

# **ARE WE PREPARING STUDENTS WITH PHYSICAL AND HEALTH DISABILITIES FOR THE 21ST CENTURY?**

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Are we preparing students with physical or health disabilities for the 21st Century? The National Education Association (NEA) contends “today every student, whether he/she plans to go directly into the workforce or on to a 4-year college or trade school, requires 21st century skills to succeed” (National Education Association, 2006, para. 4). In 2002, about 57% of students with physical disabilities and 56% of students with health disabilities planned to attend a two year or four year college. Fifty-six percent of students with physical disabilities and 59% of students with health disabilities completed high school and earned a standard diploma (U.S. Department of Education, 2004). Fifteen percent of college freshmen attending four year institutions of higher education in 2001 reported that they had a health-related disability and 7% reported an orthopedic disability (Henderson, 2001). Did these students participate in a K–12 curriculum that prepared them for globalization?

Significant numbers of students with physical or health disabilities are included in general education classrooms. The U.S. Department of Education (2005) indicated that 50% of elementary students with physical disabilities and 43% of high school students were educated in the general education setting for 79% of the day. At least 50% of elementary and secondary students with health impairments spent the majority of their day in general education classrooms. This fact may be an important contributor to the number of such children who go on to pursue a college or university education.

Advancements in technology, communication, open trade markets, political systems, and movement of people have created a borderless world (Friedman, 2006). The world, according to Friedman (2006) is flat. By this

he means that such things as outsourcing, corporations, and technology have increased the connectivity between countries and their citizens. The flattening of the world, states Friedman (2006), is about the “creation of a global platform for multiple forms of sharing work, knowledge, and entertainment” (p. 510). Friedman believes that “how we educate our children may prove to be more important than how much we educate them” (p. 302). He states, “Ignoring the ability of globalization to empower individuals and enrich our cultural cornucopia misses its potentially positive effect on human freedom and diversity” (p. 510). Schools, in this country, must more effectively prepare children with physical and health disabilities to participate as members of a flattened world society that is comprised of many and varied constituent cultures. Workplaces, schools and communities have become diverse cultural puzzles that are vastly reshaping the fabric of society in the U.S. Globalization, and byproducts of the process, challenge the current educational system.

Concerns about American’s youth being productive workers, capable leaders and conscientious consumers in a global community are copious. The Committee for Economical Development (2005) reported that youth, in this country, know little about the world or international issues and how this affects their future, acquire insufficient international skills and knowledge to maintain America’s competitiveness in the global economy, possess minimum levels of proficiency in second languages, and attain diminutive knowledge of world cultures and religions. These skill deficiencies threaten students’ ability to function in an increasingly interdependent world.

### **GLOBALIZATION OF EDUCATION IN THE UNITED STATES**

Globalization of education has led to global migration of information, politics, and most significantly people. According to the National Center for Educational Statistics (2001), schools in the United States are becoming increasingly ethnically diverse. Public school enrollment for 2000–2001 showed a student population of 67% European Americans, 17% African Americans, 16% Hispanic Americans, 4% Asian/Pacific Islanders, and 1% American Indian/Alaska Native. Many of these students are children and youth with physical and health disabilities (U.S. Department of Education, 2004). The internationalization of the student population brings the challenge of educating a citizenry that understand and cares about both national and global issues.

In 2002, National Geographic commissioned the Roper survey to test the geographic knowledge of 18- to 24-year-olds in Canada, France, Germany,

Italy, Japan, Mexico, Sweden, Great Britain, and the United States. The National Geographic–Roper Survey of Global Geographic Literacy (2002) polled more than 3,000 18- to 24-year-olds in these countries. Sweden scored highest; Mexico, lowest; and the U.S. was next to last. About 11% of young citizens in the U.S. could not locate their country on a map. The Pacific Ocean’s location was a mystery to 29%; Japan, to 58%; France, to 65%; and the United Kingdom, to 69%.

The National Geographic, in 2006, again commissioned a survey of students in the U.S. to see how much they knew about the world. The survey conducted by National Geographic Roper found serious gaps in the geographic knowledge of 18 to 24 year olds. Survey results suggest most young adults demonstrated limited understanding of the world, and placed insufficient importance on the basic geographic skills that might enhance their knowledge.

Only 37% of young Americans could find Iraq on a map.

6 in 10 young Americans could not speak a foreign language fluently.

20% of young Americans thought Sudan was in Asia.

48% of young Americans believed the majority population in India was Muslim.

Half of young Americans could not find New York on a map.

Both the 2002 and the 2006 survey results conclude that “young people in the U.S.—the most recent graduates of its educational system—are unprepared for an increasingly global future” (National Geographic-Roper Survey, 2006). To address these skill deficits for students with physical or health disabilities, global studies should be an integral aspect of the curriculum and should be reflected in goals and objectives for Individualized Education Plans (IEPs).

### **LEADERSHIP FOR GLOBAL EDUCATION**

In a memorandum to administrators of executive departments and other agencies, President Clinton made the following statement: “To continue to compete successfully in the global economy and to maintain our role as a world leader, the United States needs to ensure that its citizens develop a broad understanding of the world, proficiency in other languages, and knowledge of other cultures” (International Education, n.d.).

Speaking in the U.S. to University Summit on International Education, President Bush (2004) reiterated the importance of second language ability. Bush described the need for a language proficient military and diplomat corps. He suggested programs where language speakers from different regions

of the world would come to the U.S. to teach their languages to citizens of this country.

The most recent and far reaching federal legislation on education was enacted when Congress reauthorized the Elementary and Secondary Education Act in 2001 and renamed it the No Child Left Behind Act (NCLB). The ultimate goal of NCLB is that all children are proficient in all subject matter by the year 2014 and are taught by qualified teachers highly trained in their subject specialization. NCLB outlines specific learner goals, objectives and outcomes to result in greater student achievement and skill proficiency in mathematics, reading and science which are measured by state standardized tests (The White House, 2007). The 2004 reauthorization of IDEA is intended to be aligned with components of NCLB (Turnbull, Turnbull, & Wehmeyer, 2007). Proficiency in global education, to include skills for 21st century competencies, is not specifically addressed in NCLB and is not a part of state level assessments.

Global education in the U.S. is much more of a grass root effort (Stewart, 2007) in spite of the vocal leadership provided by current and past U.S. presidents. Several states are taking steps to prepare a more globally sophisticated work force through creating new policy frameworks and new curricular and professional development initiatives, using distance education and online courses, encouraging partnerships with schools in other countries, and creating international themed schools as part of their high and middle school redesign efforts (Stewart, 2007). Some of these reengineering efforts will afford students an opportunity to learn, through study abroad programs, about educational systems in other countries (Engler & Hunt, 2004). These opportunities must be accessible to students with physical or health disabilities.

### **GLOBAL EDUCATION ISSUES**

There is wide discussion in the field of education regarding the rationale for global education issues. InternationalEd.org (n.d.) identified the following as reasons why students need a global and international perspective as a component of their education:

Globalization is driving demand for an internationally competent workforce. Our nation's trade with Asia, now concentrated in California, has exceeded Europe since 1979 and is expected to approach 1 trillion dollars a year this decade. The majority of future growth for

industries of all sizes is in overseas markets; today one in six new jobs created flows from international trade.

Access to good jobs will require new skills and competencies. Future careers in business, government, health care, law enforcement, and other good jobs will all require global knowledge and skills.

Solving new national and human security challenges, including terrorism and HIV/AIDS, and the ongoing problems of poverty and environmental degradation, will require increased knowledge of other world regions, cultures and languages.

Increased diversity in our nation's classrooms, workplaces, and communities, including new immigrants from many different parts of Asia and Latin America, requires greater understanding of the myriad cultures and histories students bring to school.

In comments to the Goldman Sachs Foundation (2003), Colin Powell, who at that time was Secretary of State, stated that "to solve most of the major problems facing our country today—from wiping out terrorism to minimizing global environmental problems to eliminating the scourge of AIDS—will require every young person to learn more about other regions, cultures, and languages." Former Secretary of Education, Rod Page, concurred with this belief as he stated to the same foundation that "our future, and the future of our children, is inextricably linked to the complex challenges of the global community." Each of these comments reflects the importance of global education and suggests global trends in education that have implications for the education of students with physical or health impairments.

### **A GLOBAL EDUCATION CURRICULUM**

"Children are growing up in a whole new world," stated former Governor of North Carolina James Hunt (Sanders & Stewart, 2004), and "we have a responsibility to see that they understand that world" (p. 205). One of the more traditional subjects disappearing across America is social studies. This curriculum offers a blend of disciplines that include civics, anthropology, geography, history, religion and sociology. Kullen (2003) defined social studies as that which provides knowledge, intellectual skills and civic values needed to make critical decisions that are essential to a culturally diverse and democratic society. More recently, the National Council for the Social Studies (NCSS) (n.d.) provided guidance to states and local school districts through curriculum standards for building students' skills in areas of impor-

tance to globalization. NCSS addresses two thematic standards for social study programs: culture awareness and diversity, and global connections and interdependence. NCSS defined culture awareness and global connections to include geography, culture, and economics, as well as natural and physical sciences and humanities; including literature, the arts, and language. Among skills that students with physical or health impairments will need to participate as global citizens include critical thinking, problem solving, self-determination, creativity, adapting and learning quickly, leadership, communication, and collaboration.

What is missing from all of the NCSS listings is an emphasis on comparative world religions to include non-western religions. Incorporating comparative religion into the curriculum enables students to achieve perspective consciousness, make educated and rational decisions, and draw intelligent conclusions about religious issues different from their own. Knowledge about beliefs and practices of various religions in a global society is vital.

Limited knowledge encourages irrational and intolerant behavior, which results in prejudicial perspectives. "One of the most profound sources of unrest in the world is the failure of education systems in many countries to bypass narrow ethnic and national interest and teach about differing belief systems and shared common value" (Douglas, 2002, p. 2). Unfortunately, social studies is not an area addressed by state assessments. The consequence is that social studies does not get the heightened attention within the curriculum that is given to areas assessed by NCLB related assessment tools. Nevertheless, teachers can use opportunities within students' IEPs to facilitate acquisition of these skills.

Second language acquisition is another important component of global education. Effective communication is the foundation of global continuity and interdependence. Beyond the cultural and educational benefits, proficiency in another language enhances students' ability to compete in the 21st century global workforce. The Committee for Economical Development (2005) reports only one-third of seventh to twelfth graders, and approximately 5% of elementary school students, study a foreign language. Less than 10% of college students enroll in foreign language studies. The future will continue to bring individuals from different language communities into close proximity to each other as they live together in an interconnected world. Second language proficiency will help students with physical or health impairments live effectively as global citizens.

Education for globalization creates unity within diversity; building strong cultural roots while achieving understanding and respect for others. Incorporating global studies into the curriculum, and the IEP, requires an

understanding about the many different themes of global awareness. Collins, Czarra, & Smith (1995) believed that the continuing emphasis on global issues, problems, and challenges require citizens who are trained and willing to deal with complex global issues. These authors indicated the following eleven categories as areas of focus for global education: “conflict and its control; economic systems; global belief systems; human rights and social justice; planet management: resources, energy, and environment; political systems; population; race and ethnicity: human commonality and diversity; the technocratic revolution; sustainable development; and globalization” (p. 2). Further, Collins et al. (1995) believed that students should “know and understand that global issues and challenges exist and affect their lives” (p. 3). In considering why students should learn about global issues, these authors felt that “global issues and problems are growing in magnitude and will neither go away nor resolve themselves” (Collins et al. 1995, p. 2). Resolution of global issues requires action from informed citizens.

The understanding of global education issues brings with it an assumption that students in this country will become more aware of their civic responsibilities. Civic awareness skills assist future generations in creating innovative ways to govern and improve national and world problems. Civic awareness is a prerequisite for social responsibility. Collins et al. (1995) emphasized that students today will be leaders and voters of the future. In order to make intelligent informed decisions, students must achieve a degree of literacy regarding global matters as well as concerns and trends that impact their lives. Global and civic literacy should include familiarity with local, national and world issues, coupled with working knowledge of basic political and public policy processes, conceptualization of problems, and ability to analyze each issue to generate possible solutions.

Teachers of students with physical or health impairments must avoid transmitting limited cultural knowledge through their instructional interactions. Collins et al. (1995) recognized the difference influences on students in the development of perspective and views on national and international trends. The authors suggested education will assist in developing skills to aid in the analytical process, evaluate the biases of varying sources, and effectively process different types of data. The current system of education will need to be more successful in teaching expanded information regarding world diversity, fundamental concepts of responsible citizenship, and the implications of irresponsible national and personal individualism within an atmosphere of globalization.

An important component of a 21st century education is technological literacy. Many students with physical or health disabilities are currently using



technological devices that provide them with greater control of their environment. However, innovation and information is becoming available at an astounding rate of speed. Twenty-first century students must master the ability to use appropriate technologies to process, analyze and present information in school, workplace and life. Friedman (2005) pointed out that wiring the world and digital production make it possible to do increasing amounts of work anywhere and anytime. Wiring of the world requires graduates to have technological skills beyond familiarity with basic applications. Graduates need skills that will enable them to communicate and collaborate as team members in a global workforce.

Education is being challenged by new opportunities related to technologies that are improving the ways in which knowledge can be produced, managed, disseminated, accessed, and controlled. Boegemann (2006) was concerned that the “proliferation of technologies did not necessarily correlate to quality” and recommended that professionals “must become well versed in what constitutes quality technology, systems and services.” Many professionals believe that access to technological resources are not equally available to all students with physical or health disabilities (The Children’s Partnership, 2003). Bauer and Piazza (1998) found that students who lived in rural areas had less access to computers, fewer options for transportation, were taught by increased numbers of unqualified personnel, did not understand assistive technology, and had more barriers to mobility. Students who live in poverty encounter similar barriers as well as inadequate knowledge of available technology options that can contribute to full participation (Jans, 2000). Limited access to technology impacts students’ ability to effectively participate within a global context and makes equitable access to technological resources a serious educational concern. Teachers should recognize the existence of such inequality and work to ensure access.

### **RESPONDING TO THE NEED FOR GLOBAL EDUCATION IN THE U.S.**

Asia Society (2006) stated that today’s students will be working and interacting in a global workforce. It is urgent that public policy as well as special and general education leaders in the U.S. ensure that students are equipped with the knowledge, skills and perspectives that will ensure global success. There are efforts to assist students in acquiring the need for global education. Sanders & Stewart (2004) indicated that “geography and economics have been incorporated into the standards of some states” (p. 200). They also described how available guidelines on how to teach religion in constitution-



ally permissible ways made it easier for schools to incorporate world religion in the curriculum. The most formidable barrier to the implementation of global education is the failure of the U.S. to establish a national priority, policy, and directions for global education and skills.

Sanders and Stewart (2004) related that preparing students for the 21st century required continued improvement in the current NCLB focus areas of math, science, and reading. In addition, according to these authors, a national policy on global education should be incorporated into NCLB and reflect the goals listed below:

Developing a citizenry and work force knowledgeable about world regions, cultures, and international issues; preparing experts and leaders in business, politics, and all major professional fields who are capable of addressing international opportunities and challenges; increasing the ability of our citizens to communicate in languages other than English; connecting young people in the U.S. with young people in other countries so that they can learn to build their common future (p. 204).

## CONCLUSION

Global issues and problems are growing and will not easily resolve themselves. Effective action requires citizens who are educated to deal with difficult and complex global challenges. Students with physical or health disabilities should leave school reasonably informed and concerned about issues facing both the U.S. and the world. In the absence of a national policy on global education, relevant IEP goals and objectives are needed to help students to understand the impact of globalization. Part of the challenge in implementing global education for students with physical or health impairments begins with educators realizing that the U.S. has become very interdependent globally. Students are now entering a rapidly changing world where distance will not matter. They must develop the skills to become collaborative team members who are creative critical thinkers. In order to achieve this goal, students with physical or health impairments should encounter a curriculum that will assist them in becoming, self-determined, responsible, and contributing world citizens. Cultural issues, local and global, have a significant impact upon the field of education and particularly special education. Now is a good time for teachers and other advocates to critically examine the curriculum, provided to students with physical or health disabilities, to determine whether it contains content appropriate for facilitating the growth of 21st century citizens.

## REFERENCES

Asia Society. (2006). China's educational transformation provides key lessons and challenges for U.S. leaders, according to new Asia Society study. Retrieved April 13, 2007, from [http://www.asiasociety.org/pressroom/china\\_education.html](http://www.asiasociety.org/pressroom/china_education.html)

Bauer, W., & Piazza, J. (1998). Increasing access through assistive technology for people with disabilities in rural areas. In Center on Disability, *Conference Proceedings: Technology and Persons with Disabilities*. Northridge: California State University. Retrieved September 3, 2007, from [http://csun.edu/cod.conf/1998/proceedings/csun98\\_018.htm](http://csun.edu/cod.conf/1998/proceedings/csun98_018.htm)

Boegemann, M. (2006). Assistive technology for the 21st century. In Center on Disability, *Conference Proceedings: Technology and Persons with Disabilities*. Northridge: California State University. Retrieved September 7, 2007, from <http://www.csun.edu/cod/conf/2006/proceedings/2664.htm>

Bush, G. (2004). Education: The promise of America. Retrieved March 3, 2007, from [www.whitehouse.gov/news/releases/2004/09/20040926.html](http://www.whitehouse.gov/news/releases/2004/09/20040926.html)

The Children's Partnership. (2003). *America's children and the information superhighway*. Los Angeles: Author. Retrieved September 3, 2007, from [www.childrenspartnershp.org/bbar/techin.html](http://www.childrenspartnershp.org/bbar/techin.html)

Collins, T., Czarra, F., & Smith, A. (1995). Guidelines for global and international studies education: Challenges, culture, connections. Retrieved April 6, 2007, from [www.globaled.org/guidelines/guidelines.pdf](http://www.globaled.org/guidelines/guidelines.pdf)

Committee for Economical Development. (2005). Education for global leadership: The importance of international studies and foreign language education for U.S. economic and national security. Retrieved February 3, 2007, from <http://www.ced.org/docs/report>

Douglas, S. (2002). Teaching about religion. *Educational Leadership*, Retrieved April 24, 2007, from <http://www.ased.org/portal/ascd/templat>

Engler, J., & Hunt, J. (2004). Preparing our students for work and citizenship in the global age. *Phi Delta Kappan*, 86, 197-199.

Friedman, T. (2005). *The world is flat: A brief history of the Twenty-first Century*. New York: Farrar, Straus and Giroux.

Friedman, T. (2006). *The world is flat: A brief history of the Twenty-first Century. Updated and Expanded*. New York: Farrar, Straus and Giroux.

Goldman Sachs Foundation Prize for Excellence in International Education. (2003). Retrieved on February 10, 2007, from [www.internationaleled.org/prize/2003.htm](http://www.internationaleled.org/prize/2003.htm)

Henderson, C. (2001). *College freshmen with disabilities: A biennial statistical profile*. Washington, DC: HEATH Resource Center, American Council on Education.

International Education (n.d.). Why does international education matter? Retrieved February 10, 2007, from [www.internationaleled.org](http://www.internationaleled.org)

Jans, L. (2000). Use of assistive technology: Findings from national surveys. In Center on Disability, *Conference Proceedings: Technology and Persons with Disabilities*. Northridge: California State University. Retrieved September 3, 2007, from <http://csun.edu/cod/conf/2000/proceedings/0049Jans.htm>

Kullen, A. (2003). A new crisis in America's schools. New Horizon for Learning. Retrieved March 12, 2007, from <http://www.newhorizons.org/trans/kullen.htm>

National Center for Educational Statistics. Digest of Educational Statistics 2001. Retrieved July 26, 2007, from <http://nces.ed.gov/pubs2002/2002130a.pdf>

National Council for the Social Studies. (n.d.) Curriculum standards for Social Studies: II. Thematic strands. Retrieved February 3, 2007, from <http://www.socialstudies.org/standards/strands>

National Education Association. (2006). 21st Century Group offers ideas to improve NCLB: Urges changes to better prepare students for global economy. Retrieved February 2, 2007, from <http://www.nea.org/esea/21stcentury.nclb.html>

National Geographic-Roper Survey of Geographic Literacy. (2002). Retrieved March 19, 2007, from <http://www.nationalgeographic.com/geosurvey2002/download/RoperSurvey.pdf>

National Geographic-Roper Survey of Geographic Literacy. (2006). Retrieved March 19, 2007, from <http://www.nationalgeographic.com/roper2006/findings.html>

Sanders, T., & Stewart, V. (2004). International education: From community innovation to national policy. *Phi Delta Kappan*, 86, 200–205.

Stewart, V. (2007). Becoming citizens of the world. *Educational Leadership*. Retrieved April 16, 2007, from <http://www.ascd.org/portal/site/ascd>

Turnbull, A, Turnbull, R., & Wehmeyer, M. (2007). *Exceptional lives: Special education in today's schools*. (5th ed.). Columbus, OH: Pearson Merrill/Prentice Hall.

U.S. Department of Education. (2004). *Twenty-sixth annual report to Congress on the implementation of the Individuals with Disabilities Education Act*. Washington, DC: U.S. Government Printing Office.

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U.S. Department of Education. (2005). *Children served under IDEA, Part B (2003)*, Data Tables. Retrieved September 3, 2007, from [www.edadata.org](http://www.edadata.org)

The White House. (2007). Fact sheet: No Child Left Behind: Keeping America competitive in the 21st century. Retrieved September 3, 2007, from <http://www.whitehouse.gov/news/releases/2007/04/20070424-7.html>

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