

Interaction of Communication and Education: Roadmap for Sustainability of inclusive Knowledge Societies.

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Abstract

In 20-30 years the world's economy may change significantly, driven by the advent of new technological and societal innovations. In general, pressure for sustainable development is increasing from all sectors of society. Sustainable development is defined as „Meeting the needs of the present generation without compromising the ability of the future generations to meet their own needs (Brundtland, G, ed., (1987.)“¹ is both a vision and a process. Communication, education have a key role to play to build on emerging trends and to make sustainable development approachable and understandable. Experts are coming to realise that traditional approach from governments and business groups urging the public to adapt the environment into their day to day decision need to be overhauled. The lesson to be learned is that communication, education, learning styles have to be positive and tailored to different circumstances and cultural contexts. Inspiring examples and visions from all area can encourage national and local authorities, business to plan, develop and implement campaign that make sustainable lifestyles is attractive. In this article we will discuss challenges of communication and education in the context of sustainable and inclusive Knowledge Societies.

Strong Demand

The social, civic and economic potential of a global Internet – one that bridges the world – is widely recognized (UNESCO 2011). Connecting an individual, locality, nation or continent to the wealth of information, expertise and communities distributed across the globe is among the greatest promises of the Internet in the field of global Communication and Education. It opens the potential for using the Internet to make easier access to information and knowledge, helps to reshape

¹ Brundtland, G, ed., (1987). Our common future: The World Commission on Environment and Development. Oxford: Oxford University Press.

freedom of expression, privacy, ethical norms and behaviour. Modern communication techniques enable effective interaction between countries and cultures.

The Europe 2020 strategy is about delivering growth that is: smart, through more effective investments in education, research and innovation; sustainable, thanks to a decisive move towards a low-carbon economy; and inclusive, with a strong emphasis on job creation and poverty reduction. Smart growth means strengthening knowledge and innovation as drivers of future growth. This requires promoting innovation and knowledge transfer, making full use of information and communication technologies and ensuring that innovative ideas can be turned into new products and services that create growth, quality jobs and address European and global societal challenges.

In the Knowledge Society the flows of information are increasing exponentially and new, digital content becomes more and more important in the fields of education, science, economy and culture. Because of rapid technological revolution, which transforms the infrastructure of information and communication, the changing information environment is closely and often controversially related to changes in social environment. The rush of the virtual space spurred by the Internet, which overcomes time and geographical barriers, to all areas of life challenges also communication and education. The report „The Future of Jobs“ at the Global Economy Forum at 2016 on demographic, socio-economic and technological dimensions emphasises the paramount importance of the mobile Internet, cloud computing and data processing technologies. In this context the importance of protecting the society's cultural and national identity is increasing not only for the sake of the public creative potential, but also for the national safety. All changes of the key areas of progress – society, economy, education, science and *sustainable management of complexity* – are related to the creation and use of knowledge. What are the Ends in the Digital Age, that technology should serve?

Emerging gaps

In the Knowledge Economy and Knowledge Society, successful strategic management is critically dependent on managing knowledge effectively in socio-cultural business systems. In Strategic Knowledge management there is increasing need to shift focus to the socio-cultural business system, i.e. „ understanding and effectively enabling knowledge generation and utilisation to enhance the dynamic capabilities of particular socio-cultural business systems“.² In reality a gap between the current dynamic capabilities of a communication and education system and what is required for future strategic resilience is indicative of a systematic strategy gap. Dynamic

² Leibold M., Probst G. J. B., Gibbert M., (2007). Strategic Management in the Knowledge Economy: New Approaches and Business Applications. Germany:Wiley. ISBN-10: 3895782572, pp 188.

capabilities required for future strategic resilience indicate what knowledge is required, and when compared with its existing knowledge base. It indicates the knowledge gap for the communication and education system.

Figure 1. Knowledge – Strategy Gap Analysis; Tiwana (2002)³



In 2009, ET 2020 set four common EU objectives to address challenges in education and training systems by 2020:

- Making lifelong learning and mobility a reality;
- Improving the quality and efficiency of education and training;
- Promoting equity, social cohesion, and active citizenship;
- Enhancing creativity and innovation, including entrepreneurship, at all levels of education and training.

Modern communication techniques enable effective interaction between countries and cultures. The Europe 2020 strategy is about delivering growth that is: smart, through more effective investments in education, research and innovation; sustainable, thanks to a decisive move towards a low-carbon economy; and inclusive, with a strong emphasis on job creation and poverty reduction. Smart growth means strengthening knowledge and innovation as drivers of future growth. This requires promoting innovation and knowledge transfer, making full use of information and communication technologies and ensuring that innovative ideas can be turned into new products and services that create growth, quality jobs and address European and global societal challenges.

³ Tiwana, A. (2002), The knowledge management toolkit: Orchestrating IT, Strategy and Knowledge Platforms, NJ: Prentice Hall.

Strategic communication requires a sophisticated method that maps perceptions and influence networks, identifies policy priorities, formulates objectives, develops themes and messages, employs relevant channels, leverages new strategic and tactical dynamics, and monitors success. Sustainable approach will build on in-depth knowledge of other cultures and factors that motivate human behaviour. In general, effective strategic communication bridges the gap between the knowledge and the strategic interests of the Society.

Global Interdisciplinary Challenges

According newest research, achieving the objectives Education for Sustainability implies a different and transformative role for education and requires educators with new set of competencies, such as envisioning, critical, creative, systemic and future thinking, dialogue, collaboration and networking“. Considering that we live in a complex, global world that demands complex answers, our point is to highlight the need to consider the perspective of complexity in education“. ⁴ Indeed, the new emerging reality requires new type of Leadership – real High Flyers. It means, that Sustainable Leadership ability, which will help to manage even digital complexity, can be learned and in many aspects managing of complexity is about human competences development.

Global citizenship education (GCE) should promote global community outcomes and outcomes for individual learners. GCE, as catalyst of the transformative process promotes the use of a wide range of active and participatory learning methods that engage the learner in critical thinking about complex global issues, and in developing skills such as communication, cooperation and conflict resolution these issues.

Figure 2. Principles of GCE pedagogy ⁵

⁴ Garcia M.R, Junyent M., Fonolleda M. (2017), "How to assess professional competencies in Education for Sustainability? An approach from a perspective of complexity", International Journal of Sustainability in Higher Education, doi: 10.1108/IJSHE-03-2016-0055 pp.3

⁵ UNESCO (2014) Global Citizenship Education Preparing learners for the challenges of the twenty-first century. Paris: UNESCO, pp. 22



Source: Source: Adapted from A. Cabezudo, Introduction on Global Citizenship Education Principles. Global Citizenship Education Forum, Bangkok, Thailand, December 2013.

According to the strategic approach, positioned in the Declaration on Education for Sustainable Development (UNESCO 2015), Education for Sustainable Development has the potential to empower learners to transform themselves and the society they live in by developing knowledge, skills, attitudes, competences and values required for addressing global citizenship and local contextual challenges of the present and the future, such as critical and systemic thinking, analytical problem-solving, creativity, working collaboratively and making decisions in the face of uncertainty, and understanding of the interconnectedness of global challenges and responsibilities emanating from such awareness.⁶ Indeed, „Education faces the challenge of overcoming reductionist processes that can perpetuate an unsustainable society and find new ways of thinking, feeling and acting in order to deal with complex reality, targeted at a necessary transformation for a just, equitable and sustainable society. Education for Sustainability should rise to this challenge“.⁷

GCE encourages people to open up to different cultures, think, act and connect more widely in different ways.

⁶ UNESCO (2015), “Declaration on Education for Sustainable Development” pp.1, available at <http://unesdoc.unesco.org/images/0023/002310/231074e.pdf> (accessed 29 May 2017).

⁷ Garcia M.R, Junyent M., Fonolleda M. (2017), "How to assess professional competencies in Education for Sustainability? An approach from a perspective of complexity", International Journal of Sustainability in Higher Education, doi: 10.1108/IJSHE-03-2016-0055 pp.2

Figure 3. How Global citizenship education(GCE) is interpreted in Asia and the Pacific (AP)⁸



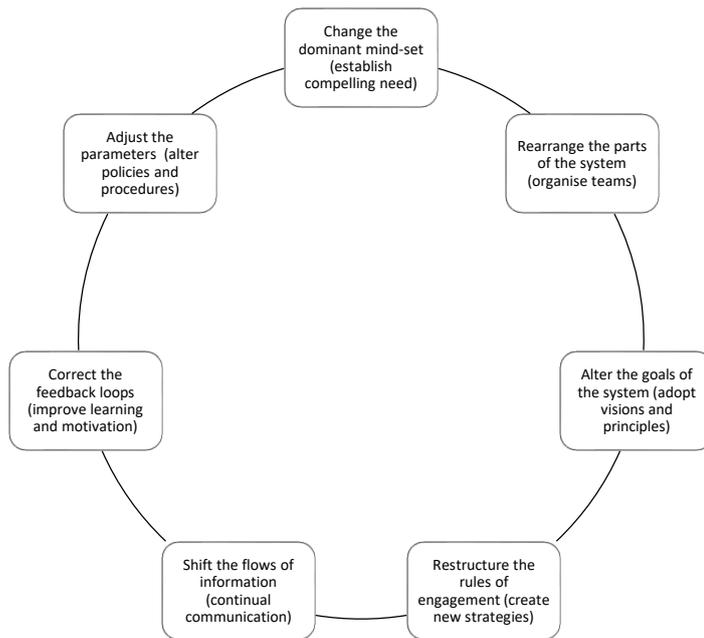
Source: Adapted from U. Chung, Global Citizenship Education in the Asia-Pacific. APCEIU. Presentation at the Technical Consultation on Global Citizenship Education, Seoul, Republic of Korea, September 2013.

Possible solutions

Figure 4. The wheel of change toward sustainability⁹

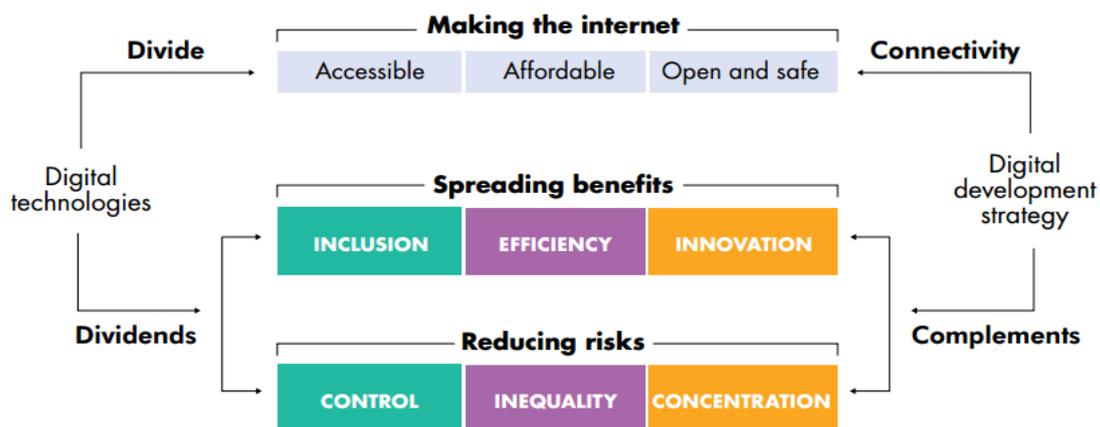
⁸ UNESCO (2014) Global Citizenship Education Preparing learners for the challenges of the twenty-first century. Paris: UNESCO.

⁹ Doppelt B 2003. Leading change towards sustainability: A change-management guide for business, management and civil society. Greenleaf Publishing Ltd, Sheffield.



It is important to change the dominant mindset that created the system through the imperative of achieving sustainability. Because the process of change is circular, organizations can start anywhere on the wheel.

Figure 5. Why digital dividends are not spreading rapidly—and what can be done¹⁰



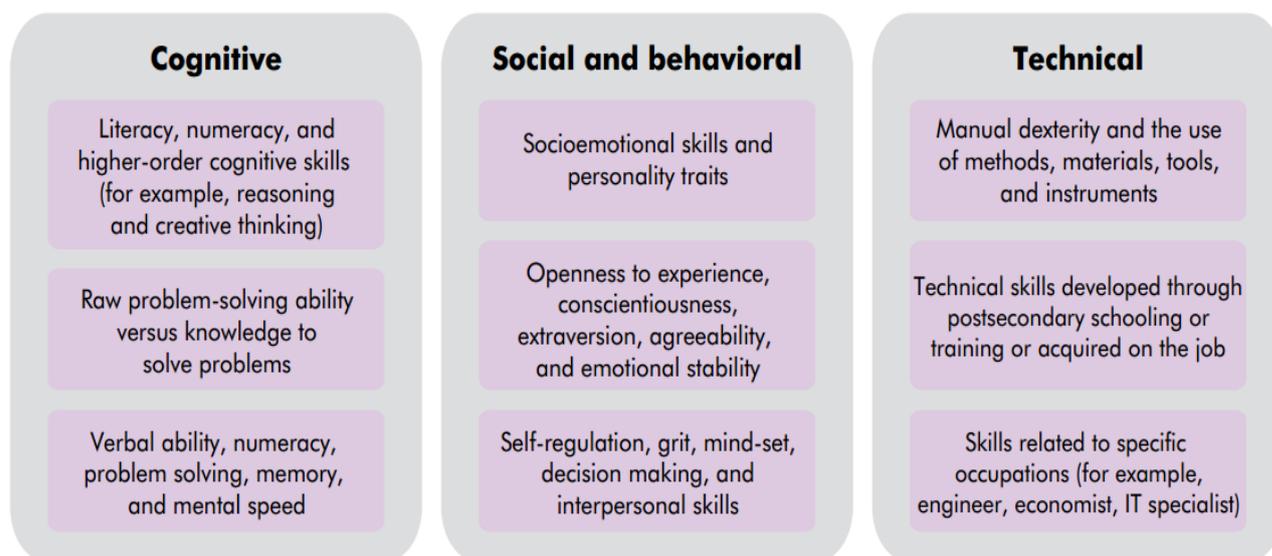
Source: WDR 2016 team.

Digital technologies have spread rapidly in much of the world. Digital dividends – the broader development benefits from using these technologies – have lagged behind. For digital technologies to benefit everyone requires closing the remaining digital divide, especially in internet access. It

¹⁰ World Bank (2016), World Development Report 2016: Digital Dividends, World Bank Washington, DC, <https://doi.org/10.1596/978-1-4648-0671-1>, pp. 4.

comes by adapting worker's skills to the demands of the new economy. To maximize digital dividends requires better understanding and communication of how technology interacts with other factors that are important for sustainable development.

Figure 6. The types of skills needed in a modern economy ¹¹



Source: WDR 2016 team, adapted from Pierre, Sanchez Puerta, and Valerio 2014

As more and more parts of the economy rely heavily on the internet, demand for advanced ICT skills will also grow. But modern labor markets also require creativity, teamwork, problem solving and critical thinking in ever-changing environment – skills that traditional education systems do not teach. In general, most important skills for modern economy are: cognitive, social and behavioral, technical.

Conclusions

- Digital technologies are transforming the worlds of business, work, and service delivery. These advances are making the leading parts of the economy and society more productive development Strategic challenges: how to create an environment

¹¹ World Bank (2016), World Development Report 2016: Digital Dividends, World Bank Washington, DC, <https://doi.org/10.1596/978-1-4648-0671-1>, pp. 33

for firms to thrive, how to build effective education and training systems, and how to make service providers more responsive to citizens.

- The World Development Report 2016 shows that while the digital revolution has forged ahead, its “analog complements”—the regulations that promote entry and competition, the skills that enable workers to access and then leverage the new economy, and the institutions that are accountable to citizens—have not kept pace.
- Countries should formulate digital development strategies that are much broader than current information and communication technology (ICT) strategies. For an information industry to continue to grow globally, however, it requires that national information, communication and education policies evolve into stable international policy framework.

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