OEA/Ser.W

CIDI/INF. 445/21

19 August 2021

Original: English

CONCEPT NOTE

Regular meeting of THE

Inter-American Council for Integral Development (CIDI)

31 August 2021

(Prepared by the Executive Secretariat for Integral Development)

THEME: **YOUTH: IMPROVING CRITICAL SKILLS AND READINESS FOR INDUSTRY 4.0 IN THE AMERICAS**

1. **Background/Justification**

The COVID-19 pandemic, the ensuing acceleration of the digital economy and the reshaping of global value chains have emphasized the need for OAS member states to address the skills gap and their workforce readiness to reap the benefits of the innovation-driven economy. The pandemic has resulted in increased poverty and inequality as well as diminished opportunities for social mobility. Women, minorities, and unskilled workers in sectors related to services, such as tourism and entertainment, and those occupations with high informality rates have been particularly impacted. The crisis has also deepened the challenges associated with young people’s productive participation in the labor market. Its main effects have been job losses and the outflow of the youth labor force into inactivity. On the other hand, industries, entrepreneurs, and workers, connected to the innovation and digital economy, from software, e-commerce, engineering, telecommunications, biotech, research and development, among sectors, experienced growth and have expanded opportunities and solutions to respond to countries’ most immediate needs.

Prior to the COVID-19 health crisis, several studies had forecasted the impact of technology and automation on the replacement and creation of jobs for all countries of the Americas. Albeit the level, speed and type of effects predicted may differ, there is consensus that significant and life-altering changes will impact several industries and occupations in the very near future.[[1]](#footnote-1)/ In this regard, it is clear that in the post-pandemic recovery phase, the participation of young people in the formal labor market will depend, in part, on them having developed critical skills and capabilities to pursue job and entrepreneurship opportunities in transformative science and technologies (often referred to as Industry 4.0 technologies) such as new materials, artificial intelligence, Big Data, quantum computing, gene editing, robotics, and blockchain. Closing the skills gap will allow OAS member states to reap the benefits from emerging technologies, improve productivity, contribute to higher growth rates, and reduce poverty.

Within the context of the Inter-American Committee on Science and Technology (COMCYT) OAS member states have identified the importance of providing youth with the necessary skills on transformative science and technologies as one of the priorities for regional cooperation.

1. **Purpose of the Meeting**

This CIDI meeting will offer member states the opportunity to discuss the rationale for regional collaboration to address the gaps on skills and capabilities for Industry 4.0 in the Americas.

Pursuant to the VI Meeting of Ministers and High Authorities of Science and Technology (REMCYT), this CIDI meeting will be an opportunity to present and pursue partnerships to develop an “Americas Youth Academy on Transformative Science and Technologies,” building on existing resources and partner offerings, to provide online training, dynamic learning, remote training labs, mentoring and hands-on experiences for youth in the Americas. Outcomes include options to provide certification, training and other qualifications to equip youth with the necessary skills and credentials to operate in the jobs of the future and an environment spurred by transformative technologies. The focus will be on developing the workforce and entrepreneurs for Industry 4.0 and strategic niches for OAS member states to diversify their economies and build resilience.

**3. Relevance to the Executive Secretariat for Integral Development (SEDI) and OAS Mandates**

The Inter-American Committee on Science and Technology (COMCYT) agreed on the main theme of the VI REMCYT: “Harnessing the Power of Transformative Science and Technologies to Drive our Communities Forward.” One of the subthemes is “Youth: Improving Skills and Readiness for Industry 4.0” which is the area of focus for this CIDI Meeting.

The CIDI meeting will also build on the work that OAS/SEDI is advancing with a regional network of experts and partners in two programs: i) Prospecta Americas on technology foresight of the top 10 transformative technologies, and ii) The OAS HUB of Commercialization and Transfer of Technology for the Americas, with a collaborative methodology to accelerate solutions to solve everyday challenges “from idea to market.”

“Promoting inclusive and competitive economies” is one of the strategic lines for Integral Development in the OAS Comprehensive Strategic Plan **(AG/RES.1 (LI-E/16)**. One of its Strategic Objectives (1.3) is to: “Increase cooperation for strengthening member States institutional capacities onincorporating innovation and transformative technology to create added value and diversification in their economies in a sustainable and inclusive fashion.”

**Resolution "Advancing Hemispheric Initiatives on Integral Development" (AG/RES.2916 (XLVIII-O/18)** instructs member states to: “Endorse the Declaration of Medellín, "Science, Technology, and Innovation as Pillars of Transformation in the Americas" (CIDI/REMCYT-V/DEC.1/17 rev.1), adopted at the Fifth Meeting of Ministers and High of Authorities on Science and Technology in the framework of CIDI, held in Medellin, Colombia. The “Declaration of Medellin” recommends to “incorporate into the work of the four Working Groups the value of the impact of transformative technologies in the economic and social development of the Americas, as a commitment to allow the member states to face the main challenges and opportunities of our region.”

1. **Structure of the Meeting**

Experts will be invited as guest speakers to present some of the main opportunity areas to build the region’s youth readiness on transformative science and technologies.

Member states will be invited to ask questions to the invited experts on their presentations and/or main points covered during their interventions as part an interactive dialogue guided by the Chair.

Following the Question and Answer period, delegations will be invited to share good practices, specific offers of collaboration or needs related to this topic. The key guiding questions for these interventions by member states are:

1) What are the key gaps or challenges for your country on developing skills for youth on transformative sciences and technologies?

2) What specific good practices or approaches that your country has successfully implemented to advance action in this area of youth skills for Industry 4.0?

3) What offers of cooperation or partnerships can your country bring to the table for regional cooperation to improve skills and opportunities for youth on transformative science and technologies?

Expert Presentations (7 Minutes/Max 10 minutes)

* Tito José Crissien Borrero, Minister of Science, Technology and Innovation (MINCIENCIAS), Colombia
* Andrea Escobedo, Director of Government Relations and Regulatory Affairs IMB-Mexico and National Vice President of Inclusion and Diversity (CANIETI-National Chamber of Technology Industries)
* Jorge Vanegas, Dean of the College of Architecture, Director of the Institute for Sustainable Communities, Texas A&M University, President of the Pan-American Academy of Engineering (PAAE)

1. **Outcome of the Meeting**

It is expected that the session will contribute to:

1. Providing information on main trends, challenges and opportunities on transformative sciences and technologies for OAS member states focused on skills development for youth;
2. Identifying priorities and areas of regional cooperation in the Americas to promote youth skills for Industry 4.0;
3. Encouraging member states to present good practices with opportunities for cooperation to reduce existing gaps and advance potential niches and opportunities.
4. Advancing a proposal to develop the “Americas Youth Academy on Transformative Technologies,” leading to the VI REMCYT to:

* Target 10,000+ youth for training in transformative technologies by 2024;
* Increase the number of women actively participating in and benefiting from the digital and innovation economy;
* Create youth groups of excellence to map technological trends and lead regional research projects on transformative technologies in OAS member states.

CIDRP03278E01

1. . Frey, C. B. and M. A. Osborne (2013), “The future of employment: how susceptible are jobs to computerisation?”, Technological Forecasting and Social Change, vol. 114., World Bank (2016), World Development Report 2016: Digital Dividends, Washington, D.C., OECD/ECLAC/CAF (Organization for Economic Cooperation and Development/Economic Commission for Latin America and the Caribbean/Development Bank of Latin America) (2016), Latin American Economic Outlook, 2017: Youth, Skills and Entrepreneurship (LC/G.2689), Paris, October, OECD (Organization for Economic Cooperation and Development) (2017), “Going digital: The future of work for women”, Policy Brief on the Future of Work, Paris., Manyika, J. and others (2017), A Future That Works: Automation, Employment, and *Productivity*, McKinsey Global Institute, January, Cadena, A. and others (2017), ”Where will Latin America’s growth come from?”, *Discussion Paper*, McKinsey Global Institute, April. [↑](#footnote-ref-1)