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People Are the Only Thing that Matter

by Dr. Miriam Masullo and Dr. Antonio Ruiz

It is estimated that 20% of the population of the US uses the Internet; outside of North America the numbers decrease to 9% in the UK and Germany, 3% in France, to absolutely privileged use elsewhere. Those are very small numbers anyway, if we consider the potential of the Internet for making knowledge and information available to people. We are talking about not only a resource for learning, but of something that affects the way we communicate and share our lives with that portion the world to which we are, in this way, connected. Let us consider next that these relative small numbers of people that can benefit from the shared world of the Internet live in not only countries with developed economies, but that these are the superpowers. What is going on then in the developing world?

The Internet and the World Wide Web are formidable forces in the business and educational environments of today. Developed countries are adopting these technologies at a very rapid pace exposing the K-12 educational environments to them. But ultimately, the premise for real benefits to education will come to assume the following: wired Internet connectivity to the schools and the home; PCs in the schools and in the homes; Internet and PC use literacy for the students and the teachers; and, web-ready curriculum oriented content that works as part of well-established and proven pedagogical methods. With these as just one set of challenges, access is not at hand for those most in need of access to education. According to our Department of Education, in the US only 14% of poor and minority classrooms are wired. Thus, even for developed countries, diminished resources, lack of educators, and safety in the schools are higher priority issues than figuring out how to make the Internet and the Web new vehicles for improved learning. We cannot even yet make those technologies vehicles for access.

Beyond the minority of people in developed countries with ready access to computers and the Internet, there is still that vast majority of students in developing and underdeveloped countries, indeed all around the world, left behind in a "disconnected world". This occurs even as we identify education as one of the essential universal enablers of the so-called "global society" whose boundaries are supposed to be less distinct now in the face of air travel, global telecommunications, and a global economy for business. Many countries and many people in that new disconnected world are not enabling themselves to participate competitively in that global economy because they lack access to education. This is vastly

recognized as one of those factors that causes social unrest, unemployment due to imbalances in a skill base, lack of participation in an information based global economy, and economic imbalance between population size and the economy required to sustain minimal living standards.

The Internet has arrived in developing countries and in particular, large cities, because of the high concentration of ready access to networking (e.g. telephone networks). A benefit to education, as it may be, in those place there is already access to education and to educational resources. However, for the vast majority of the K-12 population around the world, a wired Internet infrastructure is not a possibility. For example, 65% of the schools in Mexico do not even have a telephone, only 3% of all Africans have access to a telephone. Where telecommunications is in short supply, so is access to education. Meanwhile, the telephone and cable companies that are the key providers of consumer and business driven deployments of such infrastructure are not interested in "wiring" such populations in the near future because they are not the consumers required to make that a viable business. Industry cannot and will not be able to justify the "business case". Once and for all, there is no business case, governments must solve the problem.

Countries such as Mexico, Brazil, India, and China which represent the leading developing economies of the world with vast pools of resources, people, and growth potential have recognized and mandated total or partial K-12 schooling requirements. But, realizing the lack of trained educators and the lack of infrastructure, they struggle to implement such requirements. Through World Bank loans, local social funding programs, and other development aids, there are resources to implement new and creative educational programs that can begin to solve this problem. The authors have long advocated for the kinds of distance learning systems that can be deployed to reach out even in the absence of a wired infrastructure and in the absence of trained educators. The solution is in the delivery of digital video broadcast classes based on existing curriculum and content, to reach all the students via a DVB (Digital Video Broadcast) infrastructure. The classes, as in most distance learning approaches can be prepared by the best educators and moderated by local facilitators at the remote locations. This one-way delivery system is the first far-reaching effort now possible, that can be used to enhance the world's access infrastructure and satisfy the schooling requirements throughout a country not just in the cities. The authors have long advocated that we must use technology to enhance access to education as a first priority, the one thing for education that technology can do well. The Internet and Web may be testimony to that, but let's not do it for only for some people.

Clearly, a universal and global solution must be provided by governments on a countrywide, province-wide, or statewide basis where the curriculum is standardized and the content is generated from a central location. Such solution would require taking into consideration the specific needs of each region in terms of geography, culture, language, content, delivery schedules, and end-user receivers, but it is doable. Other applications of the solution would include health education, vocational training, government services, and regional and national information services. These can be delivered directly to the home or to the school, library, or

health center using the same solution and infrastructure. It can be argued that any effort that benefits education is worthwhile. In the short term, limited Internet access to educational resources is of benefit to education - for some. It can be argued that such efforts advance the field of distance learning and even our understanding of access requirements, for eventually making the benefits available to all. But we all know that what is coming out of the short efforts is driven by business opportunities, not universal access. In the short term business matters more. But, when people don't matter in the short term, they will not matter at all. People are the only thing that matter.

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