



International Telecommunication Union (ITU)

Contribution to the 2015 United Nations Economic and Social Council (ECOSOC) Integration Segment

ITU INPUTS

- One of the causes of youth unemployment is a skills mismatch between what the market is seeking and what institutions of learning are providing. Even in the face of global youth unemployment crisis, jobs requiring STEM skills, and more specifically, **jobs in the ICT sector, are going unfilled** because employers claim they cannot find employees with the right set of skills.
- The European Commission estimates that there will be a **skills shortfall of some 900,000 ICT jobs in Europe by 2015**. In the US, the research conducted by the National Center for Women and Information Technology at University of Colorado, Boulder, shows that based on current graduation rates in the US, there will be 1.2 million IT jobs by 2022, but only 39% of these will be filled by US computing undergraduates - **leaving a skills shortfall of 732,000 jobs**. According to South Africa's Nelson Mandela Metropolitan University (NMMU), in South Africa alone, the skills shortage of high-end ICT professionals is between 20,000 and 70,000. Few developing countries have released skills shortfall estimates, but given the ICT growth rates in these countries, we can predict these trends are global.
- There are a growing number of jobs and business opportunities for youth that possess ICT skills. However, despite the growing demand for digital skills, many youth are not being taught these skills in school.
- In response to these challenges the ITU published the "Digital Opportunities: Innovative ICT solutions for Youth Employment" report highlighting that ICTs should be included in youth employment and entrepreneurship strategies for several reasons.
 - **ICT has infiltrated virtually every market segment, more jobs and businesses require digital skills than ever before. ICTs are transforming all sectors including old ones** such as farming, manufacturing and the health sector. The European Commission estimated that **90% of all jobs will require technology skills across all sectors**.
 - **ICTs are creating new market sectors** that didn't exist even a few years ago, such as **microwork, gaming and the mobile apps economy**. In addition, they are fueling new and **innovative ways young digital entrepreneurs work and do business**. Tech hubs, app labs and other business incubation spaces provide solutions to young digital entrepreneurs, offering Internet connectivity, support structures (including shared office space), mentorship and collaboration.
 - **ICTs are also changing the way we learn**. There is an explosion of online learning opportunities that facilitate the ability of youth to learn new technical, business and soft skills. Furthermore, a growing array of **ICT-enabled resources** is available for youth seeking jobs or launching their own businesses

- **In order to promote youth employment, it is therefore essential that youth obtain digital skills.** In any comprehensive **global or national youth employment and entrepreneurship strategy, policy makers and UN agencies need to recognize the demand for digital jobs and the supply of digital skills training and more advanced STEM training as well as digital employment / entrepreneurship resources.**

- Based on the Report, the **concrete recommendations for policy makers designing youth employment strategies are to:**
 - Include digital skills in school curriculum and adapt curriculum to incorporate collaborative ways of acquiring ICT skills, making use of free materials available online;
 - Support skills development for out-of-school youth in telecentres, libraries and community technology centres and train staff to serve as curators of free online resources;
 - Recognize alternative certification models, such as badges, to demonstrate skills mastery to promote employment among youth who are out-of-school;
 - Promote and support collaborative innovation spaces such as co-working spaces, tech hub and hacker/maker spaces. Innovation spaces are both business incubators and skills development centers;
 - Fund app contests and competitions both to help fund young entrepreneurs and develop skills;
 - Stimulate production of local content such as text-to-speech engines in local languages;
 - Leverage government procurement of products and services to support youth entrepreneurs
 - Continuously track new initiatives, make mid-course corrections and identify and incorporate emerging opportunities

- ITU extends an invitation to also recognize digital opportunities for addressing youth unemployment and to include the above elements in the global initiative on youth employment.