



**Asia-Pacific
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Advancing Free Trade
for Asia-Pacific **Prosperity**

Strengthening Innovative Skills Training and Education for Increasing Workers' Inclusion in the Digital Age

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APEC Human Resources Development Working Group

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INTRODUCTION

On 18-19 July 2019, an ***APEC Workshop on Innovative Skills for an Inclusive Future of Work in the Digital Age was held in Ha Noi, Viet Nam***, co-sponsored by *Australia, Chile, Indonesia, Japan, Malaysia, Russia, Singapore, and Thailand*. The Workshop is held under the Human Resources Development Working Group with a view to contributing to the implementation of **the Action Agenda on Advancing Economic, Financial and Social Inclusion** and the **Framework on Human Resources Development in the Digital Age**

The Workshop gathered about 100 participants, including representatives from APEC member economies, representatives of related ministries, agencies, women associations and entrepreneurs of Ha Noi, and international organizations such as OECD, UNESCAP, World Bank, UNESCO. The Workshop was opened by H.E. Mr. Bui Thanh Son, First Deputy Minister of Foreign Affairs of Viet Nam, Mdm. Tan Sri Dr Rebecca Sta Maria, Executive Director of APEC Secretariat, and Mr. Nguyen Manh Cuong, Director-General of the Department of International Cooperation.

The objectives of the Workshop are to: (i) assess the impacts of digitalization and automation on vulnerable workers; (ii) share best practices and coordinate policy measures on how to utilize innovative education, training and other workforce policies to help workers update their skills and knowledge to increase their employability and actively participate in rapidly changing economic environment; (iii) identify focused areas of cooperation in innovative education/training and other workforce policies to meet new market demands; and (iv) develop a compendium of recommendations to submit to HRDWG

KEY ISSUES DISCUSSED

The two-day workshop was divided into 4 sessions.

The First Session on Industry 4.0: Technological Disruption and the Future of Work was chaired by Ms. Joanna Wood, Education Counsellor, Australia Embassy in Ha Noi, with speakers from OECD, World Bank, ASEAN Secretariat, AlphaBeta, Microsoft and panelists from UNESCAP and UNESCO.

OECD presented on the 2019 skills outlook, which included an analysis of megatrends that affect the future of jobs and skills (robots, globalization, ageing population...). Key messages are as follows: (i) New technologies are rapidly permeating the world of work and are profoundly changing the skills required to enter and progress in the labour market and to thrive in a digital society; (ii) Economies face different challenges and some economies are more prepared than others for technological change; (iii) Strengthening adult learning is crucial to help workers successfully navigate a changing labor market and to allow transitioning to more secure occupation; (iv) Lifelong learning for all is therefore at the core of the policy response to digital transformation: uncertainties on future skills needs; new digital skills/knowledge in the future; and the need to adapt the skills mix.

The **World Bank** gave a historical analysis of the changing nature of work over time, which identified some challenging trends, such as job polarization, rate of formalization of jobs is still low, fewer standard long-term contract, and social insurance does not catch up with the ageing population and job transition. Key recommendations from WB are the call for changes: (i) workers need to upgrade from basic skills and knowledge to soft skills; (ii) from young education to lifelong learning; (iii) move from traditional education to many short, tailored courses to catch up with technology change; (iii) from school/institution-based education to office-based training programs to match with onsite technological demands.

ASEAN SEC briefed on the digital transformation in ASEAN and how it affected women of the region. The presentation highlighted that there is still a significant gender gaps in terms of payment and leader positions in ASEAN. The presentation also informed of many commitments and measures that ASEAN members have been implementing as reflected in various ASEAN Documents.

AlphaBeta presented on the impacts of AI on skills and jobs in Asia, which gave a positive outlook of the effects of AI on skills and jobs in Asia. Key recommendations are to foster an appropriate action agenda that addresses the unique challenges the region faces (uneven adoption of AI; lack of awareness; lack of lifelong learning model/education curriculums to deal with skill change; lack of government investment for retraining, and social policies not adapting with the changing context) and to strengthen best practice sharing and mutual learning among governments.

Microsoft's presentation focused on the emergence and implications of AI and suggested recommendations on how to harness AI for skill training and job matching to foster an inclusive future of work.

During the panelist discussion, all the participants agreed that it's high time for governments, entrepreneurs, people to change their awareness of the digital

revolution. Attention need to be paid to new forms of learning to complement traditional education. there was also a consensus about importance of social protection with a change of a policy from protecting jobs to protecting people. Lifelong learning goes along with this shift.

Session II on Innovative Skills for the 21st Century Workforce was chaired by Mr. Michael Croft, Head of Office and UNESCO Representative to Viet Nam; speakers are from Australia, Thailand, Indonesia, and TOPICA Viet Nam; Panelists from Viet Nam and Hong Kong, China.

Australia's presentation highlighted the reality of skill gaps and skill mismatches in the APEC region and shared Australia's experiences. Key recommendations from the presentations are to: (i) Invest in better data systems and user-centered tools to improve the evidence available for skills and employment decisions at multiple levels; (ii) Improve governance arrangements for VET, involving business; (iii) Introduce new policy tools to change investment behaviour; and (iv) Encourage partnerships between different stakeholders, including employment services.

Russia shared best practices on how the domestic education system respond to new demands and highlight a paradox: even high investment in education but many economies still do not get a corresponding increase of productivity. Key recommendations are: (i) Traditional general and specific cognitive skills remain important (maybe less than before) BUT need to be addressed in life-long learning; (ii) Non-cognitive skills and personal traits always relevant, need further research in terms of education practices (solving real life problems); (iii) Universal skills – require clarification of theoretical framework: “4c” (communication, cooperation, creativity, critical thinking), “new literacies” (digital, ecological, cultural, financial, etc.) as well as analysis and dissemination of best practices; (iv) Allocative Abilities. Entrepreneurial Element of HC – most underdeveloped, requires investment in research and experiments (entrepreneurial education). Russia also suggested new view of education: (i) the definition of “human capital” should not only cover specific capital (workplace skills) and traditional “general capital” (business culture, productivity, literacy, etc.,) but “active independence”, the ability to dutifully establish one's career and social trajectory, as well as make the world a better place in constructive cooperation with others. (ii) Education - not a system of organization but a sphere of activity, the “educational ecosystem”, which covers the entirety of formal and informal practices, thereby ensuring the accumulation of human capital; (iii) Moving from “teaching” to “learning”. Priority - independent study, supporting initiative, as well as students' interests and motivation.

Indonesia gave a holistic presentation on the digital transformation and the improvement of domestic education system in the economy. There was a complete upgradation of curriculum development, teacher training, school infrastructure, scholarship and teaching factory.

Singapore presented on SkillsFuture, a nation-wide movement to enable Singaporeans to develop to their fullest potential throughout life through the mastery of skills and lifelong learning. The SkillsFuture movement incorporates a wide range of initiatives, including Skills Frameworks which help to facilitate skills recognition and support the design of training programmes for skills and career development, subsidies and grants to support Singaporeans taking up lifelong learning, as well as SkillsFuture Work-Study Programmes and enhanced internships to encourage Singaporeans to acquire industry-relevant skills.

Thailand shared about the 20 year National Strategy with 5 important elements: (i) Reform Learning Process to facilitate 21st Century Skills; (ii) Change Roles of Teachers to “Facilitators or Coachers”; (iii) Strengthen education management; (iv) Enhance lifelong learning; (v) Develop Digital Platform for learning process. An interesting initiative is the “Intelligent Center”, formed by partnership colleges, which provide inclusive and quality education by using digital technology. The Intelligent Centers serve not only for communication but also learning resources and for other important activities.

Topica Viet Nam emphasized 3 technological trends that help building new skills for the 21st century, which are: (i) immersive experiences, (ii) guidance by AI, and (iii) education value chain. The presentation highlighted many innovative models of learning offer by TOPICA to help various learners improve their skills.

During the open discussion, panelists and participants exchanged ideas on how to make government and people better aware of the urgency for changes, how to better enhance the coordination between public and private sector; how to improve the ecosystem of education and incite more people into lifelong learning.

Session III on Active Labor Market Policies for Inclusive and Innovative Growth was chaired by Mr. Fraser Thompson from AlphaBeta, with speakers from Viet Nam, Hong Kong, China, Thailand, Viet Nam, Passerelles Numériques Viet Nam and panelist from Russia and Indonesia.

Viet Nam shared on the domestic measures to enable and facilitate women’s inclusion in the labor market. The presentation highlighted many legal documents and strategies to prove that gender issues was streamlined in many spheres of policy making.

Hong Kong, China presented on the city’s policies in support of workers. The vision was to put HRD within the strategy of smart city development, in which emphasis was put on STEM education and IT skill development.

Thailand gave a comprehensive analysis of the domestic economy and the situation of the workforce. The presentation highlighted the new features and demands of 21st century learning and recommended that policy making need to tailor to the changing context and the subjects targeted: “less free sized, more

mass customized sizes”

Passerelles Numériques Viet Nam shared their comprehensive solution in supporting disadvantaged youths with IT skill potentials. The program offered by Passerelles Numériques Viet Nam covered talent finding, training and job matching, which helped training about 200 trainees per year with an employment rate of 97%.

During the discussion, panelists and participants exchanged views on how to promote more women inclusion in the labor market; whether developing economies should choose to embrace the migration of mass production work or quickly move up the innovation ladder; are traditional education losing ground to the newly emerged non-degree trainings.

Session 4 on Deepening Global Partnership for an Inclusive Future of Work was chaired by Ms. Ha Thi Minh Duc, Deputy Director-General of the Ministry of Labor-Invalids, and Social Affairs, with speakers from UNESCAP and OECD, and panelists from AlphaBeta and UNESCO.

OECD's presented on the problems of changing skill demands, which require an integrated multi-sectoral approach with frequent adjustment for skill governance. Key recommendations are adult learning; lifelong learning for all and a frequent monitoring of skill demands change and prepare for policy adjustment.

UNESCAP elaborated on the SDGs related to HRD and Education. Key recommendations are: (i) APEC will have to recommit to a long-term community building based on openness, innovation and inclusivity; (ii) With such mission / vision, APEC (as an institution and as a community) will play a key role in helping all their peoples navigate these changes; (iii) Areas of focus for inclusive future of work: Inclusive ICT infrastructure, skills development and training, social protection; (iv) Actions / modalities for APEC: Partnerships, regional dialogues and knowledge sharing, regulatory frameworks.

During the discussion, panelists and participants agreed that there need to have an integrated multi-sectoral approach to the issues education and training; the content and awareness need to be injected into many multilateral discussion; PPP collaboration need to be further strengthened and free flow of data is very important and need enabling policy support.

The Workshop move on the discuss the Compendium of Recommendations and generally agree with the main topics, which are: (i) *Enhancing Coordination to Address Skill Gaps and Skill Mismatches*; (ii) *Transforming Education and Training for an Inclusive Future of Work*; (iii) *Promoting People-Centered Agenda for Maintaining Economic Growth and Supporting Workforce Transition*; (iv) *Capacity Building for Entrepreneurs to Expedite the Acquisition of Technology, Reforming Governance and Training of Employees*; (v) *Promoting Synergies*

among Regional and International Organizations on Gender and Digital Inclusion.
All participants agreed to give comments and will adopt the list of recommendations intersessionally by 30 July 2019

Ms Nguyen Minh Hang Deputy APEC SOM of Viet Nam gave the closing remarks and thanks all speakers, participants, organizing committees and press for their hard work.

LIST OF RECOMMENDATIONS

I. Developing a comprehensive approach and holistic policies on innovative skills for an inclusive future

1. Promote innovative skills including critical thinking, creativity, problem solving, teamwork, communication, flexibility and collaboration skills and social and emotional skills that enable adaptability and resilience to the changing nature of work;
2. Initiate APEC-wide policies that support labour market adaptability, life-long learning, and workforce participation and promote innovation and entrepreneurship in the digital age.
3. Modernize data collection and analysis for skill mapping and skill forecasting. Identify the future skills and competencies in the region that will be required to meet the need of new technologies and digitalization across the life-long learning continuum;
4. Enhance information sharing and best practices among APEC members for occupational standards, quality assurance, qualifications frameworks and recognition policies and practices;
5. Continue work to promote the internationalization of education and research institutions and support network collaboration between these institutions, including through information sharing, dual and joint degree programs, etc...;
6. Take concrete measures and comprehensive policies to promote lifelong learning that enables all segments of society to acquire skills, reskill and upskill, especially in foundational skills, ICT and advanced numeracy skills to respond to the shifting demand of the labor market and move up to higher wage, high growth field.

II. Transforming Education and Training for an Inclusive Future of Work

7. Modernize education and training systems to foster inclusive education agenda that is accessible for all. By fostering lifelong learning opportunities from early childhood onwards, modernized systems can lift participation rates and outcomes among disadvantaged groups and ensure that individuals have the opportunity to reach their full potential. APEC members will also take advantage of digital and distance learning platforms to provide flexible learning opportunities.
8. Accelerate innovation in education and training by supporting frameworks, research and good practice pertaining to the innovative use of ICT in teaching and learning to equip students with skills for the future.
9. Foster Science, Technology, Engineering, the Arts and Mathematics (STEAM) skills in APEC region, so as to emphasize the integration of fields of knowledge

with creativity and prepare for our next generation and regional workforce to create decent jobs and achieve innovative and inclusive growth.

10. Promote more dynamic connections between education, training and the world of work. Enhance the use of comprehensive skills development frameworks that meet both educational standards and labour market realities.
11. Prioritize skills development among vulnerable and underrepresented groups which are at higher risk of exclusion and marginalization in the digitalized world to reduce the digital divides, gender gaps, widen access to education and skills across all ages.

III. Promoting People-Centered Agenda for Maintaining Economic Growth and Supporting Workforce Transition

12. Advance innovation and technological diffusion, including the adoption of automation technologies, to generate long term productivity, new business models, occupations, and work activities for the sustainable growth and prosperity for all.
13. Step up investments in the institutions, policies and strategies that will support people of all ages through future of work transitions. Active labour market policies need to be proactive and public employment services need to be expanded. This will also require effective multi-stakeholder social dialogue in the developing and implementation of related policies.
14. Promote flexible working arrangements and online talent platforms for all and ensure that digitally enabled jobs are also quality jobs, with proper pay and social protection.
15. Implement a transformative and measurable agenda for gender equality. Policies need to foster the sharing of unpaid care work in the home to create genuine equality of opportunity in the workplace. Strengthening women's voice and leadership, eliminating violence and harassment at work and implementing pay transparency policies are preconditions for gender equality. Specific measures are also needed to address gender equality in the technology-enabled jobs of tomorrow.

IV. Capacity Building for Entrepreneurs to Expedite the Acquisition of Technology, Reform Governance and Employees Training

16. Develop a set of policies to support and encourage the deployment of automation and AI. Companies encouraged to build the supporting digital assets, big data and analytics capabilities to make automation and AI a success, while at the same time ensure employment and decent salary for staffs.
17. Rethink organizational structure and redesign businesses processes to unlock productivity gains; develop or acquire the talent, discipline, and know-how to

implement the sort of changes that will be needed to harness the full potential of automation.

18. Adapt talent strategy and manage workforce transitions. Business leaders need to ensure that the talent their companies require to transition to more automated operations is in place. This will involve a combination of recruiting automation-savvy professionals, retraining workers to play new roles and preparing workers for a new world of work.

19. Strengthen partnerships between enterprises, start-ups, vocational schools, local authorities and other relevant stakeholders.

V. Promoting synergies among regional and international organizations on innovative skills

20. Establish network of exchanges, sharing experience and best practices among policy makers, researchers, entrepreneurs, start-ups and education institutions in APEC region.

21. Strengthen coordination and synergies on education and employment among international organisations such as ILO, UNESCO, UNESCAP, APEC, OECD, ASEM, ASEAN, etc.

22. Take advantage of the ongoing global commitments, APEC economies' government and multi-actors should endeavor in alignment with the related UN SDGs, especially Goal 4 on Quality Education, Goal 8 on Decent Work & Economic Growth, and Goal 9 on Industry, Innovations and Infrastructure./.
