Fostering Students' Global Awareness: Technology Applications in Social Studies Teaching and Learning

Elizabeth O. Crawford Armstrong Atlantic State University

Misty M. Kirby
The College of William & Mary

Abstract

Global education is essential to students' development of knowledge, skills, and attitudes necessary for future employment and for building successful relationships in an increasingly interconnected and pluralistic society. Incorporation of technology in meaningful and authentic learning experiences with students in the classroom as supported by the Technological Pedagogical Content Knowledge (TPCK) framework allows teachers to foster students' understandings of the interrelationships of peoples worldwide, thereby preparing them to participate meaningfully as global citizens. An overview of web-based organizations that foster global awareness and a description of professional development opportunities in global education are provided.

"Children in this country must be provided an education that more than adequately prepares them for citizenship in the society and world they will soon inherit" (Schukar, 1993, p. 57).

Introduction

Globalization is a reality. Consequently, we, as educators, have an important responsibility to prepare students to function in and contribute to a global society. In his book *The World Is Flat: A Brief History of the Twenty-First Century*, Thomas Friedman (2005) emphasized the ways in which globalization has leveled the playing field for many countries. Our world, he argued, has become increasingly "flatter," or "connected," since the turn of the century. Friedman warns readers that antiquated ways of doing things both socially and politically are no longer effective, including how we educate students. The classrooms of today should look nothing like classrooms of the past. Students must gain new kinds of knowledge, skills, and dispositions in order to function successfully in an increasingly interconnected global society (Bell-Rose & Desai, 2005). Digital technologies offer many potential ways to foster global awareness in classrooms. Through infusion of both global education and technology in social studies teaching and learning, teachers can foster students' understandings of the interrelationships of peoples worldwide, thereby preparing students to participate meaningfully as global citizens.

While we contend that technology can serve as a valuable tool to foster global awareness among students, we recognize that a teacher's decision to incorporate digital technologies should occur in the context of content and pedagogy. Through the incorporation of technologies in authentic and meaningful ways as supported by the Technological Pedagogical Content Knowledge (TPCK) framework (Mishra & Koehler, 2006), there is potential for preparing students for global citizenship.

What is Global Education?

In order to prepare students for an increasingly pluralistic and interdependent world, global education in K-12 schooling is essential. Across the literature, conceptualizations of global education are not universal (Pike, 2000) and have been defined in the following ways: a philosophical perspective through which teachers may facilitate students' understandings of content areas such as science, literature, and the humanities (Dyer, 1995); learning that involves aspects of life that cross all boundaries (Tye. 2003); and a study of how cultures interact, leading to the empowerment of students to act in matters of local, national, and international interest (Pike & Selby, 1988). Despite such variations, global education most often entails the study of human conflict and cooperation, the interdependence of human systems, and the fostering of cross-cultural understandings, such as the development of empathy and perspectivetaking (Freeman, 1993; Pike; Tye & Tye, 1992). In short, global education aims to instill in students a global perspective and to develop the essential knowledge, skills, and dispositions necessary to live successfully in a world characterized by cultural and ethnic pluralism, increasing interdependence, and limited natural resources (Gilliom, 1981).

Global awareness enhances students' abilities to work collaboratively with persons of diverse backgrounds, to understand and seek solutions to global issues, and to acquire 21st century skills, such as learning non-English languages (Partnership for 21st Century Skills, 2004), all of which are vital to participation in society and the future workforce. Global awareness should not be viewed as a passing fad for educational reform. On the contrary, our students' futures depend on it.

Why is Global Awareness Important?

Many have criticized American public education as being slow to respond to globalization (Barker, 2000; Bell-Rose & Desai, 2005; Tye, 2003). In light of such criticisms, public education in the United States must do more to prepare students for an increasingly interconnected, "flat" world. Teaching from a global perspective represents a viable strategy for doing so.

Inherent to teaching from a global perspective is the recognition of the impact of students' social and emotional development on their cognitive development. A growing body of scientifically-based research supports the positive effects associated with

educational practices that emphasize students' social and emotional learning needs (e.g., Zins, Weissberg, Wang, & Walberg, 2004). Because students' success in a global society is dependent upon their abilities to collaborate with others, be open to differences, and think critically, teaching from a global perspective is critical.

In order to prepare students for the future workforce, global education is essential. David Thornburg (2002) posited that the most essential skills for becoming a future "knowledge-value" worker are technological fluency, effective communication skills, teamwork, leadership, problem solving, and creativity. Such attributes emphasize the need to prepare students for participation in the future workforce and enhance their ability to contribute positively to a global society.

How to Foster Global Awareness

Although some states have recently enacted policies placing greater emphasis on global education in K-12 curricula (e.g., Manzo, 2005), the accountability movement has resulted in schools that focus largely on the tested curriculum. Since the mid-1980s, global education initiatives have been challenged, largely due to "...the inherent controversial nature of global education; struggles to control the agenda in both content and instructional strategies; and the failure of some global educators to provide balance in curriculum development, the selection of resource materials, and classroom instruction" (Schukar, 1993, p. 52). Further, time constraints and limited budgets are oftcited barriers to teaching about world cultures in meaningful, engaging ways (Merryfield, 2004). We submit that fostering global awareness in the classroom must not require additional burdens for educators. Instead, teachers need professional development to learn innovative and effective strategies for embedding authentic global education within their mandated curriculum. To that end, technology offers a host of possibilities for accomplishing this goal across all disciplines, particularly in social studies teaching and learning.

The Role of Technology in Fostering Global Awareness

The Technological Pedagogical Content Knowledge (TPCK) model offers a sound conceptual framework for considering how teachers can foster students' global awareness through the authentic, appropriate, and effective integration of various educational technologies. Building upon the work of Shulman (1986), Mishra and Koehler (2006) provide a model for conceptualizing three essential, interrelated components of teachers' knowledge: Content Knowledge (CK), Pedagogical Knowledge (PK), and Technological Knowledge (TK). In essence, the TPCK framework emphasizes that teaching is highly contextual and dependent upon teachers' knowledge of appropriate and effective means to guide and facilitate the learning of specific student audiences. In light of this perspective, the TPCK framework may be viewed as a valuable process by which global education can be infused in educational contexts.

Figure 1 highlights the TPCK framework and the interrelated domains of the three primary forms of teacher knowledge: content, pedagogy, and technology. In isolation, the elements of Content Knowledge (CK), Pedagogical Knowledge (PK), and Technological Knowledge (TK) provide the foundation for this conceptual model, with "interactions" occurring at their intersections. These include Pedagogical Content Knowledge (PCK), Technological Pedagogical Knowledge (TPK), and Technological Content Knowledge (TCK).

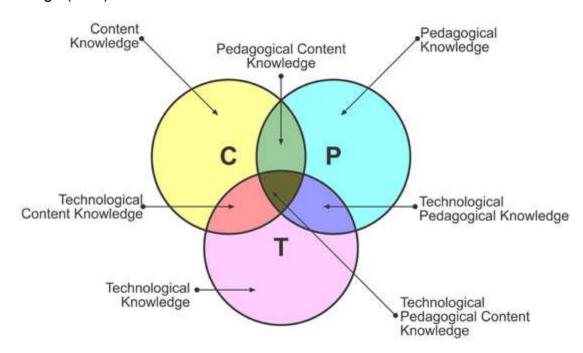


Figure 1. Technological Pedagogical Content Knowledge (TPCK).

From "Introducing technological pedagogical content knowledge," by M. J. Koehler and P. Mishra, in press, Reprinted with the permission of the authors.

Content Knowledge (CK) represents the specific subject matter that is to be learned and taught. In the context of K-12 schooling, one can typically apply this to specific content areas of instruction, such as middle school life science or high school British literature. Unlike these discrete core subject areas, global education is considered to "permeate the total curriculum," or to derive from all areas of study (Gilliom, 1981, p. 170). In addition to lacking definitive meaning, global education is subject to various political influences and viewpoints (Cross & Molnar, 1994), which may shape how educators view the role and importance of global education in their curriculum and instruction.

Despite its relative ambiguity, Byrnes (1997) identified four main foci in global education across the research literature: transnational issues, global linkages, cross-cultural understanding, and perspective-taking. Similarly, Begler (1993) cited concepts and dispositions such as cooperation, perspective-taking, acceptance of ambiguity and

change, coping with conflict, and valuing diversity as common components of teaching and learning within a global framework. As such, global education does not represent isolated subject area content. Instead, it represents a philosophical perspective through which teachers may facilitate students' understanding of content areas such as science, literature, and the humanities (Dyer, 1995).

Although applicable across disciplines, global education is especially appropriate for integration within social studies teaching and learning at all grade levels, especially when emphasizing civic participation and human interdependence. Global education extends beyond teaching discrete bits of knowledge, especially content that may perpetuate stereotypes such as the "4 F's"—food, fashion, fiestas, and folklore (Begler, 1993). Rather, global education aims to instill in students universal concepts and dispositions that foster cross-cultural understandings. Merryfield (2004) calls this "substantive culture learning," which serves to foster students' intercultural skills, the capacity for recognizing stereotypes and cultural universals, and the establishment of life-long learning about diverse peoples. Using the TPCK framework as a conceptual foundation, a teacher's understanding of and ability to incorporate global concepts and critical global awareness within specific content area teaching represents his or her content knowledge.

Pedagogical Knowledge (PK) includes in-depth understanding of instructional processes and methods of teaching and learning. PK also entails one's educational purposes and values, classroom management, curricular design and implementation, student assessment, and other related areas (Harris, Mishra, & Koehler, 2007). Inherent in pedagogical knowledge is the recognition of and appreciation for the needs of all students, including the use of effective strategies to teach specific content to specific learners. Such knowledge, therefore, is highly contextual and differs from the pedagogical knowledge shared by all teachers or subject matter experts (Mishra & Koehler, 2006).

Across the literature, specific instructional strategies such as collaborative (cooperative) learning, concept-based learning, and role-playing are noted as valuable in fostering students' global awareness (Begler, 1993; Byrnes, 1997; Dyer, 1995). Collaborative learning, for example, engages students in interpersonal problem solving, a valuable strategy used to foster global education across content areas, especially as tolerance and the ability to collaborate effectively are essential to acquiring global perspectives (Freeman, 1993). Concept-based learning also offers a promising approach to embed global understanding in social studies teaching and learning by affording opportunities for students to develop deep knowledge that may then be applied across contexts. Byrnes, for example, illustrates the benefits of using overarching concepts such as "overexpansion" and "overspending" in the social studies, enabling students to make connections from one historical period to another. By structuring teaching and learning around such concepts instead of emphasizing isolated facts, student engagement and understanding are enhanced.

Role-playing presents an additional strategy with potential for fostering global awareness in the classroom, specifically when aiming to instill empathy and perspective-taking in students (Begler, 1993). Dyer (1995), for example, found that role-playing benefited students' abilities to empathize and view situations differently, particularly when students played the part of a literary character they found to be "unattractive" or a character with whom they did not initially sympathize. Role-playing debates may also be beneficial in cultivating students' understandings of and respect for diverse perspectives (Begler) and to practice conflict resolution skills (Schukar, 1993).

Cooperative learning, concept-based learning, and role playing are only three pedagogical strategies for developing students' global awareness in the classroom. As Begler (1993) emphasized, "...how we teach (the strategies or processes used in teaching) is as important to achieving our objectives as *what* we teach (the specific knowledge, skills, or attitude objectives making up the content of the curriculum)" (p. 14). Teachers should seek opportunities to embed global perspectives and understandings in various aspects of their teaching when appropriate.

Technological Knowledge (TK) entails knowledge of and the ability to use both non-digital tools and equipment such as overhead projectors and blackboards, and digital tools, such as computers. Unlike the other two domains of knowledge, TK is considered by some researchers to be in a constant "state of flux" due to continuous technological advancements. Social studies teachers must contend with learning new technology while effectively applying technology to their specific content area of instruction (Mishra & Koehler, 2006). Despite the effects of technology on the learning process, pedagogy and content, Harris, Mishra, and Koehler (2007) view commonalities among teachers' TK across disciplinary areas, conceptualizing them as an evolving process resulting from each individual's experiences with technology.

Specific types of knowledge emerge at the intersections of content, pedagogy, and technology. Pedagogical content knowledge (PCK), for example, includes the selection and use of teaching methods as appropriate for specific content areas. Technological content knowledge (TCK) pertains to knowledge of how technology and content are related, such as how a specific technological tool may impact the teaching of specific content (e.g., the use of a GPS system in the study of geography). Technological pedagogical knowledge (TPK), on the other hand, relates technology and pedagogy—or how various technologies may be applied during specific aspects of teaching and learning. Finally, when the three bodies of knowledge are considered holistically, Technological Pedagogical Content Knowledge (TPCK) is conceptualized, highlighting the dynamic connections and interactions as well as the independent and combined affordances and constraints (Mishra & Koehler, 2006). Mishra and Koehler explain that:

TPCK is the basis of good teaching with technology and requires an understanding of the representation of concepts using technologies; pedagogical techniques that use technologies in constructive ways to teach content;

knowledge of what makes concepts difficult or easy to learn and how technology can help redress some of the problems that students face; knowledge of students' prior knowledge and theories of epistemology; and knowledge of how technologies can be used to build on existing knowledge and to develop new epistemologies or strengthen old ones. (p. 1029)

Because technology as a tool is often viewed separately from its application, the TPCK framework offers a meaningful lens through which to consider how technology may be incorporated effectively and appropriately when teaching specific content to specific audiences. As such, the TPCK framework serves as a sound conceptual foundation for considering how teachers can foster students' global awareness in social studies teaching and learning.

Specific Technology Applications to Foster Global Awareness

As previously emphasized, sound teaching requires the thoughtful application of teachers' knowledge of specific content, pedagogical practices, and technology during the teaching and learning process. A teacher's decision to incorporate or use specific technologies, therefore, must not occur in isolation of the elements of content and pedagogy (Mishra & Koehler, 2006). Essentially, technology offers valuable tools to foster global awareness among students. In other words, students' abilities to use various technologies are not the intended objective, but rather a means to an end. As Harris (1997-1998) emphasized, "...tools, no matter how powerful their educational potential, don't directly help our students to learn. What's important is how we *use* the tools to assist teaching and learning" (para. 5). When electronic technologies are integrated into social studies learning, they offer the potential to promote cross-cultural understandings and awareness in areas such as equity, diversity, and discrimination, among both students and teachers (Merryfield, 2000).

Numerous applications of technologies exist that may promote students' global understanding. Among these are web-based research, interpersonal communications, collaborative projects, and telefieldtrips. Such applications may be categorized into three broad genres of educational online activity (see Table 1): interpersonal exchange, information collection and analysis, and problem solving (Harris, 1997-1998; Harris, 2001).

Table 1
Genres of Educational Online Activity, Including Applications

Interpersonal Exchange	Information Collection and Analysis	Problem Solving
keypals	information exchanges	information searches
global classrooms	database creation	peer feedback activities
electronic appearances	electronic publishing	parallel problem solving
telementoring	telefieldtrips	sequential problem solving
Q&A activities	pooled data analysis	telepresent problem solving
impersonations		simulations
		social action projects

From "Wetware: Why use activity structures?" by J. B. Harris, 1997-1998, *Learning and Leading With Technology*, *25*(4), paras. 33-35.

Within each activity structure, teachers may elect to use various technologies, such as audio and video equipment, scanners, word processing software, multimedia software, and so forth, according to the specific activity and its intended purpose. The Internet is typically the "hub" for electronic activity structures, offering a host of possibilities for fostering global awareness, namely through access to the vast network of multimedia information and individuals around the globe, as well as by affording self-directed learning that may enhance student engagement (e.g., Scheidet, 2003). By connecting classrooms worldwide, students can participate in global service learning projects, thereby transferring their global awareness into global action. Today, numerous web-based organizations host forums, videoconferences, social action projects, and informational databases, providing a virtual network of students, teachers, and community members focused on improving global understanding. Table 2 highlights such notable organizations offering diverse learning opportunities representative of all three genres of educational online activity structures for K-12 students, higher education students, and educators.

Table 2			
Overview of Web-Based Organizations that Foster Global Awareness			
Source	Target Audience	Brief Description	Unique Features
Apple Learning Inter- change 2007	K-12; Higher Education	A cost-free interchange that invites educators to share ideas and resources for fostering global understanding among students through various media, including video, iChat, email, and blogging. Classroom activities, lesson ideas, and collaborative projects on a variety of topics are available.	Activities for K-12 and higher education classrooms are produced by teachers, Apple, and Apple content affiliates such as NASA, The Smithsonian, and the George Lucas Educational Foundation. Educators can create and submit their own projects for assessment, enhancement, and peer-review. Members can set preferences using the channel menu and can filter non-relevant content while browsing and searching.
The ePals Global Network™	K-12	Established in 1996, ePals™ provides cost-free, school-safe collaborative learning opportunities for K-12 teachers, students, and families via email, discussion boards, blogs, and collaborative learning projects. The ePals™ community includes more than eight million people in over 200 countries and territories, comprising more than 120,000 classrooms worldwide.	A collaborative reading program entitled In2Books permits children to write to adult pen pals about books they are reading, thereby offering an interactive audience for their literary reactions. A Chinese-English Language and Learning Portal offers moderated discussion board and teacher-supervised language development activities for teachers and students in grades 3 through 12.

Table 2			
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Source	Target Audience	Brief Description	Unique Features
Global Nomads Group	6-12	The award-winning Global Nomads Group invites young people to collaborate, to share their similarities and differences, and discuss global issues that affect them, primarily via videoconferencing.	Students design and direct live videoconferences with students in other locations, sometimes remote and wartorn. Important topics are addressed such as international politics, present-day conditions in Darfur, the war in Iraq, and environmental issues, as well as students' day-to-day lives. A searchable media library stores videos filmed by GNG staff who explore diverse locations, such as the Great Wall of China, Cape Town, Salvador, Jordan, and many others. Relevant lesson plans accompany many of the videos.
Global School- Net Founda- tion	K-12	A free-membership program that houses more than 2,000 online collaborative projects with more than 90,000 teachers in 194 countries. Global SchoolNet promotes online project-based learning activities that promote students' global awareness as they use web publishing, video conferencing, and other technologies.	GSN provides a forum for students to showcase their writing, such as through its Newsday literacy project, an online publication. In partnership with Google Education, GSN invites teachers and students to use Google Docs and Spreadsheets as collaborative tools to brainstorm strategies to combat global warming.

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Source	Target Audience	Brief Description	Unique Features
The International Education and Resource Network (iEARN)	K-12 and Higher Education	iEarn is the world's largest and longest-running online community consisting of more than 1 million K-12 teachers and students in 120 countries who collaborate to foster international education and cooperation. Projects are teacher- and student-created and implemented, and include examples of what students are doing to foster positive change in their communities. Professional development and annual seminars are also available for educators.	iEARN has chapters around the world with country coordinators, representatives, and contact people to enhance the effectiveness of its mission. "News Flashes" are emailed bimonthly to keep members abreast of activity across the network. Online professional development courses are offered for educators around the world. Topics include ways to integrate project-based learning within existing curricular standards.
Kidlink	K-12	Established in 1990 and run by 500 volunteers in more than 50 countries, Kidlink offers cost-free, safe KidMail to send messages, KidCom to chat with Kidlink friends, and KidSpace to post web pages. More than 30 languages are represented by its members.	In KidSpace, members can create personalized web pages to describe their interests and to showcase work and images used for Kidlink projects. A "Teacher Portal" offers a forum to share ideas and strategies for motivating students and improving their ability to set personal goals. Lesson plans emphasizing "life-skill training" are provided on topics such as critical thinking, empathy building, advocacy, and conflict resolution.

Table 2 Overview of Web-Based Organizations that Foster Global Awareness			
Source	Target Audience	Brief Description	Unique Features
Kids Across the World	K-8	Photojournalist and educator Joan Sara Klatchko shares "photo-stories" about youth from more than 30 countries. Descriptions of unique features of nations, as well as shared needs and values are included.	Digital guides are presented with specific questions to guide students' understandings of a region's environment, economy, and culture, as well as how to distinguish assumption from fact. An assembly program hosted by Ms. Klatchko features an interactive session in which she presents photographs and stories of children she has met during her travels. Participating schools receive a Teacher's Guide with lesson plans.
100 People: A World Portrait	K-12	Serves as an interactive portal for posing questions such as: What if the global population of 6.5 billion was reduced to only 100 people and all statistics used to describe them remained proportionally accurate? What would those 100 people look like, and where do you fit in? Schools can participate in this global project whereby students nominate persons to be celebrated in their communities.	Participating schools post artwork and a community profile, noting the languages, food, clothing, and industries in the local economy, listed alphabetically by country name. The result of this global project culminates in an exhibit comprised of photographs, a film, a book, a music compilation, and a web-based curriculum for middle and high school students.

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Overview of Web-Based Organizations that Foster Global Awareness			
Source	Target Audience	Brief Description	Unique Features
Meet Your Global Neighbor: A Commun- ity Global Aware- ness Program	K-8	Sponsored by the American Institute for Foreign Study, Meet Your Global Neighbor is an educational program designed to promote global understanding. Au Pairs are selected and trained by community counselors. They participate in school classrooms to enhance students' knowledge of world cultures.	The Kids Culture Corner link offers facts, music, folktales, games and activities, recipes, history, holidays, and more to educate children about other nations throughout the world. Through the Sister School Project, preschool through 5 th grade classrooms can partner with classes in different countries. Partner schools determine how often to exchange information.
Roots and Shoots	K-12 and Higher Education	Spearheaded by Jane Goodall, Roots and Shoots facilitates cultural exchange correspondences that foster opportunities for students and educators to gain new global perspectives. Service learning projects, an interactive discussion board, and opportunities for youth to serve in leadership positions are highlighted.	Roots and Shoots is a youth-driven network that underscores the importance of making positive changes for the environment and in the local community. Students are supported as they design, lead, and implement service-oriented campaigns. Roots and Shoots sponsors college-based projects and events. Professors are encouraged to become Roots and Shoots mentors; students are encouraged to enact positive change on their campuses.

Table 2				
Overview	Overview of Web-Based Organizations that Foster Global Awareness			
Source	Target Audience	Brief Description	Unique Features	
World Wise Schools	3-12	Housed in the Office of Domestic Programs, World Wise Schools matches a Peace Corps volunteer with a U. S. teacher for two years. Teachers may choose any region of the world, program type (e.g., business, education, environment), or a specific volunteer. The resulting exchange provides rich, direct experience from volunteers and cross-cultural lessons, stories, artifacts, video, and more.	Peace Corps volunteers who have returned from service can visit classrooms and local organizations to speak about their experiences in other countries. Participating schools are provided a handbook of ideas for developing effective and rewarding exchanges, as well as tools to assist in planning service learning projects.	

Implications for Professional Development

An oft-cited criticism in teacher education focuses on the failure of schools of education to prepare educators to teach effectively about human interdependence, diversity, and educational equity (Davis, 2003; Merryfield, 2000). Without question, fostering global awareness among students first requires that teachers themselves develop global perspectives (Barker, 2000). Because many educators feel the pressures of accountability for what they teach, educators need professional support to develop understandings of and strategies for incorporating global education in their curriculum and instruction (Pike, 2000). Global education must neither be viewed in competition with subject areas nor be limited to isolated and inauthentic applications (Gilliom, 1981). In order to be most effective, global education should be an integral part of teaching and learning in the social studies. To achieve this goal, professional development framed within the TPCK model affords teachers opportunities to reflect upon and build new knowledge concerning strategies and technologies that foster global education in classroom instruction.

Professional development must occur at preservice and inservice levels. Importantly, teachers' substantive knowledge base in areas such as world history, international economics, international relations, and related core subdisciplines, must be

strengthened (Begler, 1993). Schools of education must also prepare teachers in processes related to global education, including strategies and methods for teaching inquiry-based learning and resolution-building among students and for teaching controversial issues (Schukar, 1993). Teachers also require ongoing support for integrating resources such as new content and technology into classroom instruction. In short, global education must become a national priority similar to the current importance of subject areas such as mathematics and reading (Holden, 2000). This precedence must be reflected in how educators are trained and supported. Nationwide, numerous professional organizations offer technical support and training, as well as global education curricular resources. In addition to the previously cited web-based organizations, Table 3 provides information about selected organizations that offer a multitude of support services for educators at little or no cost.

Table 3

Professional Development Opportunities in Global Education

Organization	Brief Overview
American Federation of Teachers (AFT)	Develops middle school and secondary social studies curricular materials to aid teachers in addressing international affairs, specifically about topics such as human rights, terrorism, and democracy.
The American Forum for Global Education	Provides curricular materials and preservice and inservice teacher support workshops.
Bay Area Global Education Program (BAGEP)	Improves teacher content and pedagogy knowledge, as well as leadership capacity, by providing professional development workshops, conferences, an extensive resource library for K-12 teachers, and scholarships for teachers and students.
The National Endowment for the Humanities	Offers grants for K-12 educators and college faculty to attend intensive summer seminars.
The National Peace Corps Association	Sponsors Global TeachNet (GTN), a comprehensive collection of resources and professional development network, that offers a quarterly newsletter and magazine, a weekly listserv, a children's website, and more.

Conclusion

In an increasingly interconnected and pluralistic world, questions arise concerning how educators are preparing students for effective citizenship (Banks, 2004). Theorists (e.g., Friedman, 2005; Thornburg, 2002) and professional organizations (e.g., Bell-Rose & Desai, 2005; The Partnership for 21st Century Skills, 2004) make a solid claim for the need to foster students' understanding of and ability to work collaboratively with individuals of diverse backgrounds, as well as opportunities to

develop technological fluency. The infusion of global education in K-12 schooling through the appropriate and effective use of various technologies is essential. By incorporating numerous technologies in authentic and meaningful ways in social studies teaching and learning, as supported by the Technological Pedagogical Content Knowledge (TPCK) framework, teachers can foster students' understandings about the interrelationships of peoples worldwide, thereby preparing students to think as global citizens.

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Elizabeth O. Crawford, a recent Ph.D. graduate of the College of William and Mary, is an Assistant Professor in the Department of Early Childhood Education at Armstrong Atlantic State University, Savannah, Georgia. She teaches courses in family involvement, child development, and educational research to students at the undergraduate and graduate levels. Her research interests include educational policy, school readiness, and school and family partnerships.

Misty M. Kirby is a doctoral student (PhD) in the Department of Education Policy, Planning, and Curriculum Leadership at the College of William and Mary, Williamsburg, VA, where she is a graduate assistant. A former NYC classroom teacher, her research interests include equity for students in high-poverty/urban schools and organizational behavior. http://mmkirb.people.wm.edu