

## ■ I+C: THE SOCIETY OF INFORMATION

Speaker: **Tapio Varis**

Professor at University of Tampere

## ■ I+C: LA SOCIEDAD DE LA INFORMACIÓN

Ponente: **Tapio Varis**

Profesor de la Universidad de Tampere

## ■ I+C: A SOCIEDADE DA INFORMACIÓN

Relator: **Tapio Varis**

Profesor da Universidade de Tampere

### **Communications in the information society**

The UNESCO Education for All programme has noted that one in five adults is without literacy skills, and most are women. The UNESCO Report "Towards Knowledge Societies" (Unesco 2005) notes that all societies possess a rich range of knowledge and make use, in their daily lives, of various levels and types of knowledge that they produce and pass on using a wide variety of means, practices and tools. This knowledge is a base on which the capacities necessary for their development can sooner or later be built. One of the main stakes in the new phase of globalization that is changing the planet is to hold on to existing capacities, largely diminished by an outflow of skills, which is on an upward trend. However, many developing countries, today, are experiencing difficulty in identifying the types of knowledge they possess, in boosting their value and in making their potential work for their development. It is therefore important, first, to raise each society's awareness of the richness of the knowledge it possesses. Those assets should then be better taken advantage of by more precise identification, which in turn would help make the most of the multiple dynamics of globalization. It would also be a good idea to thoroughly identify each society's weak points, in particular with regard to access to information and knowledge. This could be done, for example, by strengthening self-reliance, identities, and empowering



communication skills. Indigenous cultural institutions like museums and traditions like dance, theatre and music are important factors also in communication.

Education and science policies should shift their focus accordingly, especially in order to meet urgent needs in the areas of agriculture, water and environmental management, health, industry and services, with the ultimate goal being the strengthening of human security. Enhancing the value of existing forms of knowledge should involve assessing skills and turning all available assets, no matter how modest, to good account in the areas of education, scientific research and technological development. That might result in a different approach to international negotiations on the liberalization of trade as well as to development and poverty-reduction strategies. As has been observed in the past, disregarding the development potential that knowledge offers can result in serious errors that have, for example, led to the present higher education crisis in Africa and to poverty-fighting strategies dominated by macro-economic orientations, often at the expense of investments in education and health, and without a genuine participatory public debate being able to influence the choice of priorities. The situation could be remedied by creating trust in the media and promoting open communications.

As noted in the UNESCO Report on Knowledge Societies (Unesco 2005) there is a general agreement of the appropriateness of the expression "knowledge societies", the same cannot be said of the content. We have to ask which type of knowledge are we talking about. Are we endorsing the hegemony of the techno-scientific model in defining legitimate and productive knowledge. Also the term "Digital Age" has been questioned as a Western concept and some speakers prefer multicultural world instead. Art is needed as means to learn from another culture. Furthermore, there are grave imbalances and obstacles that mark the access to knowledge both locally and globally.

One of the basic questions in academic life in the 21<sup>st</sup> century is to understand what do we understand by knowledge – especially in the knowledge society. Science has moved from the certainty of Galilei and Newton towards chaos theory, probability and relativity. Knowledge is increasingly understood in its contextuality and complexity, change and uncertainty, and holistic approach. Furthermore, the role of tacit knowledge and art have become important as well. In the past, new industries each needed new concepts and knowledge to be understood



However we define the 21<sup>st</sup> century societies there are some trends that seem to have consequences in all spheres of life. Globalization and digitalization have fundamental consequences in educational and learning life, working life and in governance. Not only money and technology are moving but markets and partnerships become global and labour becomes increasingly mobile. The issue of multiculturalism becomes central and people live in media environments of multiple identities. There is also the threat of becoming marginalized and excluded.

Traditional print and electronic media were introduced within a period of reasonable length and with a rough estimation of the economic and social impacts. Now the new media are being introduced with a speed that hardly anyone has time or ability to assess all of the consequences

In recent years fundamental changes have occurred in technology, political world order, and population growth that have a profound impact on world economic, political and human development. The rapid developments in telecommunications, microprocessors and biotechnologies and the introduction of information super-highways are changing national and international economies and world order. National programmes of national information infrastructures are planned to be connected to the world-wide efforts to create global electronic information super-highways which are expected to revolutionize economy as well as education and learning environments.

In the global perspective, there is the threat that the information gap is increasing and not decreasing. Even in the technologically advanced countries a great number of individual homes are without computer connections and very few home computers have modems. In fact, the first utilizers of information super-highways will be those who have the necessary equipment. In the early stages of motor-highways the first users were those who had cars and could benefit the new infrastructure. Highways changed the whole culture including small business and shopping centers. The shops were no more built at walking distance but near the highways. In the case of information super-highways we do not yet know how much they will serve individual citizens and how much enterprises, organizations, and administration.



In the last ten years or so one has been able to observe the central role of information and communication technology for social and economic development. The traditional industrial societies have faced difficulties and even collapsed particularly in cases where obsolete models of thinking have dominated management. Such economies, however, have been in the increase which have been able to utilize new communication and information resources like in the Pacific region and also in North America. In light of the exponential growth on electronic communications, the role of telecommunications will grow fast in world affairs.

## **TRUST IN CONTENT**

In Europe, a European Union Media Experts' Conference was organized in 2007 to show ways of ensuring trust in the content and of guaranteeing variety in the digital media ("More trust in content – The potential of co- and self-regulation in digital media", Leipzig, 9 - 11 May 2007). The starting point for the intensive discussions of the more than 250 media experts from all Member States of the European Union were the radical changes in the media world. Such can be seen, for example, in the growing significance of online content compared to traditional media, the new role of the users who themselves are becoming producers, the gatekeeper function of search engines and electronic program guides, and in the evolution of the current content carriers into integrated companies which also offer content.

The conference which was organized under the German Presidency of the European Union focused on four central questions. The first question was how more content can be created that is suitable for children. One of the recommendations was that offering children as much content as possible which is geared to their needs – at the regarding age – is a promising way of opening up the potential of the digital world for them and at the same time of protecting them against its dangers. Children can make use of digital media and utilize their potential for education, creativity and communication.



The second question was how can the existence of a reliable and wide range of information be ensured in the digital world? The conference concluded that the main barrier to access is the lack of competence of the user. Efforts must be undertaken to enhance the users' media literacy, thus enabling them to take conscious decisions.

The third question was which self-regulatory instruments have proven successful? Among the answers was the observation that in the digital world, content is increasingly being developed by users rather than by representatives of professional journalists' associations who feel themselves bound to a professional ethos.

The fourth question asked what potential does co-regulation have in the context of digital content? Here the seminar participants welcomed the fact that in particular co-regulation is recognized as an instrument for implementing the provisions for the protection of minors, human dignity and consumers as well as other fields. Openness for all participants and transparency of the system is one of the elements for an effective regulatory system.

In his background paper to the Leipzig conference Richard Collins discussed measures to foster journalistic independence and quality. In his view self-regulation is not simply a matter of the administration and adjudication of codes of conduct by an external and independent body; at its best it's the internalisation and effective practice of norms of good conduct within organizations and by individuals. Effective and consistent adherence to such codes (whether explicitly formulated or implicitly embodied in adherence to informal norms of professional conduct) can build public trust (Collins 2007). The European codes of journalistic ethics are compiled at my University of Tampere (<http://www.uta.fi/ethicnet/>).

Broadband Internet holds great promise for improving multimedia e-learning and telehealthcare capabilities in global scale, especially in rural and isolated areas that are not well served by commercial network providers (Varis - Utsumi - Klemm 2003).

E-learning is now moving towards a more social activity with social web, blogs, and wikipedia. Weblogs can also be seen as new forms of journalism: they are personal diaries, they organize internal and external political communication, they are a form of publications and expert communication. In short, blogs can be seen as "pre medium" and "post medium" for the mass media. Furthermore, the individualistic values of are being replaced by more



social and communitarian values. The rise of the community media may be an example of this.

### **DEVELOPING DIGITAL LITERACY**

It is widely understood that the most important skills of the future would be communication skills. Today everyone is able to access vast amounts of data without a mediator. Critical thinking skills are needed as a productive and positive activity. Critical thinkers see the future as open and malleable, not as closed and fixed. They are aware of the diversity of values, behaviours, social structures, and artistic forms in the world. Critical thinking is a process, not an outcome, and it is emotive as well as rational.

In my understanding we face three kinds of problems. First we have to try to understand what is the learning process of becoming literate and what does communication competence and media skills mean in the information society. Second, we have to analyse the increasing neo-illiteracy. Third, we should discuss of what kind of skills should we give to the citizens now as compared to the earlier skills of writing and reading.

In an intercultural world communication necessarily mediates different values and cultural behaviours. Great civilizations and cultures have very different patterns of communication and use different senses in a different way. In consequence, if a truly global information society is to be created, more attention should be given to the diversity of cultures and the co-existence of different civilizations and cultures.

Media literacy has been defined as the ability to access, analyze, evaluate, and communicate messages in a wide variety of forms. Media literacy is a concept whose broad definition and range of applications lead to diverse approaches, creating some intriguing conflicts and tensions. Educators and scholars with disciplinary backgrounds in media studies, the fine and performing arts, history, psychology and sociology, education, and literary analysis each may vigorously defend one's own understanding of what it means to access, analyze, evaluate, or create media texts without a full awareness of the extent of complexity, depth or integrity of various other approaches (Hobbs 1998).

The concept of digital literacy in a broad sense is a way of thinking but it can also be understood as complementary to the concept of media education and even synonymous with



media literacy. Digital literacy as media literacy aims to develop both critical understanding of and active participation in the media. In the discussions in UNESCO Communication and Information Sector, for example, digital literacy is understood to enable people to interpret and make informed judgements as users of information supports and sources and it also enables them to become producers of media in their own right. Digital and media literacy is about developing people's critical and creative abilities.

According to José Manuel Pérez Tornero digital literacy is not just a simple operative and technical consciousness that is made up of nothing more than technical knowledge. Digital literacy is the complex acquisition process of an individual of humanity combined with their abilities and intellectual competencies (perceptive, cognitive, emotive) and practical competencies (physiological and motor). In Pérez's view these correspond to the technological transformation of the last decades in the twentieth century – the technological change of the Information Society.

To reduce digital literacy exclusively to the skills of using a computer is a crude simplification and a loss in meaning. Using a computer requires diverse and complex previous knowledge. It also introduces the individual and humanity to new contexts, which demands mental, intellectual, profound and complex changes. In essence, digital literacy is a complicated process that consists of acquiring a new tekne. This Greek term means the ability of art or craft by an individual or humanity. According to Pérez we are facing the transformation of the most profound tekne that humanity has ever experienced (Pérez Tornero 2004).

The challenges to peace and open, multicultural communication can be characterized by the transition from an industrial society to an information society with the need of digital competences. The dynamics of globalization, mobility and pluralism result in a multicultural world. A higher degree of individual flexibility in combination with the need for tolerance and responsibility are connected to the demand for sustainable development. The promotion of higher quality and equal educational opportunities become central issues of educational institutions.

The study of complexity has brought science closer than ever to art, Knowledge has gone through a cycle from non-specialism to specialism, and now back to interdisciplinarity, even transdisciplinarity. Art deals with the sensual world (media as the extension of senses) and



the holistic concept of human being. Traditional knowledge has been disciplinary based although increasingly interdisciplinary. In the vocational field knowledge is also contextual and needs to be created in application - learning by doing. This also reflects local and regional realities. The Western philosophy is characterized by analytical, scientific, objective, rational and critical thinking while the Eastern approach is characterized by synthesis, literature and art with a subjective and emotional thinking. Both cannot and should not dominate other, but should have close dialogues between them. In a sense, many of the basic issues were already discussed in ancient Greece by Socrates, Plato and Aristotle. Aristotle's "Poetics" is of particular importance to understand the balance between different senses of the human being and the combination of sound, drama, and text like in modern multimedia. Also Aristotle's definition of rhetoric as the faculty of discovering in any given case the available means of persuasion is a relevant approach to analyse the influence of modern media.

In order to learn new technologies and become digitally literate new forms of learning paths have to be developed utilizing all forms of learning, especially at work and non-formal environments. At the same time special attention should be given to teacher education in information and communication skills and competences. The period of transition that we are now living differs from the periods of change of older dominant media. Traditional print and electronic media were introduced within a period of reasonable length and when we moved to the active use of a new form of communication, we could also have a rough estimation of the economic and social impacts of it, and train new professionals for the media and support people for the institutions. Now different forms of communication and technologies integrate and converge with a speed that hardly anyone has the time or ability to assess all of the consequences, real possibilities, or problems. In a positive sense, people may be able to speak more directly to each other without former restrictions.

## **REFERENCES:**

Collins, R. (2007). Who offers reliable and diverse information in the digital world and how can users get access to this information? "More Trust in Content – the Potential of Co- and Self-Regulation in Digital Media", European Union Media Experts' Conference, Leipzig 9-11 May, 2007

"More trust in content – The potential of co- and self-regulation in digital media". (2007). Conclusions of the German Presidency on the EU Media Experts' Conference in Leipzig from 9 to 11 May 2007.



- Pérez Tornero, J. M. (2004). Promoting Digital Literacy. European Commission 4<sup>th</sup> Workshop "Media Literacy, Digital Literacy, e-Learning", 27 February, Brussels.
- UNESCO. (2005): *Towards Knowledge Societies*. Unesco, Paris.
- Varis, T. (1998). Communications in the future UN system. In Alger, C. (ed) *The Future of the United Nations System: Potential for the Twenty-first Century* (pp. 357-382). United Nations University Press. Tokyo, Japan.
- Varis, T. (2002). The Media in Postmodern War and Terrorism. In: *War or Health? A Reader* with a preface by Kofi Annan, Edited by Ilkka Taipale et.al. Zed Books Ltd., 7 Cynthia Street, London N19JF, UK and Room 400, 175 Fifth Avenue, New York, NY 10010, USA.
- Varis, T.& Utsumi, T. - Klemm, W. (Eds.). (2003). *Global Peace Through The Global University System*, University of Tampere, Finland. Saarijarven Offset Oy. ISBN 951-44-5695-5