

Foreword

Globalization is consolidated by the extraordinary invasion of education and learning by new technologies, especially the Internet. The development of communication and information technologies makes it possible for distance teaching institutions to strengthen their position in the educational landscape. But learning in the 21st century also requires new skills on how to learn and how to assess learning with the new tools. New technologies also pave the way for lifelong education for all and at the same time are challenging the traditional universities and schools.

This issue of the International Journal on *New Trends in Education and Their Implications* is an impressive collection of scholarly articles from many countries and cultures which show convincing interest in information technologies in education. The contributions range from assessment to communication problems. Communication skills and competence remain basic in the emerging information and knowledge society. The articles of this issue even examine the issues related to effective use of meta communication concept as nonverbal communication.

The philosophy of e-learning focuses on the individual learner although it recognizes that most learning is social. In the past training has organized itself much for the convenience and needs of instructors, institutions, and bureaucracies. Now e Learning is the convergence of learning and networks, the Internet. New university systems are being developed for new global needs and different scenarios for the school classrooms of the future are being developed.

One scenario for the future classroom is that there will not be radical changes in the next 10 years. The philosophy of knowledge transfer continues and schools remain teacher centric with testing at fixed periods. However, this scenario is challenged by two new perspectives.

The second scenario is that information technologies and virtual learning environments will bring big changes to schools and other educational institutions. The current economic and financial situation encourages administrators to look for more economic means for organizing effective education. This philosophy emphasizes getting the facts straight and virtual education. It is learner centric rather than teacher centric, and implies continuous testing and assessment. In essence, this approach might turn out to be too technocratic and undervalues human and civilization dimensions in education.

Therefore, the third scenario recognizes that the 21st century requires radically new skills but also communication competences. The philosophy is learning how to learn. New technologies are applied with real-life learning with virtual assistance but human and cultural values are emphasized. Testing may require personal judgement from outsiders.

The new literacies can be approached as functional literacy in the same way as traditional reading, writing and calculating. The new abilities are believed to have a strong correlation with the traditional ones but in fact seem to do so much less than expected. The evaluation tools are quite advanced in assessment of access and information literacy competence standards, for example. But the assessment of media and digital literacy still requires a lot of research work.

The use of ICT and digital skills in performing art, craft, and other fields require a team work with special skills. The trend of digitalization does not mean that everything traditional should be rejected. New communicative inventions have also destroyed something valuable, and special attention should be given to the diversity of approaches in the information technologies applications. A blended approach is often adopted. Most essential

in this new learning environment is the fact that the learner is constantly facing epistemic conflicts when a problem is presented that needs to be solved but lies outside the learner's current repertoire. Most of the problems of the information society will be of that kind. The learner needs to proceed with self-regulation with an active engagement, which is the learner's response to the conflict. The idea is to adjust and reconstruct thinking to deal with the learning problem at hand.

The cultural dimension in the information technologies applications also brings the dimension of feelings and the spirit of sharing and caring to the process. The social dimension requires inclusive policies. In an intercultural world, communication necessarily mediates different values and cultural behaviors. 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

This journal brings excellent contributions from different countries and great civilizations. In general, the study of complexity has brought science closer than ever to art. Knowledge has gone through a cycle from nonspecialism to specialism and is now moving back to interdisciplinarity, even transdisciplinarity. Art deals with the sensual world (media as the extension of senses) and the holistic concept of human being.

Especially 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. One cannot and should not dominate the other.

People of the work force face two overlapping challenges. The first is to acquire the skills necessary to enter an increasingly digital job market, and the second is to continually improve those skills, and learn new ones, as life-long learning. Many studies suggest that workers around the world may not be keeping pace. It is widely believed that schools are failing to sustain the pipeline of employees who are adequately prepared to exploit new knowledge and skills.

The challenge now in the 21st century is to bring together scientists, public authorities, businesses, academics, civil society organizations and other interested groups and stakeholders to understand challenges for sustainable education and cultural literacy in the global context; identify the potential of information technologies to advance and improve education; share knowledge and best practices about successful policies in global education; create venues of collaboration; and consolidate responsible communities for multiliteracies.

This issue contributes to these goals and raises several issues for further discussion.



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Prof. Varis has held various posts throughout his career, including Rector of the University for Peace (created by the UN) in Costa Rica; Chair of Media Studies in the University of Tampere, Finland; and Director of Tampere Peace Research Institute. He has been visiting professor in many parts of the world, including Mexico, Venezuela, United States, Spain, and Austria. Prof. Varis has authored approximately 200 scientific articles on topics such as "Global Peace through the Global University System," "The New Media, Cultural Identity and Integration in the New media World" and "Values and Limits of the Global Media in the Age of Cyberspace." He contributes to scholarly publications as well as to print and broadcast media. He holds a Masters and Doctor of Social Science degrees from the University of Tampere, Finland.

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