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OECD

BETTER POLICIES FOR BETTER LIVES

SKILLS SUMMIT 2018

SKILLS FOR A DIGITAL WORLD

28-29 June 2018, Porto, Portugal

OECD-Portugal Joint Summary



1. The OECD and Portugal are proud to have jointly organised the 2018 Skills Summit in Porto, which brought together 23 Ministers, Deputy Ministers, State Secretaries and Deputy State Secretaries from 22 countries as well as a representative of the European Commission to discuss the implications of the digital transformation for the skills people need as well as for skills policy.

Building skills for a digital world

2. The Skills Summit brought together ministers with responsibility for a range of skills-relevant portfolios – from education and employment to social affairs and economic development. This broad participation demonstrates the cross-cutting nature of skills policies and the need for a whole-of-government approach to respond to the challenges and seize the opportunities of a digital world.

3. Representatives of the Trade Union Advisory Committee and the Business and Industry Advisory Committee to the OECD also demonstrated the high level of interest among social partners in these issues, as well as the importance of involving them in designing and implementing skills policies for a digital world.

4. The Summit began with opening remarks by the Minister of Education of Portugal, Tiago Brandão Rodrigues, the OECD Secretary-General, Angel Gurría, and the Director of Social Affairs, in the Directorate-General for Employment, Social Affairs and Inclusion, Manuela Geleng. Minister Brandão Rodrigues commented on the importance of preparing all citizens to thrive in a digital world, economically, socially and civically, and noted Portugal's goal to move from about 55% of Portuguese citizens with basic digital competencies to 80% by 2030. OECD Secretary-General Gurría commented on the challenges posed by the scale and speed of the digital transformation to countries, especially those where access to education and learning continues to be uneven. Director Manuela Geleng highlighted the importance of not just using information and communication technologies (ICT), but of innovating with it. She also asserted the firm commitment of the European Commission to skills investments, including through the Commission's budget proposal for the 2021-2027 programming period.

5. This introduction was followed by three plenary sessions that combined presentations of OECD evidence on the impact of digitalisation on economies and societies, short comments on the topic by Portuguese ministers, and open discussions among participants, moderated by Gavin Dykes.

6. Ministers and officials discussed the key challenges and opportunities brought about by digitalisation and about which policies can help to mitigate the challenges and maximise the opportunities. The Summit allowed for frank and constructive exchanges on shared skills challenges and potential solutions. It also highlighted a number of areas where debates are ongoing and further research, analysis and policy experimentation is required.

Understand – Risks and opportunities in a digital world: the changing landscape of skills needs

Setting the scene

7. Chaired by the Minister of Economy of Portugal, Manuel Caldeira Cabral, this session began with two presentations, by Gabriela Ramos, OECD Chief of Staff and

G7/G20 Sherpa and Andy Wyckoff, OECD Director of Science, Technology and Innovation. Minister Cabral then provided perspectives on the Portuguese context.

8. The presentations highlighted the implications of digitalisation on inclusive growth. Some of these implications are positive – for example, digital technology enables increased access to essential services for individuals around the world (e.g., mobile banking) and allows for increased flexibility in work organisation. However, as the digital economy increases the demand and rewards for high levels of skills, there are also risks of growing divides, between high- and low-skilled individuals, digital natives and older generations, those with advantaged and disadvantaged backgrounds and the gender gap, as women remain underrepresented in many sectors highly rewarded in the digital economy.

9. The digital transformation is permeating all sectors and facets of life although at different speeds. Digitalisation thus impacts on how firms are organised, the types of jobs and tasks that are increasingly in demand and those whose demand may fall significantly, and the types of skills that are increasingly rewarded in the labour market, such as cognitive skills (literacy, numeracy and problem-solving) but also task-based skills such as ICT skills, marketing and accounting.

Highlights of discussion

10. Participants emphasised the need to align the supply of skills at all stages of life with the demand for skills in the economy, a requirement heightened – but also complicated by – the digital transformation. Still, digitalisation was also conceived as an opportunity to engage and up-skill (or re-skill) low-skilled adults and immigrants.

11. Individuals need to have the right bundles of skills for the digital age. These include digital skills and encompass a wide range of cognitive and socio-emotional skills as well as subject matter knowledge. Skills to become critical users of online information (e.g. media literacy) and to become creators with technology (e.g. entrepreneurial skills) were noted as increasingly important, although requiring different targets and methodologies. Basic computer skills were described as both necessary across all occupations, but also as insufficient in themselves to navigate the complex and vast digital world competently. Special concern about developing gender-sensitive approaches was expressed, to reduce powerful stereotypes in the digital world about men's and women's roles.

12. The level of skills needed to succeed is also important. As more routine jobs and tasks become automated, raising skill levels was identified as a major challenge. At the same time, several countries noted shortages in occupations requiring medium levels of skills, for instance in the sector of ICT and tourism. This was identified as a particular for VET programmes.

13. Ensuring youth get the right skills for the digital age was highlighted as a top priority for educational reforms. Many countries outlined the need for comprehensive changes, from revising the curriculum, to ensuring technology can be used effectively for learning, and upskilling teachers. Attracting competent teachers to teach how to use technology in informed and creative ways remains a challenge. One potential cause for this is the tendency of professionals with ICT skills to be absorbed by industries offering competitive wages. Ensuring youth can access the labour market was further raised as a concern, particularly as entry jobs are more at risk of automation.

14. Among adults too, participants identified a need to facilitate upskilling, with general agreement that there is a need to move to more effective approaches to providing lifelong learning. While employers in many countries do provide training, there is a need to prepare workers not just to do better on their current job, or even the economic sector they work in, but to become resilient in a changing labour market.

Design – Rethinking education and lifelong learning policies

Setting the scene

15. Chaired by the Secretary of State of Science, Technology and Higher Education of Portugal, Fernanda Rollo, this session began with a presentation by OECD Director of Education and Skills, Andreas Schleicher. Secretary of State Rollo then provided perspectives on the Portuguese context.

16. The presentation highlighted that while the digital transformation over the past 10 years has generated a lot of innovations and digital environments require higher skills levels than traditional workplaces, the skills of youth, as measured by PISA, have remained flat on average. Thus education reform, for instance to adapt the curriculum to allow students to learn key skills, is critical. It is at the same time a difficult task, given the immediate costs of reforms and the many who support the status quo – including parents. Reforming lifelong learning systems is also imperative. In this area, work of the OECD on assessing the difference in the skills required by different types of occupations will offer promising avenues to help governments, individuals and firms understand what job transitions may be the most feasible and desirable for workers.

Highlights of discussion

17. Adapting education and learning systems and policies to prepare individuals for the digital transformation was a key priority of all participants. This implies equipping people with higher levels of skills and also with new sets of skills, such as complex problem solving, critical thinking, creativity and adaptability. Finding the right balance between broad skillsets and specialisation was identified as critical.

18. There was broad agreement about the need to revisit and to improve educational curricula, as well as pedagogies, to ensure the provision of skills for the digital age for all students. This included discussions around the right approach to introducing technologies in the classroom, with several countries considering “bringing your own device” policies. Some participants also noted the usefulness of digital tools developed by private companies that help individuals both in their skills development and career guidance.

19. At the same time, concerns were raised that technology in the classroom can also lead to lower outcomes if not used effectively, and about the prominent role that private companies developing educational content have in shaping these technologies. Participants thus noted the need to forge better partnerships between the education sector and companies that develop digital technologies for learning, to ensure quality and avoid various risks (addictive content, etc.).

20. Upskilling teachers was a recurrent theme of discussion, with participants noting that while technology holds promise, there is a need to consider the complementarity between artificial and human intelligence in teaching. Policy approaches to foster quality teaching for the digital age were discussed, including strategies in some countries to

foster cooperation between technological and educational experts and to create networks among schools to facilitate knowledge and good practice exchange.

21. In a world where skills drive economic and social well-being, participants insisted on the need for life-long and life-wide learning. It was suggested this should start from affordable and quality early childhood education and care as early as age 0-4, where many countries still lag behind, include high quality initial and advanced education, and ensure a diverse provision of quality adult learning opportunities.

22. Participants further noted the need for a combination of strong digital, basic cognitive and transferable skills and subject matter knowledge, which was described as necessary to foster a desire to engage with the world and create.

23. Making learning “life-wide” was emphasised as critical, including by breaking down silos between types of education, including vocational education and training (VET) and general education, but also between formal and informal learning. It was noted that learning on the job in particular should be encouraged and recognised as valuable. The importance of defining learning outcomes regardless of where the learning took place was raised as one way to help with this goal of encouraging learning.

24. Education and training policies were broadly viewed as needing to foster increased accessibility, quality and relevance of learning. It was noted that a challenge of on-the-job learning is that it is often specific to workers’ current job or sector, but fails to prepare workers for the labour market more broadly.

25. Participants also highlighted the importance of ensuring greater participation in learning among disadvantaged and low-skilled individuals, and expressed concerns about the difficulty of raising the rate of engagement in learning for these groups. To support upskilling, participants noted the importance of specific policies such as improving career guidance and counselling. They also emphasised the critical need to link skills policies together with employment and social security policies to facilitate job mobility and re-training during unemployment spells.

26. For other groups too, participants highlighted the risks of falling behind. They noted in particular the under-representation of women in technology and science, technology, engineering and mathematics (STEM) fields, and the low representation of women in the digital economy.

Implement – Toward better skills policies for tomorrow’s world

Setting the scene

27. Chaired by the Secretary of State of Employment of Portugal, Miguel Cabrita, this session began with two presentations, by OECD Director of Employment, Labour and Social Affairs, Stefano Scarpetta and the Head of the OECD Centre for Skills, Montserrat Gomendio. Secretary of State Cabrita then provided perspectives on the Portuguese context.

28. The presentations highlighted the impact of the three mega-trends – globalisation, digitalisation and population ageing – on the future of work, including job polarisation and the rise of “gig work”. The presentations outlined the need for policies that provide new skills sets that align with demand, support new forms of employment and allow for training for multiple careers. Policy pointers were provided to design systems of skills assessment and anticipation that can support the formulation of skills policies, the

planning of the supply of skills training at the local level, and to support career guidance at the individual level. In particular, sound methodologies, adequate funding, and involving all relevant parties – all government ministries, social partners and sub-national and sectoral entities – were emphasised.

29. Developing effective governance mechanisms for skills systems is complex due to the diversity of actors involved at all stages of learning (e.g. public and private providers of early childhood education, schools, universities, VET providers, employers, etc.). This complexity creates challenges: on the one hand the increased decentralisation in education and the greater role of various actors – including firms – can help serve a wide variety of learning needs. On the other hand, governments continue to have a role to play in coordinating these various actors, ensuring equity of opportunities and aligning the various policies needed to make the most of the digital transformation (e.g. education and labour policies, but also industry, housing, innovation, migration, tax and social policies).

Highlights of discussion

30. Encouraging lifelong learning requires reforms that facilitate access to training and the recognition of competencies acquired, regardless of the type of education pursued. Some countries noted the importance of viewing education as not just an initial phase of life, but as a key labour market tool, which individuals must be able to access at any point.

31. Reforming and expanding VET systems to meet labour market demand was noted as an opportunity to improve participation in learning for both youth and adults, and to make VET an important channel for lifelong learning well-aligned with labour market needs.

32. On-the-job learning was mentioned as a key lever to increase skills, although firms often face challenges in assessing the skills needed in the long-term. Some sectors were noted as already strongly affected by digitalisation, such as the financial sector, and requiring particular help in identifying how to re-skill and up-skill the workforce.

33. Some countries noted the value of encouraging flexible access to education and training not just to limit the effects of job displacement, but to increase the support of both workers and trade unions for the new ways of working resulting from digitalisation and other trends. Particular emphasis was placed by several countries on skills assessment and recognition as an essential component to encourage learning.

34. To facilitate the implementation of upskilling policies, countries have experimented with different governance models. Examples were provided of collaborative mechanisms between central governments, regional and local entities, where the central government has a lead role in steering and financing skills development programmes, but local authorities and actors have considerable flexibility with respect to implementation. This type of approach was reported to work well and effectively promote collaboration.

35. Involving stakeholders in the implementation of policies, and ensuring reforms are aligned across different policy areas, were also highlighted as critical ingredients for successful implementation. For instance, some countries noted the involvement of social partners and public employment services as central to implementing upskilling policies. They also noted the necessity to link skills policies with those focusing on job security and job mobility. Countries mentioned in particular the need to build incentives as part of

policies to encourage take-up of training, such as systems allowing individuals in training to keep a portion of their wages.

36. While there was consensus about the importance of engaging individuals, private and public institutions in fostering skills systems for the digital age, important questions were raised regarding the role of various actors in defining skills needs, as well as in motivating and supporting individuals in pursuing lifelong learning. In particular, different perspectives were expressed about whether it should be the responsibility of individuals to engage in learning, even if supported by funding from government or employers, or if governments should be responsible to ensure the upskilling of a part of the population, especially the low-skilled. Clear commitments for action from all parties were considered to be critical for success.

37. Other important questions were raised about the funding of lifelong learning, and how the funding source affects the type of learning available. Examples were provided of funding organised by sectors, which would need to be revisited to facilitate the funding of a broader set of skills.

Conclusion

38. After a final tour de table, the Portuguese Minister of Education, Tiago Brandão Rodrigues, provided a brief summary of the debates during the summit, greeting all the participants and staff involved in the organisation of the event. He emphasised the important work ahead to strengthen skills systems, to ensure good collaboration and engagement among all stakeholders, provide guidance to learners and equip them with a diversity of skills, and the effective planning and delivery of upskilling opportunities. He closed by re-affirming that digitalization is mostly a human process, where technology becomes quickly obsolete, while people never do.

39. The event closed with remarks from the OECD Secretary-General, Angel Gurría and the Minister of Foreign Affairs of Portugal, Augusto Santos Silva.

40. Highlights were provided of the key areas for action discussed by Ministers, as well as the principles that should guide action in a digital world.

41. Among key areas for action, it was noted that skills policies for a digital world must take into account the risk of growing inequalities and involve those who are impacted by digitalisation, including individuals, firms and regions. Reforming the financing and governance of lifelong learning systems was also noted as essential to move away from a concept of education as just one phase of life. A third area of focus was the need to continuously update the international evidence base on digitalisation, and the policy approaches that can respond to the risks it poses and the opportunities it offers. In this regard, the importance of updating the OECD Skills Strategy framework, which is to be released in 2019, was reaffirmed.

42. Lifelong learning was highlighted as central in the context of democratic societies, where digital competences are essential for effective civic and social participation, and to ensure citizens are well-equipped against misinformation. The importance of labour at the heart of the organisation of human societies was also noted, with words of caution around notions that technology will eventually eliminate human work. Efforts to engage populations in this discussion, including through trade unions, were noted as important to avoid a backlash against the digital transformation.

43. In conclusion, the co-organisers recognised the key value of the Summit as another step in a policy dialogue that is critical both to quantify the challenges and the stakes and to exchange about the policy issues and solutions implemented across OECD countries.

44. OECD countries are invited to follow up on these areas for action, and to discuss progress at the next Skills Summit in 2020.