

# Is the Divide Digital

## If Not Digital, Then What?

The thematic focus of this Issue is: **Access to Information and Knowledge**. With the remarkable advancements in information and telecommunication technologies (ICT), there is now a genuine concern about the "digital divide", the gap between the ICT "haves" and the ICT "have-nots." There is a good justification for this concern and the figures show it at every level. But narrowing the divide - publishing a newspaper in every village, placing a radio and TV in every household, putting a computer in every classroom, and wiring every building to the Internet - does not automatically solve the problem. The most serious divide is in the **extent and quality of human knowledge and learning**. It is not digital; it is educational.

It is necessary but not sufficient to provide avenues to information and knowledge. What is more important is to **empower people with appropriate educational, cognitive and behavioral skills and tools** to:

- access the information avenues efficiently, effectively and wisely;
- acquire knowledge and internalize it;
- apply knowledge to better understand the changing world, to develop their capabilities, to live and work in dignity, to participate in development, to improve the quality of their lives, and to make informed decisions; and
- upgrade their knowledge continuously and systematically.

## The Digital Divide ... An Educational Emergency

Advancements in ICT have revolutionized the world economy. Information can now be collected, analyzed and communicated with increasing speed through dramatic innovations in information technology, rapid international communication and transportation capacity, and massive technological connections across national boundaries. Any service that can be digitized and transmitted can be produced and sold anywhere. Together, with economic developments, these advancements are producing a new worldwide economy that is global, high speed, knowledge driven, disciplinarian, and competitive. Countries have to meet the competitiveness challenge in terms of agility, networking and learning, and to arrange production to achieve quality, productivity and flexibility. The good news is that, with the potential of human

development and advanced technologies, developing countries can leapfrog. The bad news is that this process is not automatic. On the contrary, unless conscious efforts are made, countries are likely to be marginalized. There is an educational emergency for:

- A workforce that has the foundation to enhance the quality and efficiency of product development, production and maintenance, and the flexibility to acquire the new skills required for new jobs; and
- A cadre of highly-trained scientific, technological and processing personnel, including some with sophisticated research skills, who can fully understand developments in the material, scientific, technological, managerial and social areas and who can take the lead in their assessment, adaptation, and local applications.

The globalization of the economy and its concomitant demands on the workforce requires a shift to an education that enhances the ability of learners to access, assess, adopt and apply knowledge, to think independently, exercise appropriate judgment and collaborate with others to make sense of new situations. The objective of education is no longer simply to convey a body of knowledge, but to teach how to learn, problem-solve and synthesize the old with the new. It is worth noting, also, that the emerging economy will no longer be centrally created and controlled by governments. This environment, which will be dominated by private sector and not government jobs, will place a premium on creativity, initiative and entrepreneurship.

## Access Anytime Anywhere

The above demands require two changes in our educational behavior. Firstly, the need for continuous access to information and knowledge makes learning life-long, and the traditionally neat distinction between learning and work unreal. Education thus becomes a continuum, with no marked beginning and end. Secondly, the process of learning cannot be confined to the traditional classroom. The architecture of education services and the allocation of resources have to be planned accordingly. No longer should countries view formal educational institutions as the sole educators, or the only institutions worthy of financial investment. Other channels, from interactive radio to educational television to offerings of virtual schooling over the Internet, or Intranet, to community learning centers, to training schemes, will have to be figured into the equation.

### Access Channels and Educational Achievement

The model of education that was developed for the industrial age cannot effectively achieve the educational empowerment in the information age. With the tools of ICT, we should be able to evolve the conventional model of:

- A building,
- A student
- A teacher (as provider of knowledge), and
- A set of textbooks and some audio-visual aids.

Into a new model of:

- A knowledge infrastructure (print, audio, video, digital )
- A learner
- A teacher (as a tutor and facilitator), and
- Multimedia materials

It is in this model, that the digital divide becomes an educational divide, and bridging it becomes a human need, an educational necessity, and a global urgency.

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### An Update....

This is the fourth issue of *TechKnowLogia*, and *we* are pleased to report that the Journal is now read in 149 countries covering all the regions of the world. Total readership based on individual and institutional subscribers, including browser and PDF versions, is approximately 20,000. In addition to downloading the PDF version of the Journal, our readers are spending significant time on the web, actively utilizing the browser version of the Journal. Our tracking system has shown that, for the month of January 2000, the web registered approximately 160,000 successful hits.

We have introduced in this issue a new feature, "**Email to the Editor.**" We have also made a number of improvements on the site, and we will continue to do so, to make it as user friendly as possible.

In order for us to continue to offer the journal free to our subscribers, we are inviting organizations, institutions and firms to co-sponsor one or more issues of the Journal and/or advertise their products and services in the Journal. (For more information on how to sponsor or advertise, please click on the respective buttons on the home page.)

We hope that *TechKnowLogia* will continue to be a useful resource for you about the potential of technologies for knowledge dissemination, effective learning and efficient education services. We also hope that you will continue to introduce it to your colleagues and friends.



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[Info@KnowledgeEnterprise.org](mailto:Info@KnowledgeEnterprise.org)

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[TechKnowLogia@KnowledgeEnterprise.org](mailto:TechKnowLogia@KnowledgeEnterprise.org)

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[TechKnowLogia@KnowledgeEnterprise.org](mailto:TechKnowLogia@KnowledgeEnterprise.org)

#### SPONSORSHIP AND ADVERTISING

[Sandra@KnowledgeEnterprise.org](mailto:Sandra@KnowledgeEnterprise.org)

#### ADDRESS AND FAX

Knowledge Enterprise, Inc.

P.O. Box 3027

Oakton, VA 22124

U.S.A.

Fax: 703-242-2279