



Enhancing Job Creation and Skills to Prepare for the Fourth Industrial Revolution

Seoul, Korea November 7-9, 2017

This document briefly summarizes some of the key highlights from the 3rd ASEAN+3 Forum on Skills, which took place in Korea from November 7-9, 2017.

The final forum of the three-year program, “Promoting Skills Development and Job Creation in East Asia (P150980),” was conducted in Seoul on November 7-9, 2017. This forum was the third in a series of annual events on skills development in the ASEAN+3 region, and brought together global experts, and regional policymakers and members of the private sector, with the aim of increasing understanding regarding the Fourth Industrial Revolution (4IR) and its impact on the ASEAN+3 region in terms of jobs and skills. The forum was jointly organized by Korea’s Ministry of Employment and Labor, the Human Resources Development Service of Korea and the World Bank Group.

More than 100 participants from over 16 countries, including government officials, researchers, representatives from the private sector, the World Bank, and other international organizations gathered at the forum to discuss the impacts of the 4IR on human resources development and job creation; the skills needed to adapt to changing labor market needs; and how the private and public sectors can best work together to meet evolving challenges. The event also included a study visit to Samsung Innovation and Creativity Center (C Lab) and Hyundai Motor Studio, who are pioneering technology-centered innovations in Korea.

Theme 1: Outlook for the Future

- Mr. Shin Chul Jang, Vice Head of the Presidential Job Committee of Korea addressed the issues facing Korea’s income gap and labor market. He described the need for a shared vision of an inclusive economy centered on jobs and establishing a virtuous circle of “Jobs – Distribution – Growth.”
- Describing the challenges for the global workforce, Dr. Carl Benedikt Frey, Co-Director of the Oxford Martin Programme on Technology and Employment, highlighted that as the scope of automation expands, low-skilled and low-income countries are becoming more exposed to automation. According to Frey, *“The emergence of new industry suggests that the new types of jobs being developed are vastly more skilled than the average types of jobs.”* Furthermore, as a result of a growing trend towards skilled job clustering, where new jobs are highly concentrated in a few locations that already have an abundance of skilled workers, the acquisition of new skills and reskilling of workforces everywhere becomes more important in order for individuals and indeed entire areas to adapt to the emerging industries and jobs.
- Looking more closely at the challenges and implications for the region, Dr. Harry Patrinos, Education Practice Manager from the World Bank, highlighted that while the East Asian growth model was very effective, it has also left many of the region’s countries reliant on occupations that are among those most likely to be automated. He emphasized that the skills demanded by the labor market are shifting towards non-routine cognitive and inter-personal skills, and changes will imply a need for new skills.

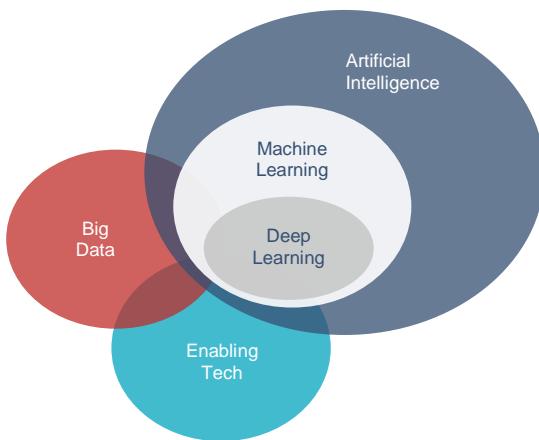
- In spite of all these changes, global experts agree that workforce development efforts must be built on a solid foundation of strong basic skills. The [policy priorities to prepare for the future](#) include:
 1. Focusing on basic skills throughout formal education and early childhood development, including measuring and improving early reading skills;
 2. Providing opportunities to workers to invest in relevant skills for the labor market that allow them to benefit from, and remain immune to, automation;
 3. Using evidence from labor market returns to education to implement financial innovations; and
 4. Using future earnings to finance higher education.
- The discussion also looked at the impact of the 4IR on the future of work in the region. Ms. Loh Gek Khim, Director of SkillsFuture Singapore, introduced Singapore's "Skills Framework," which is an integral component of Industry Transformation Maps - co-created by industry leaders, unions and government - for the Singapore workforce. The Framework provides information on a sector, including its future development, and maps out the career progression pathway of an individual. These pathways outline critical work functions, key tasks and required competencies. The framework provides an idea of existing and emerging skills to education and training institutions as well as a profile for individuals working to acquire the needed skills for a particular job.

Theme 2: Analysis of Current Status

- Dr. So Young Kim, Professor at the Korea Advanced Institute of Science and Technology (KAIST) emphasized that intrinsic motivation paired with an innovative environment will motivate and nurture creativity for science and technology education. She stressed that reforming education and R&D systems are *the priority investments in the age of 4IR*.
- In the discussion on development of human resources for the workplace, Ms. Sunny J Park, Head of Corporate, External and Legal at Microsoft Korea, described how Microsoft has recently experienced a shift in mindset to meet the new challenges. Through a [growth mindset](#) as opposed to a fixed mindset, Microsoft is constantly challenging their employees with a learning culture focused on embracing both opportunities for and challenges to furthering their career development. According to Park, "*In order to tackle this shift, we need to create the right culture and innovative workplace to ensure that people are being creative and are able to develop the skillsets they need to succeed in 4IR.*" Through internal training efforts and partnering with NGOs and government, Microsoft is training employees and members of underprivileged communities to skill up.

Theme 3: Preparing for the Future

- Mr. Tom Vander Ark, Co-Founder of Getting Smart, introduced a framework combining deep learning, big data and enabling technology, which transforms every sector of human endeavor.



Tom Vander Ark (2017), *The Future of Work & How to Prepare*, presentation at the 3rd ASEAN+3 HRD Forum, Seoul, Korea

- In order to prepare for this challenge, Vander Ark highlighted examples of new learning frameworks including [MyWays Competencies](#) and [flipping the curriculum to emphasize transferrable skills](#).
- Dr. Pablo Ariel Acosta, Senior World Bank Economist, shared findings from the Skills Toward Employment and Productivity (STEP) initiative in Philippines. The study reveals that socioemotional skills (SES) are associated with large income increases for women, less-educated workers, and those employed in the service sector. A main takeaway is that mainstreaming SES into regular training programs, after assessment of current delivery performance and impact, will improve labor force skills development.

Case Studies of Human Resources Development Policy in the Region:

A series of country case studies were presented to showcase human resources development policies in the region, including:

- **Korea:** Mr. Jung-Woo Kim, Team Leader from HRD Korea, contrasted the country's higher education enrollment rate with its adult participation rate in education and training. He envisions a shift to a competency-based society with lifelong access to job training. He introduced the National Competency Standards (NCS), which were incorporated into the curriculum to improve relevance of education, training and qualifications for work, and the Work-Learning Dual System, which ensures opportunities for work-based lifelong learning.
- **Malaysia:** For Malaysia's higher education program, Tan Sri Dr. Noorul Ainur Mohd Nur, Secretary General of Malaysia's Ministry of Higher Education, presented the government's strategy, "Redesigning Higher Education," implemented earlier this year. The strategy includes the following programs, which aim to ensure that students are prepared for the 4IR:
 - a. 2u2i: Provides two years of training at University and two years at Industry.
 - b. CEO Faculty: CEOs of companies provide lectures, curriculum development and mentoring at universities.
 - c. ICGPA: Promotes a well-balanced and holistic approach to education, where the student performance evaluation includes volunteer activities, entrepreneurship and social work.
 - d. MOOC: Provides massive online learning and exams.
 - e. Accreditation of Prior Experiential Learning (APEL): Encourages lifelong learning. The professional experiences of a worker can be counted towards a bachelor's degree, allowing individuals to progress to Master's degree work.

- Philippines: Dr. Diosdado San Antonio, Director of the Philippines Department of Education, discussed recent K - 12 Reform, which features cultural-responsiveness, flexibility, ICT-based learning and globalization in the revised curriculum. The reform also emphasizes strong community-industry partnerships and relevance. In this model, industry leaders are taking part in development of learning resources to ensure student capabilities meet industry needs.
- China: In the discussion on skills development models for the future, Mr. Wenbin Hu, Senior Education Advisor from Cambridge Education, shared the results and implications from the Yunnan TVET Project in China. He emphasized the importance of support from leadership on introducing teaching and learning standards, and longer-term and competency-based training in active pedagogy. A key take-away from the project's experience is that it is important to build up a critical mass of trained teachers who can act as role models and change the institutional culture regarding teaching and learning methodology.

Moving Forward:

Dialogue on these and other key issues impacting skills and jobs development in East Asia and the Pacific will continue through annual forums and follow up activities, with the second phase of the Program envisioned to launch in 2018. Upcoming annual forums' thematic focuses will be based on feedback from participants of previous forums. Initial ideas for future discussion include: how developing and developed countries in the region can collaborate on R&D and labor force development amid the 4IR, how public private partnerships can best be formed to address the challenges of the 4IR, and how gaps between current training programs, such as TVET, can be narrowed to best meet evolving industry needs.

Media:



Korean Media Coverage:

1. November 7, 2017 | Korea Herald:

[ASEAN+3 leaders explore ways to secure job amid 4th industrial revolution](#)

2. November 6, 2017 | [Yonhap News](#)

3. November 6, 2017 | [Asia Economy](#)

4. November 7, 2017 | [Labor Daily News](#)

5. November 6, 2017 | [News 1 Korea](#)

6. November 6, 2017 | [Money Today](#)

7. November 6, 2017 | [Queen](#)