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## The Digital Divide

### **INTRODUCTION**

The term “ Digital Divide” describes the differences between populations’ ability to access digital information mainly through the Internet but not limited to the Internet but also include state-of-the-art networks: telephone, radio, TV, satellite, basically everything that can be considered Information and Communication Technologies (ICT). The divide results from social-economic differences between populations. The digital divide is a problem for teachers because our goal is to prepare students for the skills that they would need to be successful in the digital era (Marine and Blanchard, 2004).

The digital divide affects the whole population because technology is the key to economic growth of every region . Every country is connected world markets especially in United States. We are a country, which has changed from an industrialized nation to an information-based nation. The adverse effect of being isolated in the digital information revolution is not only a global problem but it is a problem for the subgroups of Americans, which are the poor, foreign-born Americans, minorities and women.

Initially the divide was result of disparity in funding but with the advent of low-cost hardware and software technology has the percentage of Americans connected to the

information infrastructure has increased significantly. Disparity in funding is no longer the barrier in closing the gap because of millions of dollars allocated by both private and governmental sources. But the digital divide has widened. Why—because of deficiency in the ability to evaluate and analysis digital information. According to the American Library Association “ A person must be able to recognize information is needed to have the ability to locate, evaluate and effectively use the needed information. Haves and have nots should be equally skilled as well as have equal access.” (Besser, 2001). Today’s gap has narrowed in the preceding decade in respect that the majority of schools are wired with the appropriate equipment but still room for improvement. The immediate crisis is the inequity technology application because of the student’s low skills to access online information, education system is slow to change and inability to keep up in the technologic advances. The problem is further complicated because the schools place technology improvement at low priority. On a broader spectrum, the problem is even more severe in rural areas and minority communities.

### **ARGUMENT POSITION**

The subgroups of Americans have a range of deficiency when accessing online content the fundamental deficiency is their lack of literacy skills and language barrier. In America 44 million adults and children are left behind because the content on the Internet is written for people with the average literacy skills and they do have it. Another 32 million Americans don’t speak English as their primary language and online content is written in English (Besser, 2001). The next level would be the Americans that maybe have an average literacy skill and the ability to understand the language but they lack high

level thinking skills, which prevent them from locating, evaluating and effectively using information on the Internet (Besser, 2001). Before teachers can use technology to empower students to be thinkers and problem solvers students must overcome literacy and language barriers.

Furthermore the impoverished and minorities are more likely use technologies for low level learning activities rather than for higher level thinking demanding activities (Warschauer, 2000). According to Wenglinsky report race and social-economic status lead to the differences of how technology is used in the classroom/schools. For example African Americans students, Hispanic students and low-income students are more likely to use computers for drill and practice, whereas white, Asian and wealthier students use technology for simulations and applications (Warschauer, 2000). Pedagogically the goal for all students is to have the ability to perform self-directed use of technology for high level thinking activities. On the larger scale school, districts and communities goals are to use technologies to solve authentic real world problems.

Another facet of equal access is the growing tendency for the content provider to charge for data found on the Internet. . Internet began with free resources but rapidly became a commercial marketplace where information is sold at today's going rate whatever that may be. For example a school may have to pay up to 10,000 annually for an electronic database, which could lead to pressure on other parts of education. It is not the lack of funds merely pointing out the change of free resources, which could lead to schools changing their technology priorities (Besser, 2001).

Nationally the United States spends 63.1% of its education budget is spent on

instruction directly which includes teachers' salaries, professional training, supplies, libraries, and computers. After spending 146.1 billion dollars annually millions of school age children do not have the skills to compete in the 21st digital community. (Monk, Pijanowski, Hussain,1997)

Clinton- Gore Administration allocated 12.5 million dollars to close the gap between Americans with access and those without so that every one will participate and benefit from our digital dependant economy according to Commerce Secretary William M. Daley in Commerce news. (Goodman, 2000) The Bill and Melinda Gates Foundation have given 2.6 billion dollars since 1999 to education in order to raise high school graduation rate for all students' regardless of ethnicity and families' social-economic status. ([www.gatesfoundation.org/education](http://www.gatesfoundation.org/education)) In spite all of the funding the Federal Government reports that schools are still behind the private sector in using technology while the student see the need and are begging for access to computers according to Education Secretary Rod Paige.

In the National Educational Technology Plan Paige (2000) stated, " Education is the only business still debating the usefulness of technology. Schools remain unchanged for the most part despite numerous reforms and increased investments in computers." Paige highlights the profound change in societies' largest group of new users of the Internet are from 2000 to 2002 were kids age 2 to 5 which makes them now school age. Their first experience in learning is already antiquated.

As evidence that many school system have a low priority for technology education, the report further states that schools constantly state they lack funding for

such technology or tech training, but actually is the government report rejects the schools' claim. Funding for technology can come from reallocating existing budgets and basing all spending decisions on whether they support learning. The government states in order to narrow the gap in the digital divide states, school districts and schools should follow the National Education Technology Plan that suggests the following recommendations.

(MSNBC,2000)

- **Leadership:** Invest in programs to develop technology-savvy leaders. Create partnerships with the business community. Empower students in the planning process.
- **Budget:** Evaluate all spending requests based on how they support student learning. Create a technology fund to carry funds over yearly budget cycles.
- **Training:** Ensure every teacher has the opportunity to take online learning courses and that teachers know how to use data to personalize instruction.
- **E-learning:** Provide students access to online learning so they can supplement and expand their courses. Set course standards that mirror those of courses required for credit.
- **Broadband access:** Explore providing high-speed communications content for all those who manage data and use online courses at school.
- **Digital content:** Get away from a reliance on textbooks in favor of multimedia content, which is less cumbersome and can be updated more quickly.
- **Data systems:** Coordinate data from administrative and instructional systems so there are clearer relationships among management decisions and student achievement.

What happens if the schools don't catch up? Today's children are growing up in a national technologically connected to the world. making the closing the digital divide paramount to the nation as well to the individual. The National Telecommunications and Information Administration was formed to promote the efficient and effective use of telecommunications and information resources in a manner that created job opportunities,

enhances U. S. competitiveness, and raises that standard of living. (NTIA,2000) The Internet has no geographic boundaries therefore the lack of technology is a problem for third world countries. NTIA 's vision is to have a "...world where telecommunications and information technologies are used to protect and improve the global quality of life."

(NTIA, 2000) Wikipedia the free online resource, multilingual encyclopedia written collaboratively by contributors around the world defend the need to close the global digital divide around the world. The Wikipedia entry featured the following four major arguments why closing the global digital divide is a national interest and a social benefit :

([http://en.wikipedia.org/wiki/Digital\\_divide](http://en.wikipedia.org/wiki/Digital_divide), May 24, 2006)

1. **Economic equality:** Some think that access to the Internet is a basic component of civil life that some developed countries aim to guarantee for their citizens. Telephone service is often considered important for the reasons of security. Health, criminal, and other types of emergencies may indeed be handled better if the person in trouble has access to a telephone. Also important seems to be the fact that much vital information for education, career, civic life, safety, etc. is increasingly provided via the Internet, especially on the web. Even social welfare services are sometimes administered and offered electronically.
2. **Social mobility:** If computers and computer networks play an increasingly important role in continued learning and career advancement, then education should integrate technology in a meaningful way to better prepare students. Without such offerings, the existing digital divide disfavors children of lower socio-economic status, particularly in light of research showing that schools serving these students in the USA usually utilize technology for remediation and skills drilling due to poor performance on standardized tests rather than for more imaginative and educationally demanding applications.
3. **Democracy:** Use of the Internet has implications for democracy. This varies from simple abilities to search and access government information to more ambitious visions of increased public participation in elections and decision making processes. Direct participation (Athenian democracy) is sometimes referred to in this context as a model.
4. **Economic growth:** The development of information infrastructure and active use of it is inextricably linked to economic growth. Information technologies in general tend to be associated with productivity improvements even though this can be debatable in some circumstances. The exploitation of the latest technologies is widely

believed to be a source of competitive advantage and the technology industries themselves provide economic benefits to the usually highly educated populations that support them. The broad goal of developing the information economy involves some form of policies addressing the digital divide in many countries with an increasingly greater portion of the domestic labor force working in information industries.

This week in Time magazine published the article *Cool Tools for the Third World* debuting tools that are bridging the technology advances to poor third world countries. The theme of the new innovations is to provide access to technology easily, consistently at a low cost to villages, farmers and to some of the poorest countries. The success stories include Village-wide WI-FI system that has increase buying power of the farmers, improved health and more villagers are learning to read in just one year. (Bower, 2006). Nigerians accessing information via space satellites and the 100\$ Laptop computer creates dignity rather than dependency for a poor society.

## **CONCLUSION**

The United States is faced on all sides with many challenges. If we are to maintain our position as the most powerful nation in the world and maintain the American way of life we must insure that all our citizens have equal opportunity to prosper in the digital age. We cannot solve the problems of global unrest, outsourcing, environmental degradation, global warming without a creative, skillful pool of American workers. What ever the technology evolves into it is important that we are all ready to embrace it. It is paramount that we close this digital divide soon.-- If we are to remain free and prosperous.--If democracy is to prevail.

## Works Cited

- Basser, Howard. "The Next Digital Divides." Politics and Education 1 (2001): 1-4. 23 May 2006 <<http://tcla.gseis.ucla.edu/divide/politics/besser.html>>.
- Blanchard, J M., and S. Morraine. Bridging the Digital Divide: an Opportunity for Growth For the 21st Century. Alcatel. 2004. 1-4. 23 May 2006 <[http://www.alcatel.com/doctypes/articlepaperlibrary/pdf/ATR2004Q3/S0408-Bridging\\_opportunity-EN.pdf](http://www.alcatel.com/doctypes/articlepaperlibrary/pdf/ATR2004Q3/S0408-Bridging_opportunity-EN.pdf)>.
- "Digital Divide." Wikipedia. 20 May 2006. Wikimedia Foundation Inc. 23 May 2006 <[http://en.wikipedia.org/wiki/Digital\\_divide](http://en.wikipedia.org/wiki/Digital_divide), May 24, 2006>.
- "Education- Melinda & Bill Gates Foundation." Melinda & Bill Gates Foundation. May 2006. 23 May 2006 <[www.gatesfoundation.org/education](http://www.gatesfoundation.org/education)>.
- Goodman, Morrie. "TOP GRANTS." Commerce News United States Department of Commerce. 05 Jan. 2000. Commerce News United States Department of Commerce. 22 May 2006 <<http://www.ntia.doc.gov/ntiahome/press/tiap010500.htm>>.
- Monk, David H., John C. Pijanowski, and Samid Hussain. "How and Where the Education Dollar is Spent." The Future of Children 7 (1997): 52-62. 23 May 2006 <[http://www.futureofchildren.org/usr\\_doc/vol7no3ART4.pdf](http://www.futureofchildren.org/usr_doc/vol7no3ART4.pdf)>.
- NTIA. NATIONAL TELECOMMUNICATIONS. United States Commerce. NTIS, 2000. 1-34. 21 May 2006 <<http://www.ntia.doc.gov/ntiahome/annualrpt/2001/2000annrpt.htm>>.

"Schools, Teachers Behind in Technology Use." U.S. Life News. MSNBC. Associated Press. 7 Jan. 2005. 20 May 2006 <<http://www.msnbc.msn.com/id/6799363/>>.

Summer, Mark, Bob Marsh, and Kristen Peterson. "Cools Tools for the Third World." TIME 29 May 2006: 55-57

Warschauer, Mark. "Technology and School Reform: a View From Both Sides of the Tracks." Education Policy Analysis Archives (2000): 1-17. ERIC Clearinghouse on Assessment and Evaluation. CSUN Oviatt Library, Granada Hills. 21 May 2006. Path: Education, Digital Divide.