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## Podcast: Global challenges – Global solutions

### Transcript for:

### *Skilling, re-skilling, digitalization and the future of work*

### Interview with ILO's Senior Skills and Employability Specialist and Team Leader on Skills Strategies for Future Labour Markets Olga Strietska-Ilina

#### Introduction by host:

Welcome to the ILO Employment Policy Department's new podcast series, Global challenges – Global solutions: The future of work.

I'm your host Tom Netter, and today we'll be discussing skilling, re-skilling, and digitalization and the world of work.

There's a new world of work emerging from megatrends such as digitalization, automation, and climate change, among others. Of these, digitalization is having a major impact on workers, employers, and governments, as tasks and activities become digitized and automated. And from the looks of things, in the light of recent developments, this trend is only going to accelerate.

With me today to discuss how this trend is going to affect us is ILO's Senior Skills and Employability Specialist and Team Leader on Skills Strategies for Future Labour Markets Olga Strietska-Ilina.

Olga, good to talk to you and welcome to the programme.

**Tom: My first question is one of definition. What do we mean by digitalization in the context of the world of work?**

**Olga:** Thank you for this question, Tom. In fact, it is a quite interesting question, which we had to deal with recently when we worked on the report published last year, on *“Changing demand for skills and digital economies and societies”*. And there, we immediately realized that there are terms, digitization and digitalization, that are used interchangeably. And it's not correct at all, because they mean completely different things. So, digitalization is the use of digital technologies and digitized data to influence how work gets done. It really transforms how customers and companies engage and how they interact. And that potentially also creates new digital revenue streams, while digitization is a mere conversion of analog to digital form. So, that is really a technology question, not a social or economic question.

So, we're really interested in digitalization rather than digitization per se. And of course, we also often deal with digital transformation, because this is something that really changes, affecting individuals, businesses, and societies that are brought about on the one hand by digitization, but also on the other hand, by internet enabled interconnections that allow these processes to operate globally. So, digitalization indeed is really something that influences the world of work, and the way we work with the way we live. And also, potentially, it influences to a great extent, employment itself, because there could be sizeable employment challenges.

There are a lot of fears that some jobs may be destroyed by substitution by technology. But we also know that due to the jobs which are created in the value chain, these are indirect jobs and jobs which are created as a result of reinvestment of profits. These are induced jobs. The overall employment effect is expected to be positive. So, we don't really fear that there will be a negative effect, but this doesn't happen by default. That requires very good policies.

**Tom: Okay. Well, Olga, thank you very much for clarifying that. Now, when we talk about digitalization, do we mean in actual processes of working or in the delivery of skills training and learning or both?**

**Olga:** Yes, of course, we mean both because digitalization, as I already explained, influences the way we work. And therefore, a lot of work which is done becomes influenced by technologies we use. So, that's when humans work next to technologies. And the tasks at the job, they become augmented by technology. And that's why we know that the absolute majority of existing work tasks within traditional jobs will be modified. They will request new types of skills, digital, not only digital skills, they're often hybrid skills that combine digital and multidisciplinary kinds of training. And at the same time, we also know that learning is very much influenced by digitalization. It influences the way how we learn, but also the uptake of learning. We can learn much more at our own pace. We can learn anywhere. We can bring learning with us on our phone and we can take learning wherever it is suitable for us.

And it's a complete game changer as well. Also, in terms of innovation, digital innovation, there are good examples of semi-experiential or semi-participative learning through augmented and virtual reality, for example. And that can be used to learn the tasks that require some hands-on experience in apprenticeship training, for example, or that can be used for classroom assignments where we cannot really put together a real classroom. Yes, so, this is all great. And then, of course, that gives a lot of opportunities in terms of learning. But also that means not only digital learning, but also digital teaching and requires specific pedagogical skills, which requires tools, resources, and capacities on the side of teaching personnel and on the side of learners as well. So, a lot of potential benefits, of course, but it doesn't happen by default. We need also to develop capacities and build systems to make sure that they are functioning efficiently.

**Tom: Okay. Thank you. Now, how has the COVID-19 pandemic impacted the onset of digitalization? We hear that it has been accelerating, can you enlighten us on this?**

**Olga:** Yes. Thanks for the question, Tom. It has been accelerating, that is true, but the COVID-19 pandemic has also been a major disruptor in learning. We implemented the global survey in 126 countries, together with the World Bank and UNESCO in early days of the pandemic. So, we talk about April, May 2020. And the results were quite shocking, because we realized that 95 per cent of TVET providers who responded to the survey reported complete closure of TVET centers. Imagine that. And especially now in case of work-based learning, 98 per cent of them were affected negatively they also reported disruptions in assessment and certification. So, there wasn't really a rosy picture. So, major disruptor definitely, but also an accelerated, because we know that out of 92 countries that actually

answered the question about the provision of online distance learning during the pandemic, only 13 of them actually used to provide this type of training before the pandemic in a systematic way.

And during the pandemic, this became half, and in case over advanced countries, two thirds. So, that quite impressive numbers, really a sharp increase in the provision of distance learning. However, we also know that there were big differences between low- and middle-income countries and advanced countries, because in low- and middle-income countries, only around 35 per cent of the population have access to the internet. So, the connectivity is really way lower than in advanced countries, where it's 80 per cent and especially in case of poor households. And therefore, there was just really a fraction around maybe 10 per cent of TVET providers that switched to online learning during the pandemic.

Poorer households were largely affected, but also women and young girls, they were the first ones to drop out completely from learning, online learning included, because they were expected to take care of their younger siblings or their own children. So, there were some negative disruptions, but also some positive developments, because a lot of innovation in learning happened. We saw some very good examples of augmented reality, virtual reality, or examples of the submission of some home assignments through videos, but also low- tech solutions in countries where the connectivity was poor, such as learning through TV channels or distribution of some learning guides and learning materials through postal services and then submission of the tasks' implementation.

And very good examples of collaboration, also between businesses and schools, where businesses provided access to internet connection or the devices to learn. And where schools provided training in those occupations, which were most standard demand in the production of some safety or medical equipment, for example, or even turned themselves into the production centers during the pandemic. Very high level of solidarity was demonstrated.

**Tom: Okay. So, how does this translate into practice? What are some of the skills needed to facilitate the digital transition?**

**Olga:** In fact, I can tell you also how the needs and skills changed during the pandemic, because we implemented some rapid assessments of reskilling and upskilling needs around the world, mostly in African countries. But I think all together we had something like 15 countries covered. And that is interesting, that

equally employers, workers, and job seekers report that digital skills become very important in their current job or in the potential job for which people can be hired. They all recognize that equally. And also, they all recognize the importance of skills, especially employers. That became urgent for teleworking because we all had to switch online. And suddenly all of us had to learn how to use Zoom, Teams, Google Meet, Skype, WhatsApp, YouTube. So, yes, this became important.

But also, what is interesting, some skills, they are accompanying digitalization. These are not digital skills. This could be even a soft skill such as teamwork, but it won't be teamwork in a traditional sense. That would be teamwork, which is happening online and very often in a global setting. So, that's what became important also as a result of the digitalization recently.

Very often there are reports about the needs of digital skills, without little explaining about them, what they are. Many people would think that these are basic skills of ability to process documents and what processing software or emails or social media skill. But there are also medium and advanced skills, which are very needed. And some of them are cross sectoral, such as coding or cybersecurity or data analytics.

But a lot of them are very specific for sectoral occupations, because there are also specific software programmes used very widely in tourism, specific software programmes for construction, for manufacturing, and these are also getting distributed through supply chains. The technology transfer happens to developing countries. And even though they're not perhaps now using to the same degree, medium and advanced skills, digital skills as in advanced countries, this is happening. They are catching up and quite quickly. So, these skills are also needed, including in developing countries.

And also, very often we speak about really good technical skills, such as engineering or electrician, and hybrid skills.

For example, when a plumber needs to have some skills of an electrician, and also understand how home solutions and renewable energy work, and how they are connected to the internet of things. So, this is one example of what is actually happening on the labour market. The same plumber also has to have very good soft skills, such as communication, to be able to advocate for certain solutions with the potential customer. So, that's a quite complex picture. And of course, for all of this, we need to have a good system of skill needs, identification, and especially anticipation for the future to be able to monitor the system, how it's developing,

and to keep track of the impact of digitalization, the world of work and especially on skills needs.

**Tom: Thanks again, Olga. Now, what does this mean in terms of the role of learning and specifically lifelong learning?**

**Olga:** That means that a lot of things are happening at a very different pace. There are a lot of changes on the labour market. And of course, we cannot speak any more about front loading of skills and especially qualifications for a lifetime. This is what we used to do. We used to go to school and then, maybe to college or a university and receive qualification that served our career during the lifetime. This is not going to happen anymore because people will need to change jobs. And therefore, they have to have an opportunity to reskill and upskill, and sometimes even to retrain to a completely new occupation. And digital skills, of course, are very important in this mix of measures that have to be implemented.

Of course, this cannot be implemented on their own by governments or by employers. This has to be a joint responsibility where individuals and workers get themselves engaged into learning. And for this, we need quite good systems of shared responsibility, not only in governance, but also in co-funding. Because we need really sufficient investments into lifelong learning to make sure that everybody has access to lifelong learning. And these investments, they have to be accompanied by incentives, incentives for individuals to engage into learning through some kind of learning protection floors, as I would call them. So, having access to vouchers to individual learning accounts or through central funds or sectoral funds, so incentivizing learning. But not only financially, also incentivizing in terms of recognizing the skill received, assessing, validating, certifying, and eventually using.

And also, making sure that the groups that might not be really in the position to access training easily, such as vulnerable groups or women in certain situations. So, that is really the task also for government, to do it in collaboration with social partners and in social dialogue, to make sure that these groups have good access to learning. Businesses, they also need to be incentivized to continue providing training, including digital training to their workers, reskilling and upskilling them to take the opportunities that are offered by their technological development and digitalization.

**Tom: Thanks, Olga, for that very interesting response. Now, my final question is, will digitalization bring more inclusiveness or more competition in the world of work? And what is the role of skills policies in this regard?**

**Olga:** Digital transformation with all the promises of the great potential does not really happen by default, we need good policies. We may find ourselves in the situation of the so-called opening scissors of inequalities, opening between countries, between households, between men and women, and between younger people and older workers who all have their own difficulties in accessing training, and then also, benefiting from technological development. Also, digitalization in some cases may even deteriorate to a certain degree working conditions. So, we all know the example of platform workers whose status in many countries is not really, entirely clear, whether they're self-employed or even sometimes treated as entrepreneurs, or these are employees.

Therefore, this often results in the lack of social protection and lower wages, and lack of occupational safety and health, and also lack of access to training. But as we already discussed, digitalization does open up enormous opportunities. It really makes the cost of training potentially lower. And potentially, it may grant access to training everywhere, at any time. And this is very important, especially for people like rural workers or people in remote areas. It's very important for full-time and part-time workers who might not have time to follow training during the day. And then suddenly, they can have access to digital learning when they finally have time and at their own pace.

The same applies to mothers of young children and especially people with disabilities. So, therefore, the so-called MOOCs, massive open online courses, and in fact, all forms of digital training, formal or informal, provide potentially such opportunity of access. But they also need to be recognized, in a sense, the result of such training has to be properly certified and become an incentive that may bring people better wages, move up in the career. So, that all really depends on policies. I think this is the message, which I'm trying to send.

**Tom: Thanks again, Olga, for sharing your knowledge and expertise on this issue. It's always very informative talking with you.**

**It's clear that digitalization is here to stay, and is changing the nature, mode, and pace of work. Within this context, the skilling and re-skilling of workers is going to be essential if enterprises and industries are to maintain and increase productivity,**

effectively manage future shocks, sustain the well-being and livelihoods of workers, and create decent jobs.

This will be crucial to guiding training and investment now and, in the future, and providing a roadmap for meeting the evolving skills challenges of digitalization facing workers throughout their working lives and employers.

I'm Tom Netter and you've been listening to the ILO Employment Policy Department podcast series, *Global Challenges, Global Solutions: The future of work*. Thank you for your time.