# The Status of Geography Education in Arizona

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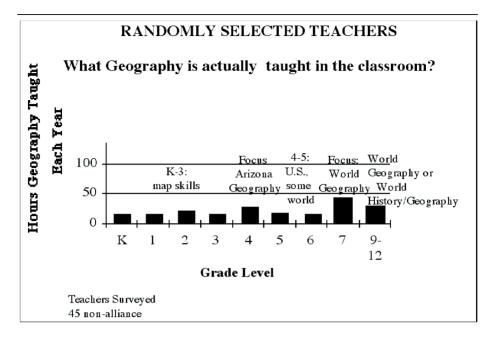
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Within the United States, the state of Arizona ranks second in terms of growing population and close to last in per-pupil educational expenditures. Student population is dominated by middle income migrants from other states and low income migrants from Mexico. Local control of education dominates Arizona's educational politics, where curriculum decisions rest in 225 districts or 2300 schools. In this chaotic educational milieu, with support from National Geographic Education Foundation – Arizona's Department of Education - Arizona State University, the Arizona Geographic Alliance (AzGA) is the single focal point advocating K-12 geography education in the state. AzGA's accomplishments include: a membership of around 2700; training over 150 active teacher consultants (TCs) who now conduct more than 2600 lesson trainings a year; the adoption of new social studies standards with ¼ being a geography strand; close working relationships with other social studies organisations in Arizona; hosting an annual GeoFest conference for hundreds of teachers; sponsoring a copyright free atlas of maps; and developing curriculum articulating geography standards with state-mandated testing in reading, writing, and mathematics. The key to AzGA's success rests in the hard work and vision of TCs and a central office supportive of TC professional development.

The predominant advocate for geography education in Arizona is the Arizona Geographic Alliance (AzGA). Created in 1992 at Arizona State University under the guidance of Professors Malcolm Comeaux, Robert Mings, and a handful of dedicated teachers, AzGA's mission is to enhance the quality and status of geography education in Arizona schools. With support from the National Geographic Society and the Arizona Department of Education, AzGA has trained over 150 teachers to form a cadre of Teacher Consultants (TCs). The results have been dramatic.

In Spring 2000, new social studies standards were adopted in Arizona. These standards were written with suggestions from geography educators in Colorado, Michigan, and Texas, and they reflect a mixture of state and national influences. The committee that created the new standards was composed of Dorn, a university-based geographer, and TCs from urban and rural school districts. Together this group worked to shape the nature of the new standards and marshaled support from others. The end result made geography one of four core disciplines in the social studies; the other disciplines are civics, economics, and history.<sup>1</sup>

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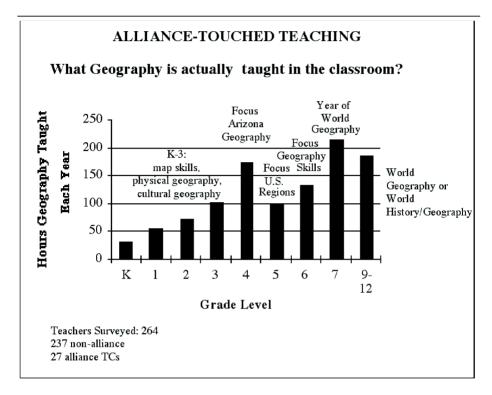


**Figure 1** Number of hours of geography taught by teachers not influenced by the Arizona Geographic Alliance. Survey conducted in 1999–2000, based on 45 teachers selected at random from 17 districts where at least five teachers came from grades K–3, 4–5, 6–8, and 9–12

In the past, little geography was taught in most Arizona classrooms (Figure 1). In contrast, because of their specialised training, TCs (and teachers influenced by TCs) have integrated geography extensively into their curriculum (Figure 2). Because of their training and leadership skills, Arizona TCs are sought for district-level curriculum revision committees, as mentors for new teachers, and as agents of change who can help implement innovative geography curriculum in their schools. In several cases, TCs have transformed world history and global studies classes into geography-focused courses.

Arizona TCs coordinate their efforts and hold leadership positions with other Arizona educational organisations. To foster cooperation, two symposia have been organized with the Arizona Bar Foundation, the Arizona Council for Social Studies, and the Arizona Council for Economics Education. At these symposia, held soon after the standards were adopted in February 2001 and again in October of 2001, participants were surveyed about the extent to which geography had been incorporated into their school curriculum. Although a few school districts had not yet started implementing the new standards, the survey results reveal growing enthusiasm for curriculum reform and adoption of the standards (Figure 3).

Teachers from all backgrounds are welcomed as members of AzGA. There are now 2700 members. Four examples currently underway exemplify the team- and partnership-building philosophy of AzGA and its TC cadre: Geo-Nomics, a joint geography-economics conference; GeoDayTrip, a field excursion to a significant



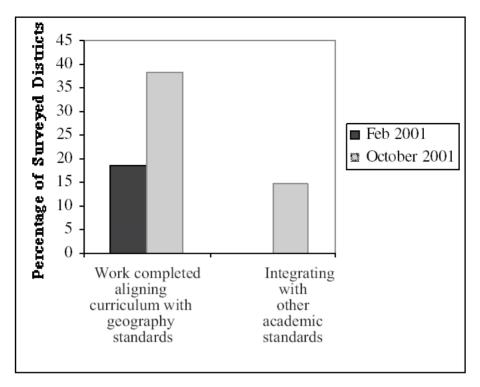
**Figure 2** Number of hours of geography taught by teachers influenced by the Arizona Geographic Alliance. Survey conducted in 1999–2000, based on 264 teachers who voluntarily turned in surveys from 19 school districts

Arizona landmark such as the location of a Japanese-American internment camp from World War II; GeoLiteracy, a geography-language arts lesson package; and strong participation in and support for the National Council of Social Studies conference that will be held in Phoenix, Arizona, in November 2002.

# High Stakes Assessment Policies and their Impact on Geography Education

In the midst of the adoption of the new state geography standards, Arizona's Department of Education promoted a high-stakes testing programme called AIMS for grades 3, 5, 8 and 12. The test covers reading, writing and mathematics skills. Although it is unclear whether this test will be used as a requirement for graduation, the conservative accountability movement successfully lobbied to tie teacher salaries with reading, writing and mathematics test scores. Arizona Superintendent of Public Instruction Jaime Molera has stressed that a programme of school accountability must exist for Arizona's schools:

The Arizona State Board of Education . . . agreed that accountability must rest with schools . . . school accountability must begin now. Schools must demonstrate that their curricula are aligned to the standards . . . schools



**Figure 3** Survey of educational leaders attending two statewide conferences on Arizona's new Social Studies standards. Thirty-four districts/charter schools were represented in the February 2001 conference, and 26 districts/charter schools were represented in the October 2001 conference. This survey reveals that while only one in five districts aligned their curriculum with the new geography standards in February of 2001, a half-year later the number of districts in alignment had doubled. Furthermore, districts had started the process of integrating geography with other academic standards, such as language arts.

must be held accountable if there is not meaningful progress in student achievement. (Molera, 2001)

The impact of accountability had been already anticipated by school administrators:

Accountability is the buzzword in education. As schools are put under the microscope to get students to pass standardized tests [in math and language arts], the responsibility ultimately rests on the shoulders of the superintendent . . . administrators will increasingly see their pay linked to student performance. We're probably getting into a time where there'll be more and more performance pay contracts. (Porter, 2001)

Anecdotal discussions with school district officials reveal that at least some administrators and teachers are not yet reacting to the accountability movement,

hoping for a swing in the pendulum. Paradoxically, momentum is building in some districts to sacrifice important lessons in science, social studies (including geography), and foreign language in order to increase focus on the high-stakes, tested subjects of reading, writing, and math. We anticipate the continuation of this momentum as state and federal funding becomes increasingly tied to improvements in language arts and mathematics test results.

#### Special Strategies of Arizona's Geography Education Community

In order to respond to teachers' needs to cope with accountability pressures and demands for classroom-ready geography resources and lessons, the Alliance has initiated five strategies.

First and foremost, TCs work within their schools and districts to hold the line against any scheduling shifts that would diminish, rather than enhance, the role of geography and other social studies disciplines. Faced with the hard reality that math, reading and writing dominate time in the classroom, TCs are writing and disseminating reading, writing and math lessons that integrate geography in significant ways.

Second, Arizona State University cartographer and scientific illustrator Barbara Trapido-Lurie developed a copyright-free map outline set adopted and distributed by the National Council for Geographic Education. This selection of maps continues to evolve to support new lessons widely used in Arizona classrooms.<sup>2</sup>

Third, the Alliance sponsors a one-day GeoFest conference in October. Hundreds of teachers attend this event to gain geography knowledge, skills, and lesson plans. Sessions at the conference frequently stress strategies to integrate geography with tested subjects.

Fourth, in response to the demand for higher language arts test scores, members of AzGA proposed the creation of lessons that would teach language arts skills through geography content. Funded by a grant from the National Geographic Society, with matching support from Arizona organisations, the GeoLiteracy project brings teams of K–3, 4–5, and 6–8 teachers from across Arizona to write, edit, pilot, and re-edit lessons completely on-line using 'php' programming. These lessons are ready for distribution in the Fall of 2002.

In order to overcome the geographical size of the state, AzGA uses technology extensively. The GeoLiteracy project is an example of the innovative use of technology to unite a large and diverse state. TCs have developed and maintain award winning websites such as http://www.homestead.com/desertfootprints/, and they can communicate effectively using a listsery <azga@aspin.asu.edu >.

## Geography in Teacher Preparation

Teacher preparation in geography education is in need of improvement in Arizona. Four new initiatives have been created to address this situation. First, establishment of the new state social studies standards coincides with adoption of new teacher certification tests: 25% of the test's content is aligned to the geography component of the social studies standards. This new assessment has produced a change in the recommended coursework for preservice education majors. Second, Arizona State University offers both an on-line and

a summer- semester geography course that includes presentations by TCs. Third, Arizona universities are hiring TCs as adjunct faculty to teach social studies methods courses. Fourth, Arizona State University is exploring the possibility of establishing a state-wide programme for a master's degree in geographic education, hoping to meet the needs of teachers by combining the resources of the three graduate degree-granting geography departments in the state (Arizona State University, Northern Arizona University, and University of Arizona).

#### Strength of Arizona's Geography Education Community

Arizona's success in promoting geography education may be attributed to two factors: (1) the hard work and vision of the TCs and, (2) the existence of a central organisation to coordinate their activities. AzGA's highest priority has been to support professional development of K–12 teachers. Alliance in-service training has a trademark of quality. It is the one organisation that local teachers can depend on to have resources and lessons which fit their classroom needs.

A close-knit camaraderie exists among the TCs. AzGAs older TCs welcome new teachers into an organisation that nurtures and promotes mutual respect and support, and encourages an atmosphere of innovation in which TCs are empowered to make a difference. AzGA conducts a yearly re-evaluation of its mission to improve Arizona's student achievement in geography and geography's sister disciplines. Following the practice of other alliances and advice from the National Geographic Society, AzGA founders realised from the beginning that student achievement begins with a highly trained content specialist in front of the classroom. From this perspective, the geography education landscape in Arizona is still undergoing meaningful and substantive grass-roots changes under the watchful stewardship of the Arizona Geographic Alliance.

### Correspondence

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#### **Notes**

- 1. Arizona's Social Studies Standards are available at http://alliance.la.asu.edu/azga/
- 2. These maps, including a special Arizona map section, can be accessed by clicking on maps at http://alliance.la.asu.edu/azga/.