DIGITAL SKILLS
CAMPAIGN

1 Digital Skills

Preparing young people for the future of work in the digital era

International Labour Organization

1 Decent Jobs for Youth – the global initiative for action

1.1 Objective

Decent Jobs for Youth is the global initiative to scale up action and impact on youth employment under the 2030 Agenda for Sustainable Development. Launched in 2016 with the endorsement of the executive heads of the United Nations, Decent Jobs for Youth is a unique platform for partners to address fragmentation and catalyse effective, innovative and evidence-based action at country and regional levels.

1.2 Partners

Decent Jobs for Youth brings together the resources and expertise of multiple partners to create linkages that maximize the effectiveness of youth employment investments. The initiative recognizes the important roles of governments, social partners, the UN System, youth and civil society, the private sector, regional institutions, parliamentarians, foundations, academia and the media in promoting decent jobs for youth. The partners of Decent Jobs for Youth subscribe to 15 guiding principles, which steer their actions and investments on youth employment.

1.3 Strategy

Building a strategic alliance to advocate, ensure policy convergence, stimulate innovative thinking and mobilize resources

Scaling up evidence-based action and impact across eight thematic priorities in line with the 2030 Agenda for Sustainable Development

Sharing and applying knowledge by capturing, analysing and sharing best practices, highlighting innovative approaches and facilitating learning

Mobilizing resources by securing high-level commitments from national, regional and international actors

1.4 Priorities for action

Eight thematic priorities to make a difference in the lives of young women and men – and in our world. Thematic plans identify areas for enhanced action and impact on decent jobs.

Green jobs for youth

Digital skills for youth

Quality apprenticeships

Youth in fragile situations

Youth transitioning to the formal economy

Youth in the rural economy

Youth entrepreneurship and self-employment

Young workers in hazardous occupations

1.5 Digital skills for youth

1.5.1 Approach

The Digital Skills for Youth thematic priority focuses on two mutually reinforcing pathways:

1. A global campaign[1] to mobilize public and private stakeholders to equip young people with employment-related digital skills training. The "Digital Skills Campaign" – as part of the Global Initiative on Decent Jobs for Youth – seeks to equip young women and men with the digital skills needed for the jobs of today and tomorrow. It incentivizes a wide range of partners to join Decent Jobs for Youth for coordinated action at the country and regional level. It promotes the implementation of measures to develop digital skills, including basic, intermediate and advanced digital skills[2] training for young people (whether in or out of school), workplace learning (including apprenticeships in the ICT sector and making digital skills a core part of national training programmes for non-ICT jobs), coding bootcamps and other advanced digital skills training programmes, digital skills curriculum development and teacher/trainer training.

2. Knowledge resources to provide evidence and data on digital skills development in the framework of lifelong learning, and to support policy makers in the development of national digital skills strategies and policies. Further research is needed to improve and understand the effectiveness of digital skills interventions. Data are crucial to understand the employment potential of industries and sectors as well as identify digital skills requirements. This pathway promotes the development of knowledge resources including toolkits to facilitate classification of digital skills into standardized categories, to assist countries in the development of digital skills strategies, and to provide guidelines for digital skills assessment at the national level.

1.5.2 Action areas

Equipping young people, both those in and out of school, with digital skills will prepare them for unprecedented job opportunities in the digital era. This will lead to innovation, higher productivity and competitiveness, as well as expanding markets, access to work and entrepreneurship opportunities. Decent Jobs for Youth, through the Digital Skills Campaign, aims to:

1. Raise awareness around the importance of digital skills training for young people
2. Engage partners to train **25 million young people** around the world with digital skills by 2030;
3. Consolidate data on the **number of young people trained in digital skills** every year as a contribution to the achievement of SDG 4.4
4. Promote policies and programmes that support digital skills development for youth

1 This campaign was launched at the World Summit on the Information Society Forum hosted by ITU in June 2017: http://news.itu.int/digital-skills-itu-and-ilo-launch-global-campaign-to-train-5-million-youths/.
2 ITU Digital Skills Toolkit - https://www.itu.int/en/ITU-D/Digital-Inclusion/Documents/ITU%20Digital%20Skills%20Toolkit.pdf

2 Why action is needed

Due to technological advancements and automation, the demand for digital skills has been growing at an unprecedented rate.[3] Working and learning are no longer the same. Collaboration takes place online, not in person. But underlying all these many changes is one constant: digital connectivity has become imperative. COVID-19 has served as a wakeup call to the global community to renew efforts to connect the people still offline as a matter of the utmost urgency. But as we know, access to technology is only one of the essentials. Simply having digital tools is not enough. We also need to continually provide people with skills and knowledge resources, to enable them fully and meaningfully leverage the transformational power of these digital tools.

Digital skills are increasingly required in workplaces around the world. In developing countries, on average one-third of urban workers use digital technologies at work,[4] while in many developed countries, digital skills permeate work environments to the extent that they have become almost necessary for employment. Around 90% of jobs in the European Union (EU) require at least some level of digital skills.[5]

There will be a demand for more people with advanced digital skills in the coming years, with some economies predicting a talent gap for workers with advanced digital skills and others ranking ICT specialists among their fastest-growing jobs. By 2030, technical skills requirements for workers in China may increase by 51% according to a recent McKinsey report,[6] while 54% of employees in the EU will require significant re-/upskilling in the area of ICTs by 2022 [7]. The United States Bureau of Labor Statistics (BLS) states that employment in computer and information technology occupations is projected to grow by 11% from 2019-2029 - much faster than the average for all occupations. [8] Since some of these jobs could be done remotely, they promise job opportunities for young people around the world. In addition, there are likely to be many more openings globally as more countries move towards the digital transition.

Digital skills are linked to higher earning potential. On average, ICT specialists earn higher incomes. In Canada, ICT workers earned 49.4 % more than the economy-wide average, while in China salaries in the ICT sector are significantly higher than in other sectors[9].

While young people are often considered "digital natives", the majority of them do not actually possess sufficient job-relevant digital skills to fill vacancies. This includes intermediate and advanced skills required by many job profiles and more basic digital skills needed for most work-related tasks today. Young people also acquire some of their digital skills informally. These skills may not be recognized by employers.

3 https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_737648.pdf
4 World Bank Group (2016). World Development Report 2016: Digital Dividends. Chapter 2: Expanding opportunities, http://documents.worldbank.org/curated/en/896971468194972881/310436360_20160263021240/additional/102725-PUB-Replacement-PUBLIC.pdf.
5 European Commission (2020). European Digital Skills and Jobs Core Service Platform: one-stop shop for digital skills https://digital-strategy.ec.europa.eu/en/funding/european-digital-skills-and-jobs-core-service-platform-one-stop-shop-digital-skills ICT for work: Digital skills in the workplace, https://ec.europa.eu/digital-single-market/en/news/ict-work-digital-skills-workplace and https://ec.europa.eu/digital-single-market/en/news/new-report-shows-digital-skills-are-required-all-types-jobs.
6 McKinsey (2021). Reskilling China: Transforming the world's largest workforce into lifelong learners https://www.mckinsey.com/featured-insights/china/reskilling-china-transforming-the-worlds-largest-workforce-into-lifelong-learners#
7 European Commission (2019). Skills for industry strategy 2030 https://ec.europa.eu/growth/content/skills-industry-strategy-2030_en
8 United States Bureau of Labor Statistics (2020), https://www.bls.gov/ooh/computer-and-information-technology/home.htm.
9 ILO (2021). Skills shortages and labour migration in the field of information and communication technology in Canada, China, Germany and Singapore https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_755663.pdf

According to a recent finding by UNICEF, based on a study of 8 countries across sub-Saharan Africa, up to 20% of adolescent boys between the age of 15-18 are equipped with ICT skills and even less so for girls, particularly in Togo and Sierra Leone, where girls with ICT skills are estimated to account for around 2 and 1 %, respectively.[10]

Furthermore, the overall lack of skills, in particular skills in using accessible ICTs such as accessible websites, online content and mobile apps, further exacerbates the employment challenges facing young persons with disabilities. In the EU, young persons with disabilities are less likely to possess digital skills. In fact, 5% of the people in the EU do not use the Internet due to some form of disability.[11] In addition, since there are a growing number of persons with disabilities who require accessible ICTs, new job opportunities are also expected for accessible ICT developers.

Governments, the private sector, academia, civil society and other key stakeholders need to ensure that young people are provided with the digital skills necessary to benefit from employment and entrepreneurship opportunities. Training young people in advanced ICT skills demanded by employers promises to result in positive labour market outcomes and can boost innovation and trigger entrepreneurship opportunities for young people. Mobile application development and emerging areas such as the Internet of Things (IoT), blockchain technologies and big data management are expected to create new jobs. These areas require skills such as hardware engineering, circuit design, machine learning, big data analysis, cryptography and multiple coding languages. To ensure that young people can harness these employment opportunities, young women and men need to be equipped with digital skills.

Digital skills are required across different sectors and at different levels. The ITU Digital Skills Toolkit classifies these skills as follows:

- Basic skills: Basic digital skills enable us to function at a minimum level in society. They are foundational skills for performing basic tasks, and there is growing consensus that basic digital functioning corresponds to a foundational literacy, taking its place alongside traditional literacy and numeracy. Basic skills cover hardware (for example using a keyboard and operating touch-screen technology), software (for example word processing, managing files on laptops, managing privacy settings on mobile phones), and basic online operations (for example email, search, or completing an online form).
- Intermediate skills: Intermediate skills enable us to use digital technologies in even more meaningful and beneficial ways, including the ability to critically evaluate technology or create content. These are effectively job-ready skills since they encompass those skills needed to perform work-related functions such as desktop publishing, digital graphic design and digital marketing. For the most part, these skills are generic, meaning their mastery prepares individuals for a wide range of digital tasks needed to participate as engaged citizens and productive workers. However, such skills are not set in stone. Indeed, one of the characteristics of intermediate skills in particular is that they expand to account for changes in technology. For instance, data skills feature more prominently as the data revolution gains further momentum, generating demand for skills needed to produce, analyse, interpret, and visualize large amounts of data.
- Advanced skills: Advanced skills are those needed by specialists in ICT professions such as computer programming and network management. These include artificial intelligence (AI), big data, coding, cybersecurity, Internet of Things (IoT), and mobile app development.

10 UNICEF (2020). COVID-19 and education: The digital gender divide among adolescents in sub-Saharan Africa https://blogs.unicef.org/evidence-for-action/covid-19-and-education-the-digital-gender-divide-among-adolescents-in-sub-saharan-africa/

11 European Commission (2019), Brochure https://digital-strategy.ec.europa.eu/en/library/digital-inclusion-and-web-accessibility-brochure.

2.1 What are approaches towards digital skills development?

2.1.1 Facilitating evidence-based policies and digital skills development interventions at national level.

The design and development of digital skills policies and strategies has to be based on research findings and data collected under controlled environments to ensure validity and relevance of the data used. Countries continue to develop digital skills strategies while some are at advanced stages of implementing their strategies. ITU has developed a Digital Skills Toolkit to support countries with both development and implementation of their digital skills strategies.[12] To support the development of these strategies and to provide guidance to countries in assessing their skills, ITU has developed the Digital Skills Assessment Guidebook.[13] This guidebook is a practical tool designed to support countries navigate the complex process of assessing skills at national level, and can be adapted to different levels of digital development.

2.1.2 Incorporating digital skills training programmes in national and regional digital transformation strategies, qualification frameworks and competency standards

Designing and adopting digital transformation policies and strategies has become a key priority for most countries. To tap into the growth potential of the digital economy, public decision-makers across the world are adopting policies and measures that foster digital technologies, enable a better business climate and prepare the labour force for digital jobs. A core element of such measures is a focus on the development of a digitally competent workforce and society.

2.1.3 Equipping the next generation with digital skills will require more focus on young women.

Young women do not participate in the same numbers as young men in advanced digital skills training or education programmes, often because they are discouraged from taking up such technical studies or careers or are unaware of these opportunities, leading to a gender imbalance in jobs requiring advanced digital skills. At the same time, an increasing number of jobs/tasks requiring digital skills can be performed online, which may facilitate access to employment by young women.

2.1.4 Rapid skills development

Rapid skills development, such as as coding bootcamps, promise not only to make graduates job-ready, but also enable graduates to enter junior web and app developer roles. Privately operated or run as social enterprises or by NGOs, ready-to-work coding bootcamps offer students three to six months of intensive courses. They teach specific coding languages, tailoring their curriculum to meet employer demands. They also use novel teaching methodologies, such as project teams working as junior web developers. Some coding bootcamps and other non-formal training programmes are providing advanced digital skills training in one to two years on topics such as Internet of Things (IoT) and big data for those without a university degree.

12 ITU Digital Skills Toolkit, https://academy.itu.int/index.php/digital-skills-toolkit
13 Digital Skills Assessment Guidebook, https://academy.itu.int/index.php/main-activities/research-publications/digital-skills-insights/digital-skills-assessment-guidebook

3 Action on digital skills for youth

3.1 Reaching scale requires the active involvement of multiple partners to advocate, mobilize resources, share knowledge and implement tested and innovative interventions.

Ministries of ICT, digital transformation, labour and education, national government bodies, the private sector, training providers, academia, NGOs, UN entities and other stakeholders all play a key role in ensuring the required scale is attained. Their actions and commitments towards Digital Skills for Youth may include:

- designing, implementing or funding digital skills development programmes for young people– including programmes that focus on disadvantaged groups, providing a full array of digital skills and information to existing and potential young entrepreneurs;
- embedding digital skills training in apprenticeship schemes and educational and professional development programmes across sectors and industries, as well as national qualifications frameworks and competency standards;
- developing and strengthening the capacity of education and training providers to deliver digital skills and adapt their curricula and activities for young people (e.g. professional development, entrepreneurship activities, on-the-job learning and job placements); and
- providing learning-to-earning opportunities that will strengthen skills development impact and outcomes.

3.2 Employers play a key role in providing opportunities for practical digital skills development.

Work-based learning is crucial to enhance the long-term employment prospects of young women and men. Hence, employers' offers of quality internships and apprenticeships can make a difference in skills acquisition and transferability into future jobs. Similarly, through sharing of data such as job vacancies, real-time data from online job platforms and related digital skills requirements, the private sector can impact the design and delivery of training programmes and support the identification of sectors and industries where young jobseekers can thrive. Close cooperation and involvement of workers' and employers' organizations based on social dialogue and tripartism is a key success factor in promoting digital skills for decent jobs for youth.

4 The digital skills campaign

The digital skills campaign is the global initiative to scale up action and impact on skills development of young people in support of the 2030 Agenda. Under this campaign, partners make commitments to train a certain number of young people with digital skills ranging from basic level to advanced level, which includes opportunities for internships and apprenticeships. By making this commitment, partners acknowledge the importance of investing in youth by developing their digital skills, sparking innovation and increasing chances of employability.

Partners can be part of the global campaign by making commitments to: 1) train a specified number of youth by 2030 and or 2) submit knowledge resources to the campaign.

Partners who join this campaign will:

a) Gain global recognition as digital skills champions.

b) Have their efforts reported to the United Nations as actions accelerating progress to the 2030 Agenda for Sustainable Development.

c) Access expertise, networks, and best practices from a worldwide alliance committed to developing digital skills of youth.

d) Increase visibility through promotional activities of the campaign.

Since this campaign encourages partners to make conscious decisions to train youth in digital skills and reach specific targets, the participating stakeholders will make all efforts to ensure these targets are met, thereby increasing the opportunities for youth to benefit from the training. The partner commitments are published on the ILO and ITU websites, together with promotional campaign material. This will encourage other partners to extend their own targets, increasing the number of youths trained. By contributing digital skills knowledge products and resource materials to the campaign, partners will enable policy makers to enhance their digital skills development interventions as well as other targeted initiatives for improving digital skills for youths

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