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## QUALITY APPRENTICESHIPS

PROMOTING QUALITY APPRENTICESHIPS  
FOR YOUNG PEOPLE

THEMATIC PRIORITY OF THE GLOBAL INITIATIVE ON DECENT JOBS FOR YOUTH





# 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

## 3 Quality Apprenticeships

## 2 Why action is needed

**Young people face great challenges to access decent work. The skills mismatch is a serious one.** Today over 40 per cent of the world's young people are either unemployed or have a job but live in poverty – this is 71 million young women and men without employment and more than 160 million working poor.<sup>1</sup> Despite significant global improvements in education<sup>2</sup> and a growing pool of active young jobseekers, employers claim they are unable to match available talent with unfilled jobs.<sup>3</sup> In 2016, 40 per cent of employers around the world reported talent shortages, the largest percentage since 2007.<sup>4</sup>

Furthermore, more and more young people are falling into a situation of over-education, where their skills and qualifications surpass the requirements of the particular occupation they are undertaking. Both skills shortages and over-education are a form of skills mismatch, i.e. the gap between jobs and skills. This gap is an important barrier to decent work and affects young people, businesses and society at large.

**The skills mismatch varies greatly across regions and is further amplified by demographic shifts.** Between 2010 and 2030, 60 per cent of the increase in the workforce will come from Africa and Asia – where school attainment is lagging behind. Highly educated regions like North America and Europe will see a decline in working age adults as their populations age. In sub-Saharan Africa and South Asia, these demographic changes and unequal distribution of education are prompting a surplus of low-skilled workers and a shortage of medium-skilled workers.<sup>5</sup>

**To address skills mismatches, education and training policies must be consistent with job creation policies.** Pro-employment economic policies and active labour market measures can enhance employability and stimulate the demand for youth labour, reducing skills shortages and removing the constraints associated with surpluses in education and skills.

**Addressing the skills mismatch requires systemic action and a global commitment, embodied today in the 2030 Agenda for Sustainable Development.** Education and skills development intersect in the 2030 Agenda, resulting in great attention being paid to learning outcomes and to those who are being left behind.<sup>6</sup> Sustainable Development Goals (SDGs) 4 and 8 provide tangible measures to close the skills gap among young women and men. This is to be achieved through three targets in particular: (i) target 4.3 on quality education, which aims to substantially increase, by 2030, the number of young people and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship; and (ii) targets 8.5 and 8.6, which aim respectively to achieve, by 2030, full and productive employment and decent work for all women and men, including for young

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<sup>1</sup> International Labour Organization (ILO) (2017). *Global Employment Trends for Youth 2017: Paths to a better working future* (Geneva, ILO).

<sup>2</sup> According to UNESCO, rates of educational attainment are increasing. Enrolment and completion rates in primary and secondary education are steadily growing and are leading to increased participation in post-compulsory education and training, resulting in a more highly educated labour force. In 2009, 702 million children were enrolled worldwide in primary education, compared with 646 million in 1999 (UNESCO, 2011). The proportion of adolescents in school increased by 12 per cent between 2000 and 2015, and the upper secondary gross enrolment rate increased by 17 per cent in the same period (UNESCO, 2015).

<sup>3</sup> *Laying the Foundation to Measure Sustainable Development Goal 4*, Sustainable Development Data Digest, <http://uis.unesco.org/sites/default/files/documents/laying-the-foundation-to-measure-sdg4-sustainable-development-data-digest-2016-en.pdf>.

<sup>4</sup> Manpower Group. 2016-2017 *Talent Shortage Survey*, based on a sample of 42,300 employers from 43 countries and territories around the globe, <http://www.manpowergroup.com/talent-shortage-2016>.

<sup>5</sup> ILO (2015). *World Employment Social Outlook Trends 2015* (Geneva, ILO).

<sup>6</sup> Hays and Oxford Economics (2016). *The Global Skills Landscape: A Complex Puzzle*, *The Hays Global Skills Index 2016*, <http://www.hays-index.com/wp-content/uploads/2016/09/Hays-GSI-Report-2016.pdf>.

## 4 Quality Apprenticeships

people and people with disabilities, and equal pay for work of equal value. These latter targets also aim to substantially reduce, by 2020, the proportion of young people not in employment, education or training.

**Quality apprenticeships are an effective mechanism to address the skills mismatch, enabling young people to transition successfully from school to work.** Quality apprenticeships are a form of technical vocational education and training that combine on-the-job training and off-the-job learning, enabling the acquisition of the knowledge, skills and competencies required to carry out a specific occupation.<sup>7</sup> By design, quality apprenticeships match the skills demanded in the labour market with those acquired in education and training systems.

**In addition to their impact in addressing the skills mismatch, quality apprenticeships are a strong building block to prompt structural transformation.** Quality apprenticeships promote innovation in the workplace, prompting productive transformation at the firm level – which in turn is a push factor for industrialization in developing and emerging economies.

### 3 Evidence and innovations

#### 3.1 What works for youth employment in quality apprenticeships

##### 3.1.1 Quality apprenticeships are cost-effective and lead to better employment and earnings outcomes among apprentices

**Quality apprenticeships provide young people with market-relevant skills to enhance their employment prospects and enable them to earn higher wages.** Quality apprenticeships improve the labour market outcomes of young women and men through meaningful exposure to the world of work. Young apprentices gain professional experience, applied knowledge and skills directly from employers, which enable them to understand a job's logic, acquire higher level and transferable skills, and cope with unpredictable situations.

Evidence from the work-based apprenticeship programme *Beroepsbegeleidende leerweg* in the Netherlands showed an unemployment rate of just 3 per cent among trained young people, compared with a rate of 11 to 30 per cent among graduates from the *Beroepsopleidende leerweg*, a school-based vocational training programme.<sup>8</sup> Similarly, after comparing the income levels of workers with apprenticeship experience and workers from a similar background but without an apprenticeship, a study in the United States revealed that apprenticeships increase lifetime income by US\$ 301,533 (US\$ 240,037 in earnings and US\$ 61,496 in fringe benefits).<sup>9</sup>

**The investment that employers make in young apprentices is offset by the longer term benefits.** Many employers worry about the cost of training young people. A review of apprenticeship investments shows that skills and productivity gains balance out the costs of training. By

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<sup>7</sup> ILO. *Toolkit for Quality Apprenticeships – Volume I: Guide to Quality Apprenticeship Systems* (Geneva, ILO, forthcoming).

<sup>8</sup> Government of the Netherlands (2014). *Key figures 2009-2013 Ministry of Education, Culture and Science* (The Hague, Dutch Ministry of Education, Culture and Science), <https://www.government.nl/documents/reports/2014/08/12/key-figures-2009-2013-ministry-of-education-culture-and-science>.

<sup>9</sup> Mathematica Policy Research (2012). *An effectiveness assessment and cost-benefit analysis of registered apprenticeship in 10 states* (Oakland), <https://www.mathematica-mpr.com/our-publications-and-findings/publications/an-effectiveness-assessment-and-costbenefit-analysis-of-registered-apprenticeship-in-10-states>.

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retaining trained former apprentices, companies recoup the training costs either before the end of the training period or shortly afterwards.<sup>10</sup>

**There are also economic gains for governments in the medium to long term through savings and tax revenues.** Effective apprenticeships will reduce public spending on active and passive labour market policies and second chance programmes for young people. They will also increase revenues from payroll and consumption taxes because young people in wage employment earn and consume more. A recent study in the United States showed a government return of US\$ 35.9 for each dollar invested in apprenticeships.<sup>11</sup> A similar study in the United Kingdom found that the net present value of one pound spent on apprenticeships is around 16 to 21 pounds.<sup>12</sup>

### **3.1.2 Tripartite collaboration and strong institutions are critical elements of successful apprenticeship schemes**

**The design and implementation of quality apprenticeships requires the collective effort of governments, workers' and employers' organizations** as well as education and training providers. Most effective quality apprenticeship schemes are regulated and financed by laws and collective agreements and policy decisions arising from social dialogue.<sup>13</sup> Cost-sharing between private and public actors can make apprenticeships more affordable and widespread. Experiences from developed countries tend to show that greater success is linked to the maturity of the institutions involved and their ability to coordinate and engage in consultations and social dialogue, adapt training and education curricula to the needs of employers, and involve young apprentices in the process. Social dialogue and tripartism are a means to promote better wages and working conditions as well as peace and social justice. They are key success factors to foster cooperation and economic performance, helping to create an enabling environment for the realization of the objective of decent work for young women and men.

**While rigorous evidence is still scant, tailoring quality, formal apprenticeship systems to the needs of developing countries is creating positive labour market outcomes among young people.** A two-year certified apprenticeship scheme in the tourism sector in Tanzania, which brought together the Association of Tanzania Employers, the Tourism Confederation, the Hotel Association and the National College of Tourism, reported increased satisfaction from employers and a 100 per cent placement rate upon completion of the apprenticeship.<sup>14</sup>

### **3.1.3 Other key design features include meaningful on-the-job training duration, availability of apprenticeship contracts, counselling and recognized qualifications**

**The majority of an apprentice's training time should be spent in the workplace.** As indicated above, exposure to the workplace increases the employment prospects of young apprentices –

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<sup>10</sup> R. Lerman (2014). *Do firms benefit from apprenticeship investment?* IZA World of Labour 2014:55.

<sup>11</sup> Mathematica Policy Research (2012) shows that, in the United States, a former apprentice is estimated to pay US\$ 19,875 more in federal, state and local taxes than a comparable worker who did not go through apprenticeship training. The reduction in social benefits due to an apprenticeship (e.g. unemployment insurance payments, food stamps, welfare and administration costs) is estimated to be US\$ 5,873 per apprentice. These benefits far outweigh the per-head cost of promoting apprenticeships (e.g. administration and community college costs).

<sup>12</sup> National Audit Office (2012). *Adult apprenticeships: Estimating economic benefits from apprenticeships* (London). Benefits to the economy are calculated by subtracting the costs (i.e. public funding, fees paid by employers, indirect cost of forgone output while learning) from the benefits (i.e. higher productivity/wages, lower unemployment, increased tax receipts, reduced benefit payments).

<sup>13</sup> ILO. *Toolkit for Quality Apprenticeships – Volume I: Guide to Quality Apprenticeship Systems* (Geneva, ILO, forthcoming).

<sup>14</sup> ILO (2016). *Making decent work a reality in Tanzania* (Geneva, International Labour Organization).



and the intensity of such exposure matters. The more time a young apprentice spends on the job, the greater the chance of enhanced employability. Some experiences in Europe point to the importance of counselling services during the apprenticeship period.<sup>15</sup>

**Quality apprenticeships require a written contract** specifying the roles and responsibilities of apprentices and employers, including, where appropriate, the way in which apprenticeships are covered by social protection. Remuneration is important and could be set at a given national level, in line with national or sectoral minimum requirements or collective agreements.

**Providing a qualification or certificate improves young people's ability to signal their skills and work experience.** Following a clearly defined and structured period of training and the successful completion of a formal assessment, apprentices can benefit from obtaining a recognized qualification that will help in their transition to other jobs.

### 3.2 Innovative approaches to promoting quality apprenticeships

- **Fostering the development of transversal and transferable skills** across occupations and sectors by (i) combining technical skills with soft (core work), entrepreneurial and digital skills; and (ii) incentivizing the mobility/rotation of apprentices across different companies.
- **Improving the quality and responsiveness of trainer–apprentice interactions through digital technologies.** Video lectures and similar technologies are particularly well suited for carrying out real-time formative assessments, involving interactive assessment of student progress and understanding.<sup>16</sup> Information and communications technology (ICT) is enabling instantaneous interaction and feedback using technology-enabled applications for on-the-job training.<sup>17,18</sup> Furthermore, ICT is fostering the participation of disabled young people in quality apprenticeship schemes.
- **Enhancing careers advice and counselling services** through collaboration between training providers, employment services and companies.
- **Making apprenticeships more affordable** by integrating learning facilities and delivery in the workplace. In addition to reducing the cost of training, this is improving its quality and labour market relevance while enhancing occupational safety among young apprentices.
- **Experimenting with different financing mechanisms.** By using mechanisms long established for public technical and vocational education and training, **such as levy systems and public and private financing**, some countries have found solutions to make quality apprenticeships more affordable for governments and enterprises.

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<sup>15</sup> BusinessEurope et al. (2016). *Towards a Shared Vision of Apprenticeships: Joint statement of the European social partners*.

<sup>16</sup> UNESCO (2015a). *Unleashing the Potential: Transforming Technical and Vocational Education and Training* (Paris, United Nations Educational, Scientific and Cultural Organization).

<sup>17</sup> K. Karkkainen and S. Vincent-Lancrin (2013). *Sparkling Innovation in STEM Education with Technology and Collaboration*, OECD Education Working Paper 91 (Paris, OECD Publishing).

<sup>18</sup> WEF (2015). *New Vision for Education: Unlocking the Potential of Technology*, Global Challenge Insight Report (Geneva, World Economic Forum).

## 4 Action on quality apprenticeships

**Quality apprenticeships offer long-term solutions to the challenge of youth employment.** They address skills mismatches by brokering partnerships between education and training institutions, employers, governments and social partners. When successful, these partnerships lead to improved demand-driven curricula, meaningful training duration and innovative training set-ups, which ultimately equip young people with market-relevant skills and enhance their long-term employment prospects.

**The goal of Decent Jobs for Youth under this thematic priority is to make quality apprenticeships – and work-based learning in general – better known, more affordable and more effective.** Many countries, particularly in the developing world, face challenges in establishing and scaling up quality apprenticeship schemes. Often, public technical and vocational education and training systems have limited resources and capacity to interact with the world of work. Affordability also threatens take-up by firms and the sustainability of schemes in the long term. The global initiative on Decent Jobs for Youth will work with partners to enhance capacity and stimulate effective collaboration between governments, employers, social partners and education and training institutions for the implementation of quality apprenticeship schemes. Close cooperation and involvement of workers' and employers' organizations based on social dialogue and tripartism is a key success factor in promoting quality apprenticeships.

### 4.1 Action at the global level

**At the global level, Decent Jobs for Youth will focus on advocacy and knowledge-sharing, building on the evidence and research generated by its partners.** It will boost evidence-based advocacy through the development of policy briefs and case studies on good practices. It will also mobilize researchers – including UNESCO Chairs on Skills Development – to examine the determinants of successful quality apprenticeships, with a focus on:

- the impacts of quality apprenticeships on the labour market outcomes of young people;
- effective mechanisms to upgrade informal apprenticeship arrangements;
- the extent of and solutions to gender biases in quality apprenticeships; and
- the role of key design features, from legal and regulatory frameworks to governance and social dialogue, the roles and responsibilities of stakeholders, equitable funding and social inclusion.

### 4.2 Action at country and regional levels

**The overarching country- and regional-level goal is to establish and scale up innovative quality apprenticeship initiatives through a series of pilot programmes.** Decent Jobs for Youth will identify a number of countries where pilot programmes can be implemented, focusing on selected growth sectors/occupations where technical and professional skills are in short supply or where a skills shortage is looming and the potential exists for youth employment creation.

**Decent Jobs for Youth and its partners will rely on an integrated approach that prioritizes gender equality, non-discrimination and the protection of young people's rights.** Recent figures show that women are often under-represented in apprenticeship programmes, accounting for 40 per cent of apprentices in Germany, 14 per cent in Canada, and just 1 per cent in Ireland.<sup>19</sup> In

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<sup>19</sup> European Trade Union Confederation (ETUC)/Unionlearn. 2016. *A European Quality framework for Quality Apprenticeships – a European trade union proposal*, <https://www.etuc.org/publications/european-quality-framework->



addition, there is significant occupational segregation, with few female apprentices in high-tech sectors such as engineering. Prioritizing gender equality is therefore at the core of Decent Jobs for Youth's work. Furthermore, non-discrimination and the protection of young people's rights are critical to deliver effective learning opportunities and make progress on the SDGs. Quality apprenticeships are already opening employment pathways among disabled young people in, for example, Ethiopia, Brazil and South Africa, where national reforms are making apprenticeship systems disability-inclusive.<sup>20</sup>

The following elements are critical to the global initiative's strategic approach at country level:

- **Policy review and strategy for the promotion of quality apprenticeships.** Work at the country level will rely on a review of existing regulatory frameworks and policies, institutional set-ups, coordination mechanisms, funding arrangements and incentives. The review will feed into the reform or design of a dedicated strategy and framework for quality apprenticeships – creating linkages with policies and strategies related to education and training, the transition from school to work, and youth employment.
- **Capacity development of stakeholders.** Training needs analysis and capacity development programmes will be developed, implemented and tailored to support the key roles of various stakeholders, from policymakers to teachers, instructors and employers. Many skills systems face shortages of teachers and trainers, managers, assessors and instructional designers, meaning it is crucial to secure the talent pipeline of quality apprenticeships for them to better respond to today's and tomorrow's labour markets. Training of tutors and in-company trainers is crucial to sustain such talent and the quality of training.
- **An integrated approach in the development of training curricula and the provision of other support services, e.g. guidance and counselling.** Decent Jobs for Youth will assist national education and training authorities to improve the relevance of curricula to labour market needs by including and enhancing soft/core work, entrepreneurial and digital skills. It will foster guidance and counselling for young apprentices through close collaboration between sector business associations, education/training institutions and employment services.
- **Exploiting the benefits of technology in learning, both on and off the job.** Digital technologies create new opportunities for the delivery and assessment of quality apprenticeships. To deliver technology-enabled apprenticeship systems, Decent Jobs for Youth will broker partnerships and collaboration between policymakers, employers, education and training institutions and technology providers.

**Monitoring and evaluation.** Quality apprenticeships place important demands on training institutions and employers to maintain the quality of apprenticeships and support young people in both on- and off-the-job learning. While strong institutions and partnerships are crucial, monitoring and evaluation efforts can ensure a positive feedback loop, providing trainers and employers with information to improve processes and understand their impact. Decent Jobs for Youth will support the business case for quality apprenticeships through assistance with the development of monitoring and evaluation tools.

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[apprenticeships#.WK2WeG8rIdU](http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/educ66a-eng.htm), and Statistics Canada. 2017. *The Government of Canada*, <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/educ66a-eng.htm>.

<sup>20</sup> Disability awareness, the accessibility of communications and information as well as the built environment, and the provision of reasonable accommodation are some of the key elements in making apprenticeships more inclusive for people with disabilities.







# SCALING UP ACTION & IMPACT ON YOUTH EMPLOYMENT

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