationwide (Lanegran and St. Peter, 1993). GeoLinks is based on Hypercard, an inexpensive computer software program that enables the user to write programs on the Macintosh computer. This enables teachers to design their own curricula to match a group of students in a specific time and place by accessing any number of lessons that are focused on outcomes the teacher wishes to use in the classroom.

With careful selection and editing of the teacher-produced lessons, this innovative use of technology has great potential. Materials can be quickly added and updated. Because this system offers such a flexible approach to curriculum development, it may prove valuable as states and individual school districts set about developing curricula for standards-based education in geography.

## VI. Conclusions

Rescued from curricular oblivion over the last decade, geography has experienced a renaissance in the system of K-12 education in the US. This renaissance has focused less on reforming the quality of geography education than on finding a place for geography in the curriculum. Since it was named one of the five core disciplines for the National Education Goals, geography was chosen to develop an assessment framework for the first-ever National Assessment of Educational Progress in geography, which will be conducted in 1994. Now, in the latest stage of the renaissance, geography is poised at the cutting edge of the principal element of US education reform –standards-based education. One of a select few federally-funded standards projects, the Geography Education Standards Project has grappled with many of the issues of educational reform; indeed, it is producing geography education's "reform package." The adoption and implementation of geography standards in many parts of the nation will constitute yet another stage in geography's renaissance. As we have seen, however, a great many constraints stand in the way of thorough, nationwide implementation of standards-based education in geography. If the next decade produces as much progress in K-12 geography education as the last decade has, geography will have achieved a solid footing in the curriculum.

As I said at the outset of this paper, standards-based education in geography will require more than standards. Curricula must be aligned with standards and strong instructional materials must be developed to support standards in the classroom. ARGUS, GIGI, and GeoLinks represent positive steps in the evolution of geography materials development in the U.S.

Recent national and state-level efforts in geography in-service teacher-training have produced important results, certainly a better record than we have in producing strong instructional material. The upshot is that even the teachers who have received good training do not have access to enough high-quality material. The demand for geography in the schools has raced

ahead of the supply of well-trained teachers and good materials. Teachers with little or no geography education are still teaching geography. Although large numbers of teachers have been involved with summer institutes and in-service workshops, the training has sometimes been uneven and superficial. A good two-week institute is a great help, but it doesn't produce the command of geography content required to get the high-quality instruction needed to help students attain the new geography standards.

We need to begin other materials development projects, such as an integrated, across-the-curriculum elementary effort built onto a geography framework. We have very little high quality elementary material for geography. At the same time, development and evaluation of ARGUS, GIGI, and GeoLinks need to continue so that we may build upon these pioneer projects of the '90s.

Geography education does not, of course, stop with the K-12 system. The renaissance in school geography is already beginning to affect the colleges and universities. The Executive Director of the Association of American Geographers recently wrote: "For American geography, the related problems of numbers and visibility will be eased by the massive efforts now being mounted to improve school geography in the United States, but those solutions will raise another challenge—that of developing a progressive and cumulative undergraduate curriculum' (Abler, 1993, p. 7). To address this challenge, geographers are now calling for the development of guidelines for undergraduate curricula in geography (Jumper, 1993). It was the development of *Guidelines for Geographic Education* in 1984 (Joint Committee on Geographic Education 1984) that set off the renaissance in pre-collegiate geography. The question is: Could such a renaissance also happen in collegiate geography?

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