

# ICT as a Capacity building tool in UNIDEB Institute of Educational Studies and Cultural Management

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Several international and Hungarian scientific researches are examining the effects of the computers and the Internet on social structures, economy or even on the individual and in that case: education and higher education.

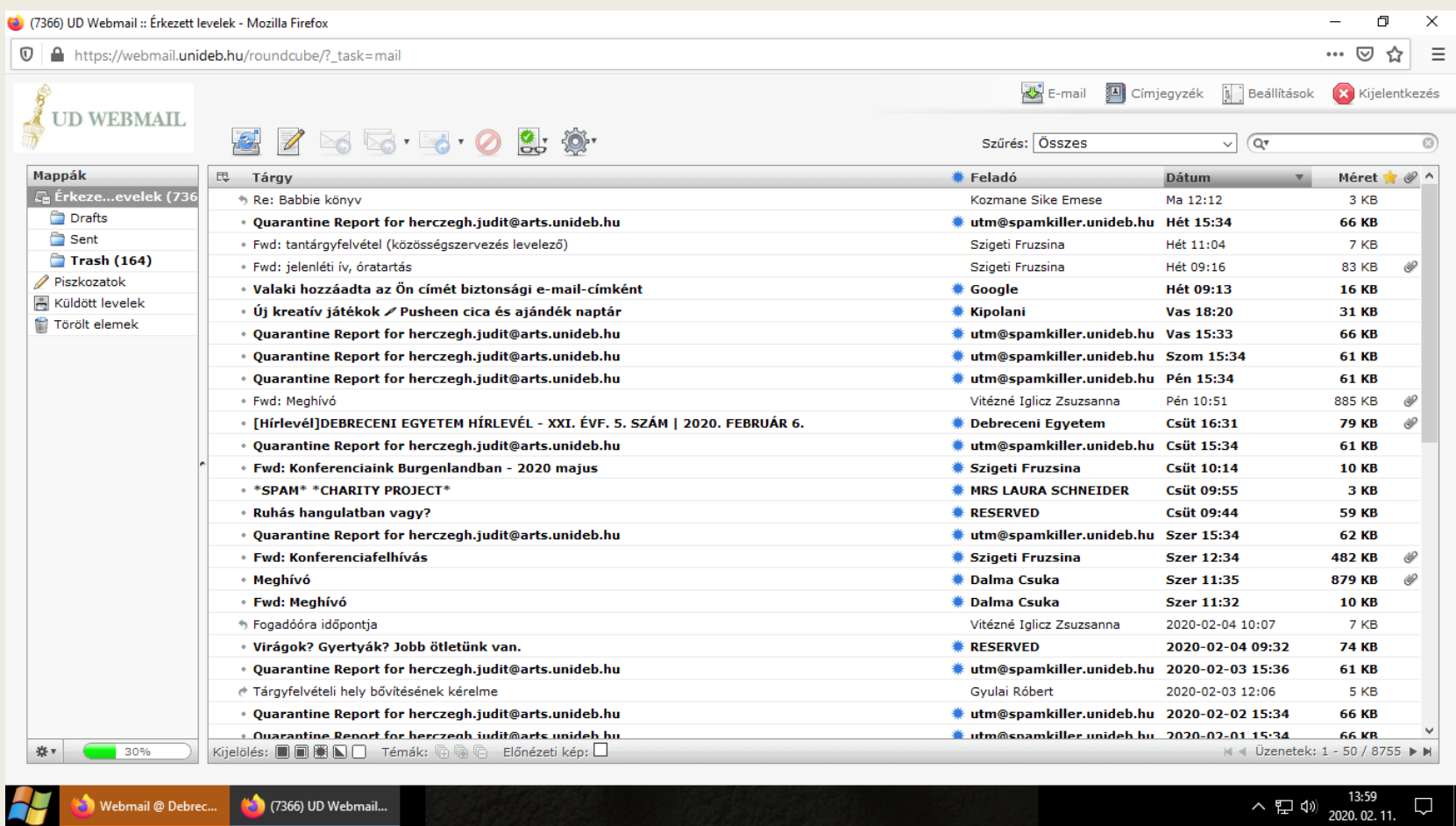
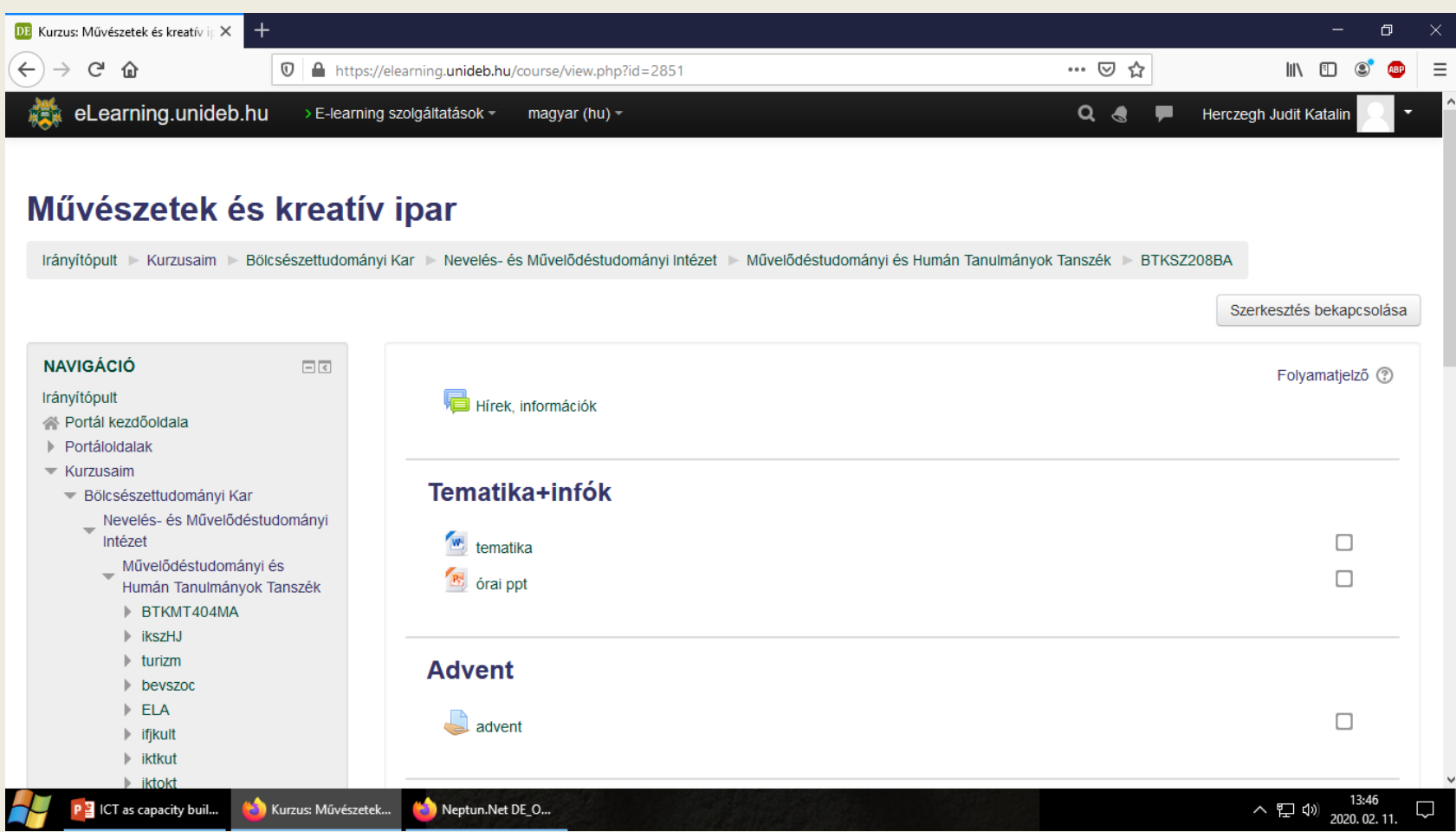
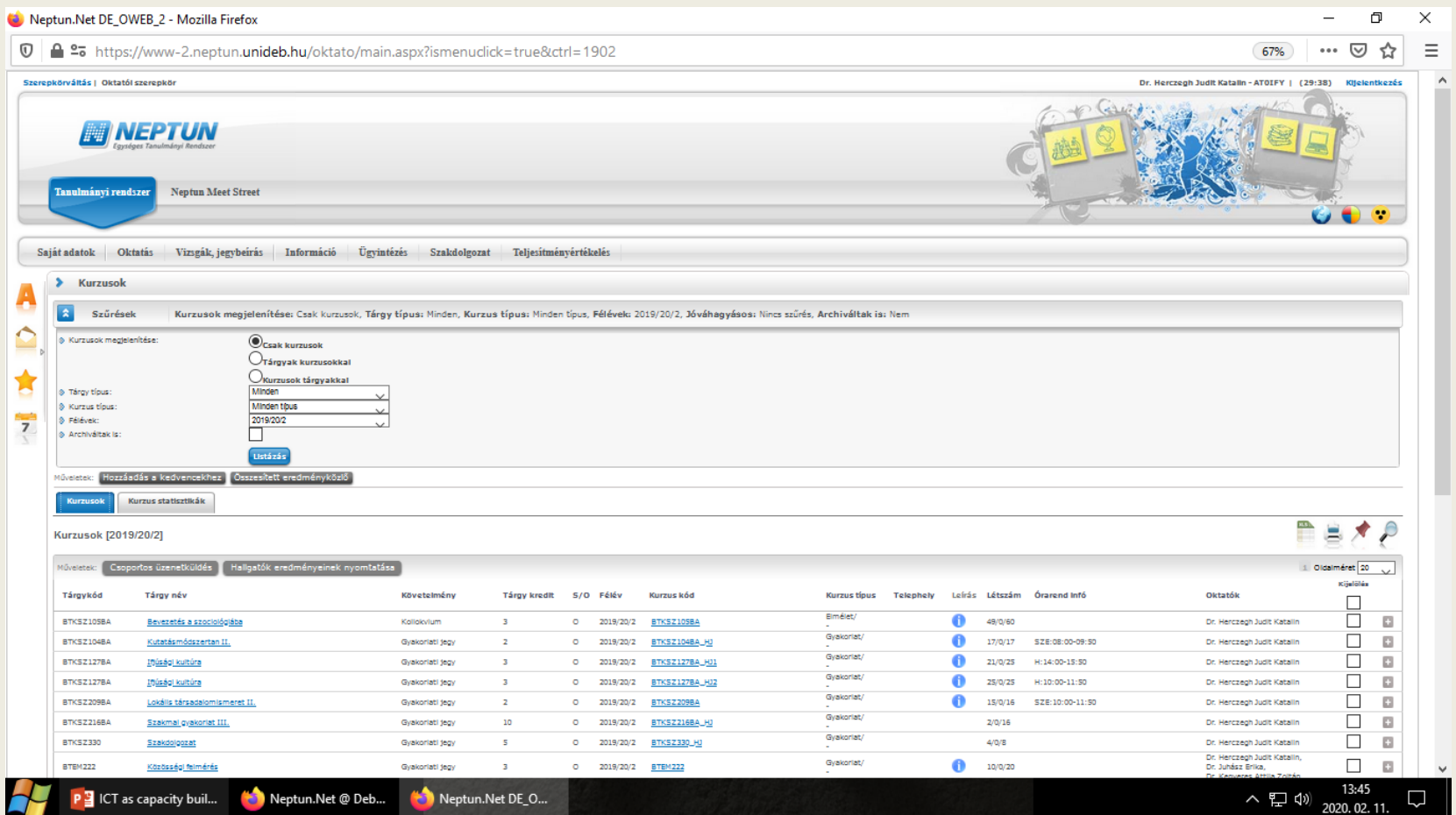
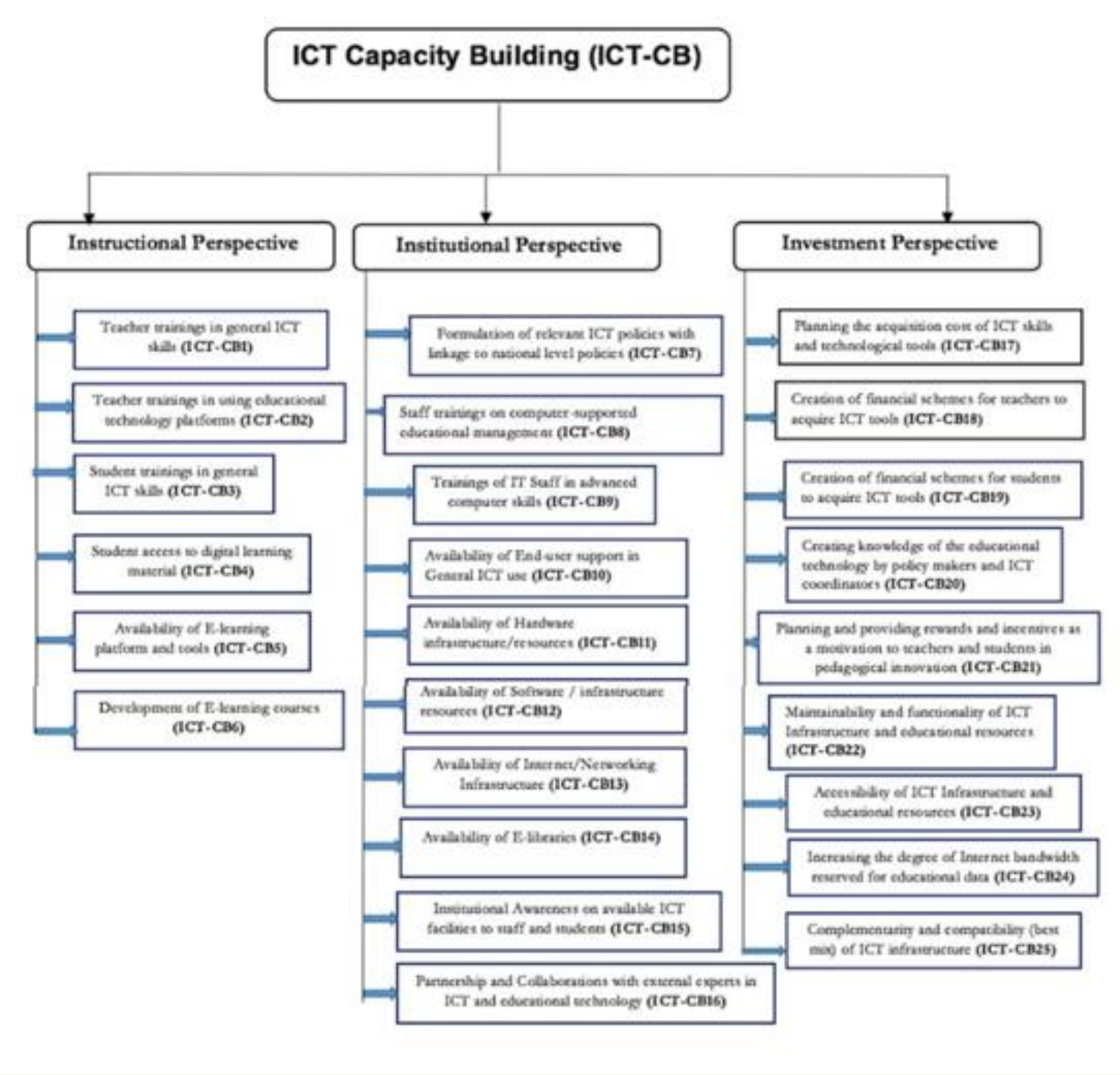
Information and Communication Technology(ICT) is a vehicle to enhance the quality of the education. As the world is moving rapidly into digital media and information, the role of ICT in education is becoming more important in the 21st century. ICT helps to share availability of best practices and best course material in education. ICT based education causes changes in the educational objectives in the conception of the teaching and learning process. ICT allows the academic Institutions to reach disadvantaged groups and new international educational markets. Within the past decade, the new ICT tools have fundamentally produced significant transformations in industry, agriculture, medicine, business, engineering and other fields. The new teaching methodologies involve the use of audiovisual, computer and telematic tools on the part of lecturers (Toro-Joshi 2012).

With the development of technology in the 21st Century, education systems attempt to integrate technology-based tools to improve experiences in pedagogy and administration (Byungura et.al. 2016).

The introduction of computers in everyday life has dramatically affected all sectors of activity including the education systems. Since the introduction of the Internet and World Wide Web, Governments and institutions of higher learning have invested significantly in projects to build Information and Communication Technology (ICT) capacities with the aim of promoting technology integration in education (Jowi, 2009; Romeo, Lloyd, & Downes, 2012).

Basically, ICT is no longer used only for educational administration but also in the whole pedagogical process (Byungura et.al. 2016).

It is becoming increasingly prominent to build human and ICT infrastructure capacities at universities from policy to implementation level. Using a critical discourse analysis, this study investigates the articulation of ICT capacity building strategies from both national and institutional ICT policies (Byungura et.al. 2016).

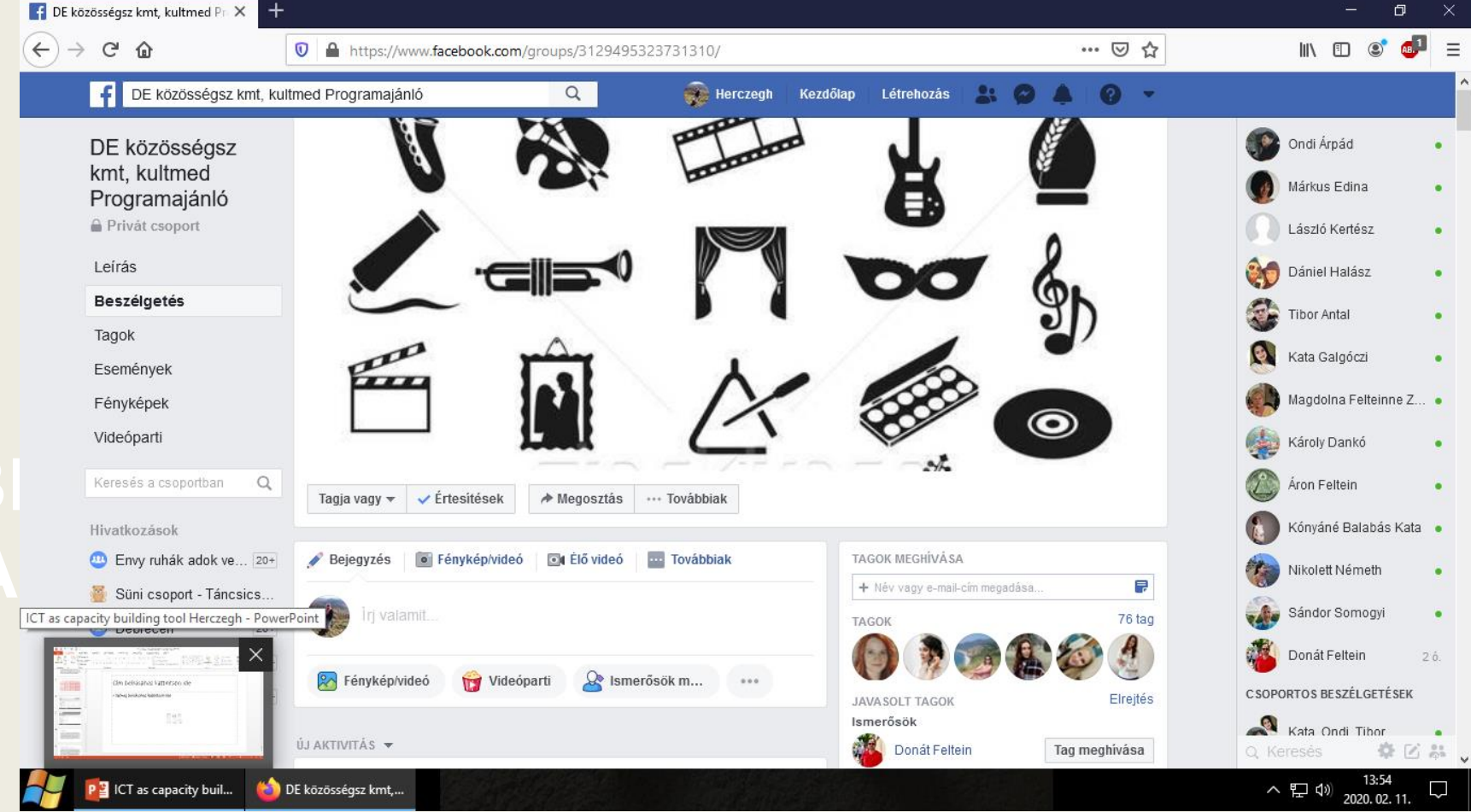
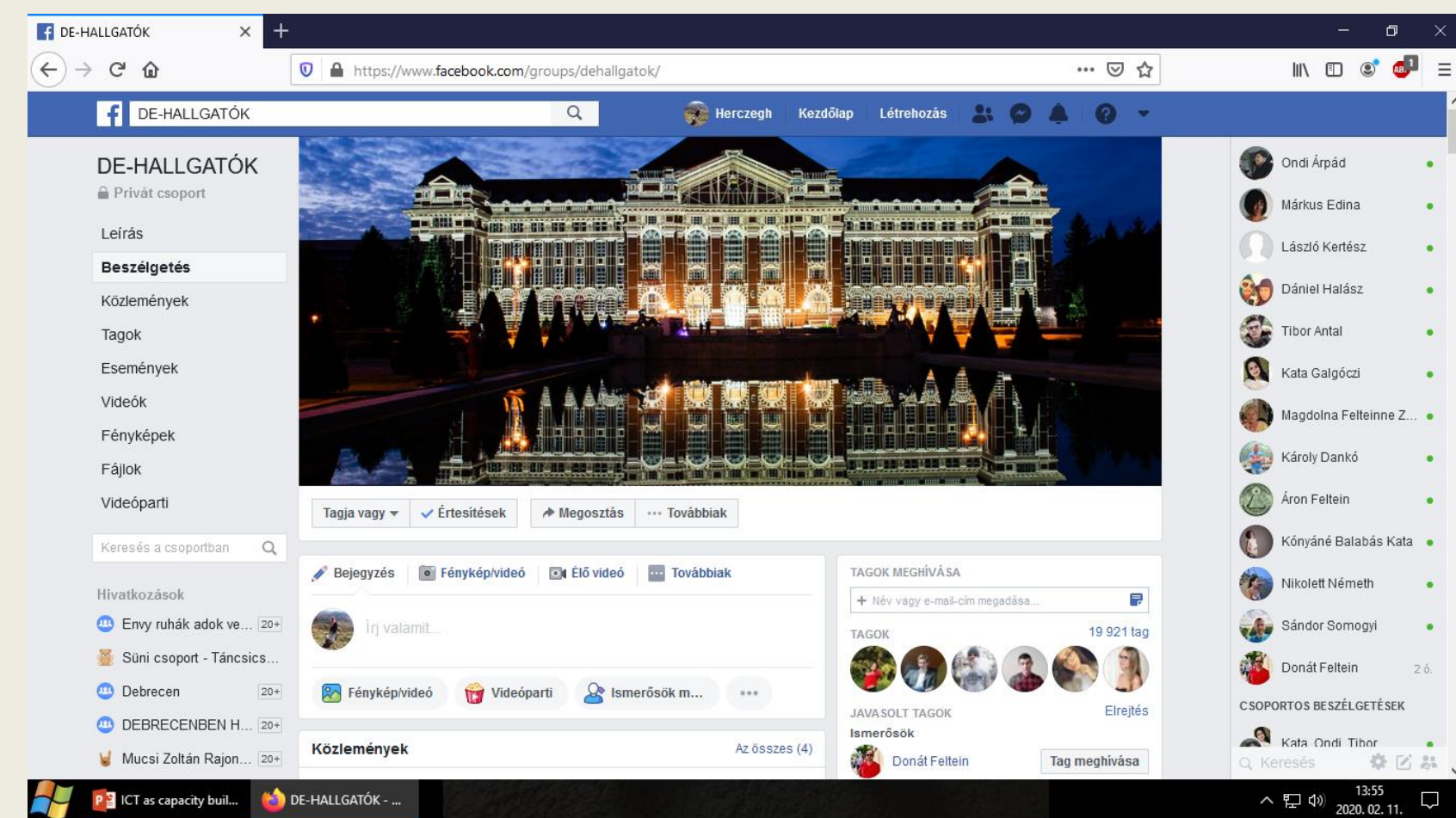


To maximize the effect of ICT on knowledge and growth it is required to create maximum connectivity, adequate network capacity and minimum required infrastructure at each node.

Further, the diffusion of this process depends on the capacity of the human element to absorb and exploit the benefits of the technology.

The policy framework and institutional mechanism coupled with the capacity to absorb and invest costs associated with both technology and human capacity building influences the role of ICT to support knowledge and growth.

Sustained educational capacity building through ICT means in today's advanced globalization process and communication infrastructure to integrate sustained “local” capacity into a “global” educational environment. Key components of “sustainability” within this globalized framework are not only “access” to global communication flows, but the creation of “active nodes”: communication hubs as integral elements of global educational networks.



The ICT Policy in higher education aims at preparing youth to participate creatively in the establishment, sustenance and growth of a knowledge society leading to all round socio- economic development of the nation and global competitiveness.

The introduction of ICT in the higher education has profound implications for the whole education process ranging from investment to the use of technologies in dealing with key issues of access, equity, management, efficiency, pedagogy and quality.

1)Student-centered Learning:ICT provides a technology that has the capacity to promote and encourage the transformation of education from a teacher directed enterprise towards student-centered models. As more and more students use computers as information sources and cognitive tools, the influence of the technology will increase to support their studies.

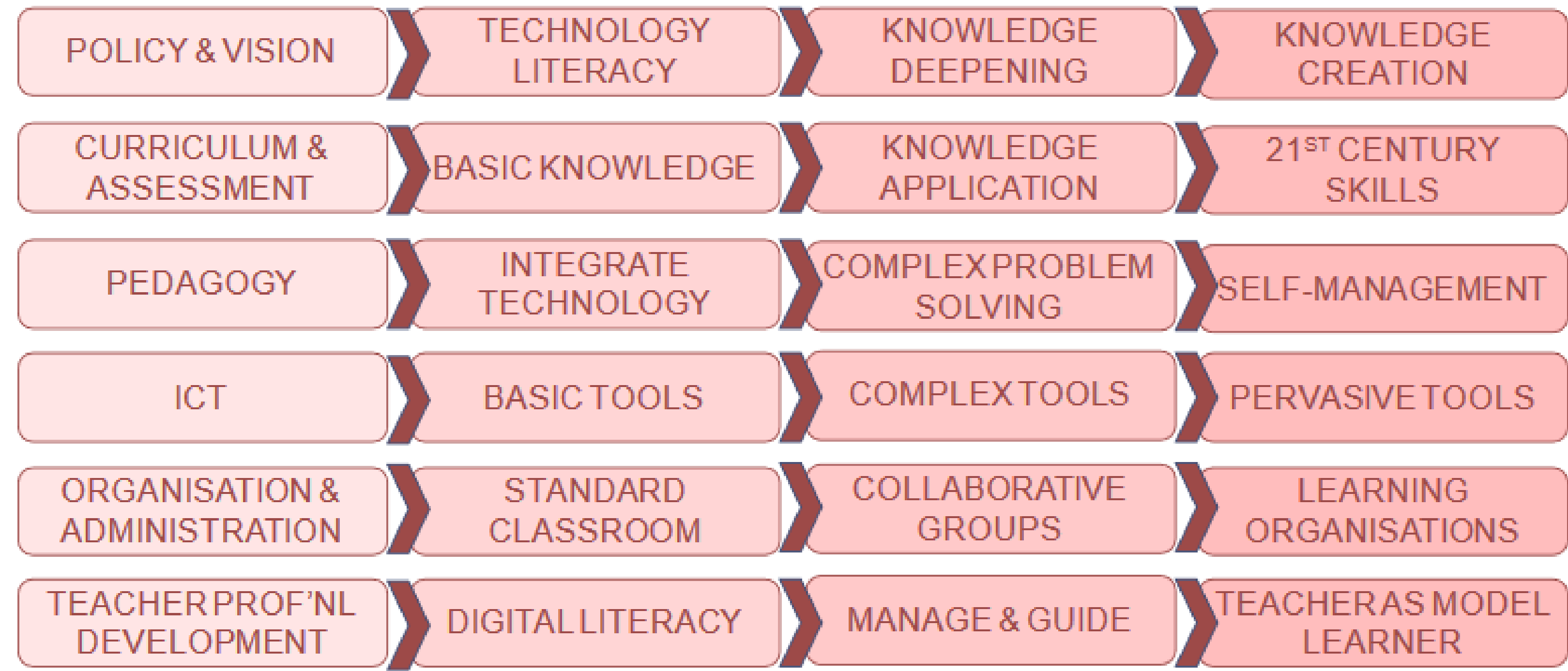
2)Supporting Knowledge Construction: Learning approaches using contemporary ICTs provide many opportunities for constructivist learning and support for resource-based, student centered settings by enabling learning to be related to context and to practice.

3)Anyplace Learning:With the help ofICT,educational institutions can offer programs at a distance mode. Today many students can use this facility through technology-facilitated learning settings.

4)Anytime Learning: Technology-facilitated educational programs remove the geographical barriers. Students are able to undertake education anywhere, anytime and at any place. This flexibility has provided learning opportunities for many more learners who previously were constrained by other commitments.

5)Information Literacy: The growing use of ICT as tools of every day life have seen the pool of generic skills expanded in recent years to include information literacy. It is highly probable that due to the future developments and growth in technology, it will help further for information literacy (Toro-Joshi 2012).

## UNESCO ICT Competency Standards Framework for Teachers



Source: UNESCO 2008

Jean Claude, Byungura et.al. (2016): ICT CAPACITY BUILDING: A CRITICAL DISCOURSE ANALYSIS OF RWANDAN POLICIES FROM HIGHER EDUCATION PERSPECTIVE. In European Journal of Open, Distance and e-LearningVol. 19 / No. 2 – 2016. 45-62.p. Jowi, J. O. (2009). Internationalization of higher education in Africa: Developments, emerging trends, issues and policy implications. Higher Education Policy, 22(3), 263-281.p.

Romeo, G., Lloyd, M., & Downes, T. (2012). Teaching Teachers for the Future (TTF): Building the ICT in education capacity of the next generation of teachers in Australia. Australasian Journal of Educational Technology, 28(6), 949-964.p.

Capacity building for ICT in education (2010). In https://www.infodev.org/infodev-files/resource/InfodevDocuments\_888.pdf

Suela, Hansen (ed.)(2018): Capacity Building in a Changing ICT Environment. In https://www.itu.int/dms\_pub/itu-d/opb/phcb/D-PHCB-CAP\_BLD.01-2018-PDF-E.pdf

Judit, Herczegh (2013): The use of the Internet and electronic communication among the teacher-trainees at the University of Debrecen . In https://dea.lib.unideb.hu/dea/bitstream/handle/2437/173107/Herczegh\_Judit\_Tezisfuzet\_angolul-t.pdf?sequence=6&isAllowed=y

Ulka, Toro – Millind, Joshi (2012): ICT in Higher Education: Review of Literature from the Period 2004-2011. International Journal of Innovation, Management and Technology, Vol. 3, No. 1, February 2012. https://pdfs.semanticscholar.org/a590/0abb6474838e5028de16a68b22fcb36fe9bb.pdf