

## **ITU-Academia Partnership Meeting: Developing Skills for the Digital Era**

**Budapest, 19-21 September 2017**

### **DRAFT OUTCOMES, CONCLUSIONS AND RECOMMENDATIONS**

Delegates to the Partnership meeting between ITU and Academia met from 19-21 September 2017 in Budapest, Hungary, to discuss capacity building challenges and priorities related to the rapid changes in information and communication technologies (ICTs), under the theme “Developing skills for the digital era”.

Delegates held thought provoking discussions and exchanged ideas over a wide range of topics, covering: the kind of skills required in the digital era; the role of universities in building capacity for the digital future; the role of universities in driving innovation; new ways of teaching and learning in the digital era; and partnerships for capacity building between ITU, universities, industry, Centers of Excellence and other training providers. In particular, delegates discussed ways by which universities could collaborate with ITU and other partners to build human capacity and maximize citizen participation in the digital economy. This short report is a summary of the deliberations over the past three days, highlighting the main outcomes and recommendations of the event. A draft of the final report of the meeting will be available on the ITU website by 29 September 2017. Delegates are kindly requested to go through this report, and submit their comments by 6 October 2017 after which the final report will be published.

The following are the highlights of the outcomes and recommendations drawn from the event.

1. The digital transformation and the related data revolution is changing profoundly our societies and economies. The future digital ecosystem is characterized by emerging technological changes related to Internet of

Things (IoT), Artificial Intelligence (AI), machine learning and big data analytics, among others.

2. The evolving digital ecosystem requires new sets of skills, thus necessitating people to be trained and retrained in order to be effective in their undertakings. Skills required include not only hard skills but increasingly also soft skills. Universities need to be ready to meet the skills challenges of the digital economy and adapt their academic programmes and curricula accordingly.
3. The future of learning will be driven by machine learning and artificial intelligence, and will largely be a confluence of technology, strategy and pedagogy. Methods of building these skills have to evolve to align with the connected world.
4. In the digitally connected world, matters of Internet governance will assume an increasingly important role. This is due to the myriad of issues affecting individuals, organizations, and nations, such as cybersecurity, privacy, data protection, among others. Academic institutions need to embrace Internet governance as a key area of academic discipline. Given the multidisciplinary nature of Internet governance, an interdisciplinary academic approach involving different faculties is required. ITU should strengthen its collaboration with universities and other Internet governance stakeholders in building capacity in this important discipline.
5. Different approaches to teaching and learning in the digital era were shared during the meeting. These approaches and methodologies display a new paradigm in teaching and learning compared to the traditional way that most universities are accustomed to. Most approaches focus on integrating knowledge and skills with design thinking, and creating a learner-centered learning environment. The learning models in the digital era emphasized competencies such as problem solving and innovation. Effective learning needs to identify different categories of learners, and to design learning that suits each category.
6. Delegates acknowledged that there was still a challenge with respect to assessing the impact of a learning intervention, and more work needed to be done in this area.
7. Delegates recognized that universities need to play a greater role in driving innovation and entrepreneurship for the digital era. Fostering innovation and

entrepreneurship has to be based on the recognition that these developments are shifting more towards the consumer as the end user rather than the manufacturers.

8. Research work from universities needs to have greater industrial and practical relevance rather than symbols of academic accomplishments.
9. The meeting noted that research that has the greatest impact is that which is undertaken in collaboration with other stakeholders.
10. Delegates urged universities to have a greater understanding of the needs of industry, and work towards producing graduates that meet these needs. For this to happen, greater understanding and collaboration between industry and universities is encouraged. One way of achieving this is for Universities to deliver industry run courses. Universities should allow industry to contribute to the design and development of their curricula.
11. Companies in the digital era will link learning to performance. This linkage will demand that learning providers such as universities produce graduates that are ready for market. They need to align their training programmes, learning methodologies and syllabi to the needs of the digital market.
12. There is need to develop national integrated frameworks for the collaboration of the training providers and academic institutions with industry. Such a framework should take into account the balance of supply and demand for skills across various disciplines and reduce cases of skills mismatch.
13. ITU is uniquely placed to develop a content repository that could become a central node for those who need support could come to find information on where they can access assistance.
14. The meeting noted that ITU Centres of Excellence were not in competition with Universities but the two are complimentary to each other. Centres of Excellence can benefit greatly from the application of academic standards to the delivery of ITU Academy eLearning courses.
15. Centers of Excellence were urged to consider the typical career path for their graduates and plan training that graduates can use for further training and career progression
16. Delegates recognized the scope for cross sectoral collaboration in capacity building in ICT involving academic institutions, private sector, government, and ITU. The scope for collaboration in capacity building is wide, ranging

from joint development of training materials, delivery of training, provision of subject matter experts to act as peer reviewers of training materials, among others.

17. The meeting encouraged greater collaboration between Universities and ITU and its related ICT training providers, such as the Centres of Excellence (CoEs). Such collaboration can be mutually beneficial to both parties.
18. ITU has an important role in capacity building as it is seen as a neutral, honest broker. Academia can partner with ITU without the fear or risk of capture that is normally associated with special interests of corporate organizations.

Based on the deliberations of the meeting, delegates discussed how ITU and academic institutions could work together to strengthen capacities for the digital future. From these discussions, the following key proposals emerged:

- a. ITU and academic institutions can cooperate in the joint development of training materials in areas of priority to ITU membership and in which the academic institution has unique competencies.
- b. ITU and academic institutions can cooperate in the delivery of training programmes and awarding of certificates and degrees in areas of priority to the ITU membership and in which the academic institution has unique competencies.
- c. ITU should consider establishing CoEs that will focus on emerging issues such as Big Data, Internet of Things, and Artificial Intelligence
- d. Academics can contribute relevant research papers and articles to the annual online ITU publication “Capacity Building in a Changing ICT Environment”.
- e. ITU shall work to facilitate partnerships and knowledge networks between universities and industry, and between universities and other training providers such as Centres of Excellence, based on shared interests. Events such as this one should be organized regularly to this effect.
- f. The Global ICT Capacity Building Symposium (CBS) 2018 will provide a concrete opportunity for bringing together different partners to showcase and discuss collaboration in the field of ICT skills development.

- g. Universities should consider becoming ITU Academia members which will provide them with increased access to ITU resources, networks and partnership opportunities as well as the global ITU membership.