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Background Paper: Developing Human Capital

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Background Paper

Human Capital Development

I. Background

Human Capital Development refers to the skills achieved by workers and reflected in increasing productivity and competitiveness of enterprises through innovation in processes and products. Its development involves processes to shape and enhance the skills and competencies of people through either education or work experience.

The educational processes are an essential tool that accompanies the person throughout her life in training, innovation, research and problem solving, as well as capacity building to improve their job performance depending on the requirements of the productive systems.

Under this scope, the theme of human capital development can be addressed from various angles: *education, labor, employability, innovation,* among others being critical the build of alliances within the public and private sector.

From the side of education, the concept of human capital development stands out the importance of Qualifications Systems, which have been created to bridge the gaps between supply and demand of qualifications. Identifying types and levels of qualifications is essential for building a system of continuous training, which allows young workers to combine periods between the labor market and training, thereby increasing their qualifications and obtaining upward career paths. This in turn, facilitates student mobility in the region and enables our people's lifelong learning (LLL), which in turn is linked to innovation.

Employability is not only about technical skills, but also includes certain personal qualities that the individual has to be able to mobilize and combine with their knowledge of the labor market[i]. Efforts put to identify the core or key competencies for life, learning and work, agree that "soft skills" (mainly based on socio-emotional components) are part of the employability foundations[ii], and so are deemed as the basis of a well-prepared workforce meant to meet the challenges of the labor market of the 21st century[iii],[iv]. In general, research worldwide has showed that it is possible to improve the soft and 'non cognitive' skills of people[v], even in adulthood; moreover, its enhancing is related to positive labor market outcomes[vi].

The possibility of students to receive formal and in-workplace education enables them to acquire professional qualifications and facilitates access to the labor market. In the private sector, it means that future employees would meet market demands through their technical profile. Under this model of education, known as dual education in Peru, the private sector and academia can develop a greater nexus of collaboration trough the design and definition of a study plan (curriculum), the establishment of training needs and performing student assessments.

On the other hand, several studies have shown the multiple benefits of higher education in people's lives, including the generation and creation of new knowledge, working methods, personal networks and the ability to solve complex problems[vii]. Higher education, especially in science and engineering, contributes to the cycle of knowledge by enabling significant innovation and, therefore, economic growth[viii].

Furthermore, the generation of qualified human capital in science and engineering has a positive effect on productivity growth rates by increasing the speed at which the cutting-edge technologies are assimilated[ix]. Human capital maximizes the capacity of technology absorption and diffusion, thus helping to reduce the technology gaps between developed and developing economies[x]. There is also a strong relationship between human capital and foreign direct investment, which in turn lead to quality growth for our people. APEC economies believe that human capital development and S&T investment are pivotal to sustained growth of APEC member economies.

Lastly, creating innovative skills in science and technology focused to 21 Century is key for inclusive, robust and sustainable growth. It is important to recognize the importance of developing education and skills in

Science, Technology, Engineering, and Mathematics (STEM) to address the advanced technology requirements of 21st century jobs in the context of knowledge based economy building and to face the changes in our markets; as well as to align education and training to the industry needs in the 21st Century. Also, APEC economies believe that the development of human capital and investment in science and technology is critical to the sustained growth of APEC member economies and social development.

II. Continuity

APEC's work highlights the importance of strengthening the nexus between academia and the private sector as a method for enhancing the acquisition of 21st Century skills, including through industry-academy collaboration to improve learning and recognizing the need to promote coordinated action with the private sector in all job-training programs, including those designed by the governments to be for the socially vulnerable populations. In Peru's case, this goal is being implemented through a dual education approach.

Mobility of highly skilled human capital and cross-border education cooperation are some of the main cornerstones of the APEC's in the HRDWG in the areas of Higher Education, Technical and Vocational Education (TVET). This linkage is recognized in the Gyeongju Joint Statement (AEMM5, Korea, 2012); the 2012 and 2013 Leaders' Declarations, as well as in the Port Moresby Declaration and the Joint Statement of the HLPD-STHE in 2015. This last statement also encouraged the mobility of S&T experts and inter-university collaboration.

In addition, the HRDMM6 (Vietnam, 2014) calls for more support for the training programs as well as the development of skills for work in order to meet the industry demands of competencies, enhance the qualifications systems, provide better access to education and training, and to improve the abilities and employability of the youth. These topics are also part of the 2015-2018 Human Resources Development Ministerial Meeting Action Plan, which prioritizes facilitating research mobility, students, labor and skills development as a way to tackle global issues and address costly, complex and multifaceted problems.

The importance of skill development in APEC was highlighted in several Leaders' Declarations and sub fora recommendations on Human Resource Development (HRD), such as the 2012 Ministerial meeting on HRD; the 2013 Ministerial meeting on Labor Markets and Social Protection. Furthermore, the APEC connectivity Blueprint for 2015 to 2025 recognizes the importance of knowledge and skill transfer to promote an economic development in Asia-Pacific economies. These topics are also aligned are also aligned to various projects on skills development and to the 2015 High Level Policy Dialogue on Human Capacity Building Joint Statement, among others.

The sixth HRD Joint Ministerial Statement and the Action Plan 2015 - 2018 prioritize facilitating research mobility, students, labor and skills development as a way to tackle global issues and address costly, complex and multifaceted problems. The APEC connectivity Blueprint for 2015 to 2025 recognizes the importance of knowledge and skill transfer to promote an economic development in Asia-Pacific economies. In addition, the Policy Partnership on Science, Technology and Innovation (PPSTI) 2015 Work Plan encourages and supports S&T SMEs through multiple channels, platforms, and foster collaboration among government, industry and academia.

Since 2004, APEC has been working on a structural reform agenda in order to reduce behind-the-border barriers and promote balanced, inclusive and sustainable growth. In September this year, Structural Reform Ministers endorsed the Renewed APEC Agenda for Structural Reform (RAASR) to 2020. The renewed agenda consists of three pillars that will require the EC to work together with other fora in order to achieve positive results by the end of 2020. Work done on human capital development will contribute to the second pillar of "deeper participation in those markets by all segments of society, including MSMES, women, youth, older workers and people with disabilities" and will also require conjoined work with the HRDWG.

The 22nd APEC Economic Leaders' Declaration - Beijing Agenda for an Integrated, Innovative and Interconnected Asia-Pacific, recognizes innovation as an important lever for economic growth and structural reform and agree to strengthen the collaboration amongst government, academia, and private sector stakeholders to build science capacity, to promote an enabling environment for innovation and to

include the establishment of training centers for the commercialization of research, and to enhance regional science and technology connectivity.

The 2015 APEC High - level policy dialogue on science and technology in higher education, held in Manila, Philippines proposed as initiatives: to encourage the mobility of S&T experts and inter-university collaboration in higher education. It also recommends to encourage, explore and promote a closer link between human capacity building in science and technology in higher education, STEM career pathways, occupational and employment needs, as well as the needs of business and industry in science and technology, in order to develop and harness regional innovations in science and technology and build more inclusive economies

Finally, the Developing of the 21st Century S&T Innovators: Key to Inclusive, Resilient and Sustained Growth recognize the importance of develop education and skills in Science, Technology, Engineering, and in Mathematics (STEM), as well as, to align education and training to industry needs in the 21st Century. In addition, The 2015 APEC High - level policy dialogue on science and technology in higher education, which took place in Manila, Philippines, proposed initiative to encourage the mobility of S&T experts and inter-university collaboration.

III. Areas of Work and Deliverables for 2016

1 Higher and Technical Education

a) Inter-university collaboration: promotion of cross-border educational cooperation
    a. Capacity building and analysis of Higher Education Quality Assurance systems (HEQAS)
    b. Work on regional benchmarking of university level public research promotion, including the development of toolkits for public research institutions.
    c. Cross-border supply, where services are transmitted across borders (such as twinning and distance or online education programs),
    d. Credit transfer of students involved in study-abroad S&T programs and recognition and validation of short-term studies and research internships in the context of the field of S&T through the regional platform,
    e. Institutional mobility (i.e., cross-border education service providers with branch campuses, franchises, and other similar commercial arrangements), and transnational individual service providers (i.e., individual educators and researchers crossing borders to provide academic and research services).

b) Promotion and exchange of views on issues related to academic mobility (students, researchers and academics), including through mutual recognition of degrees and diplomas as a prerequisite for mobility
    a. Information exchange on different ways and methodologies to build, develop, and implement mutual recognition agreements of degrees and diplomas, thus aiming to facilitate academic mobility, taking into account that the Asia-Pacific region it is perhaps the most diverse in terms of education systems and quality assurance

c) Encouragement of public-private alliances for education and research, including educational infrastructure
    a. Develop strategies and share experiences to attract private investment on education and research infrastructure aiming to reduce or bridge remaining gaps.

2 Employability & Skills for work

a) Promote the development, qualification and mutual recognition of skills and knowledge in the Asia Pacific, with a view to ensure productivity in the region for the future.

    a. Follow up on the initiative on an APEC Integrated Referencing Framework for Skills Recognition and Mobility and the results of the Mapping Qualifications Frameworks Report

    b. Exchange views on the implementation of qualification systems in APEC region economies: the place of the qualifications frameworks and the development of norms for competences

    c. Promote information sharing and research for the development of qualifications systems in cooperation with the private sector, including through ABAC.

b) Strengthening a linkage between academia and the private sector

    a. Advance the APEC Initiative on Youth Employment

    b. Organize a seminar on best strategies, instruments and tools developed by economies to foster the permanent collaboration and linkage between the private sector and the academia in order to align the training offer with the needs of productive sectors.

    c. Promote a review and the organization of a workshop about the lessons-learned from the dual system of vocational education and training: facts and results to improve job training in APEC.

    d. Work to systematize APEC experiences in formal and in-workplace education

c) Development of Skills for the XXI Century, including hard and soft skills

    a. Promote the construction of an APEC Skills Development Capacity Building Alliance (ASD-CBA)

    b. Promote mainstreaming APEC's work on skills and competencies for the XXI Century in relevant sub fora and committees, including the EC.

    c. Work on a framework to lay the basis for future work on human capital and structural reform

    d. Conduct a study to identify the most needed soft skills in the APEC region

    e. Organize a symposium on soft skills for employability, aiming to build the "APEC Regional Knowledge Network on Best Practices for Employability Soft-Skills Development"

3 Educational, Scientific, Technological and innovative capabilities

a) Promoting research funding and training programs in S&T

    a. Work to foster and enhance the APEC scholarship system.

b) Promoting the use of information technology toward the attainment of an innovation network in APEC

    a. Discuss novel ways to link research databases, research centers, digital repositories, and others, in order to exchange experiences and knowledge

    b. Encourage collaboration between the different actors of the innovation system, including through connectivity and information technologies

c) Fostering inter-university collaboration and technology transfer in APEC, seeking to fill the gap between the supply and demand for technology in academia and industry and to align research activities in APEC with industry needs.

    a. Share information about approaches to research in workforce planning and encouraging university – industry links

    b. Share ideas on novel ways to bring together experts from governments, academics, university leaders, industry partners and research organizations from across the Asia-Pacific

d) Advancing APEC efforts to strengthen education and skill development for Science, Technology, Engineering, and Mathematics (STEM) careers, to address the occupational and employment needs of innovative businesses and industries.

    a. Work to build an APEC STEM Community of specialist who provides innovative strategies and resources that enhance ICT skills STEM teachers to share their learning and products.

e) Facilitating the mobility of highly skilled human capital, as well as promoting the international mobility of researchers to facilitate innovation and sustainable growth

    a. Support policies that facilitate the mobility of highly skilled human capital as well as policies aimed at promoting the international mobility of researchers to facilitate innovation and sustainable growth.

IV. Timeframe

Consultations on this concept note and proposals by economies, relevant working groups' Lead Shepherds and Chairs, shall be received until 21st January 2016.

Further consultations will take place during the meeting for the preparatory conference for the 6th AEMM in Beijing (January 23-25 2016)

Activities shall be included in annual working plans whenever possible and intersessional consultations shall start after SOM1.

At SOM 2, in May 2016, taking advantage of HRDWG, EDNET and PSTI sessions, a preparatory conference for the Ministerial meeting on Education shall take place.

The 6th AEMM will take place in Peru on October 4-6, 2016.

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