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International Centre
for Technical and Vocational
Education and Training

Meeting Report



UNESCO-UNEVOC Regional Forum Advancing TVET for Youth Employability and Sustainable Development

27–28 August 2013, San José, Costa Rica

Latin America and the Caribbean

Organized by

UNESCO-UNEVOC International Centre for
Technical and Vocational Education and Training

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Abbreviations

ACCC	Association of Canadian Community Colleges
BIBB	Federal Institute for Vocational Education and Training (Germany)
CARICOM	Caribbean Community and Common Market
CBMET	competency-based modularized education and training
CECAP	Educational Training and Production Centre (Uruguay)
CIDA	Canadian International Development Agency
CONIF	National Council for the Federal Network of Vocational, Scientific and Technological Education Institutions (Brazil)
ECLAC	Economic Commission for Latin America and the Caribbean
EFA	Education for All
EFE	Education for Employment
ESD	Education for Sustainable Development
ETF	Employment and Training Fund
FMS	family management skills
FOIL	ILO Training, Guidance and Employability project
GTVET	greening technical and vocational education and training
ILO	International Labour Organization
INA	Instituto Nacional de Aprendizaje (Costa Rica)
LAC	Latin America and the Caribbean
N/CVQ	National/Caribbean Vocational Qualification
NEET	not in education, employment or training
NGO	non-governmental organization
OECD	Organisation for Economic Co-operation and Development
PNET	Programa Nacional de Educación y Trabajo (National Education and Work Programme, Uruguay)
PP	promising practice
SCCP	Secondary Competency Certificate Programme
SENA	National Learning Service (Colombia)
TAMCC	T. A. Maryshow Community College (Grenada)
TVET	technical and vocational education and training
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNEVOC	UNESCO International Centre for Technical and Vocational Education and Training

Executive summary



Background and context

The Regional Forum of UNEVOC centres in Latin America and the Caribbean (LAC) presented in this report was one of a series of activities aiming to strengthen global and regional harmonization for the advancement of TVET transformation through the capacities of UNEVOC's unique global network of specialized TVET institutions and affiliated partners, following the UNESCO Third International Congress on Technical and Vocational Education and Training (TVET) that took place in China in May 2012. The Forum also provided the opportunity to present evidence on the two priority thematic areas for UNESCO-UNEVOC for 2013, Youth and Skills and Greening TVET. This was achieved through the presentation and discussion of several promising practices in these two areas.

Objectives

The objectives of the forum were to:

- address the topics of Greening TVET and Youth and Skills through discussions amongst high-level experts with international and regional expertise
- reinforce and extend regional networks and partnerships for the advancement of TVET transformation towards regional harmonization and resource mobilization
- further strengthen the UNEVOC consolidation process in the region.



Participants of the LAC regional forum

Promising practices

A total of twelve promising practices were presented at the meeting, five on the topic of Greening TVET and seven on the topic of youth and skills. The practices were very varied and reflected the diversity of the countries as well as the institutions represented in the forum. They included both local, small-scale initiatives sometimes initiated by tutors themselves, as well as larger-scale programmes, often rolled out at national level. All promising practices submitted and presented in the forum will be further analyzed in view of the forthcoming global UNEVOC forum planned for 2014 and in the light of the post-2015 dialogue.

Way forward

The forum reinforced the view that youth and skills and greening TVET are two important areas that should have a central place in the education and training agendas of many, if not all, countries in the region. There is also a need to harness networking to promote further strategies for youth and skills and greening TVET. Strategic partnerships between the private sector, educational institutions and civil society organizations will have to be improved and forged in more creative arrangements to build the enabling environment for improving the skills and competencies of youth and matching these to labour market opportunities.

Introduction



Background and context

In the context of the UNESCO Third International Congress on Technical and Vocational Education and Training (TVET) hosted by the Government of the People's Republic of China in Shanghai in May 2012, UNESCO's director-general was invited to seek to implement the following actions through the UNESCO-UNEVOC International Centre:

- collect and disseminate evidence demonstrating the multiple and diverse policy approaches for transforming and expanding TVET, using the global UNEVOC Network and UNESCO Chairs active in the field
- expand and enhance the capacities of the UNEVOC to play a key role in developing the capacities of decision-makers and practitioners, and facilitate the involvement of all stakeholders.

Following these recommendations and based on the outcomes of an International Forum (November 2012) as well as a regional consultation workshop (March 2013), both facilitated and organized by UNESCO-UNEVOC in Bonn, the Regional Forum in Latin America and the Caribbean (LAC) is another step in a series of activities aiming to further strengthen global and regional harmonization for the advancement of TVET transformation through the capacities of UNEVOC's unique global network of specialized TVET institutions and affiliated partners.

As an outcome of the consultation workshop in March 2013 where regional UNEVOC coordinators from Asia, Africa and Latin America were present, it was decided to highlight the topics Youth and Skills and Greening TVET through the presentation of evidence-based promising practices (PP). The meeting that took place in San José, Costa Rica, on 27 and 28 August 2013 provided an initial platform to showcase these innovative regional initiatives.

In the context of the UNESCO Decade of Education for Sustainable Development (ESD) and the Education for All (EFA) initiative, the Regional Forum for Latin America and the Caribbean provided a platform for addressing issues related to greening TVET and youth employment strategies.

Young people are among the most vulnerable when it comes to secure decent employment. They face barriers when trying to enter the job market, such as a lack of work experience and contacts. In addition, they are the first to be dismissed in times of economic crisis. This makes them at least three times more likely to be unemployed than adults. In Latin America, in addition to being more likely to be unemployed, the quality of the jobs that young people have tends to be worse too. Young people are for example 30 per cent more likely to be employed in the informal sector compared to adults and approximately 53 per cent of those employed are not paying contributions to the social security system or a pension scheme.

At the same time, the world is facing challenges as a result of growing environmental degradation and climatic change. Adapting the concept of sustainable development and greening TVET strategies requires a methodical and systematic approach to the changing job opportunities and skill demands as new industries and job profiles emerge. TVET institutions need to be responsive to these dynamics in order to produce a workforce that matches actual market requirements. This transition implies a revision of existing curricula, qualification standards and training programmes as well as retraining teachers and trainers.

Against this backdrop the Regional Forum's objective was to strengthen regional harmonization for the advancement of TVET transformation through networking, partnerships and mobilization of expertise and resources. UNESCO-UNEVOC together with the Instituto Nacional de Aprendizaje (INA), an active UNEVOC centre and cluster co-ordinator for Latin America, facilitated high-level panels of experts discussing contemporary issues and highlighting skills development strategies, approaches and

innovative practices in the areas of greening TVET and youth employment. The discussion outcomes and recommendations gathered from selected PPs will be further used as regional inputs to the UNESCO-UNEVOC plan of action for 2014. An anticipated inter-regional conference to be hosted by UNESCO-UNEVOC in Bonn in 2014 will provide the required platform for follow-up discussions and activities.

Objectives of the forum

The objectives of the forum were to:

- address the topics of Greening TVET and Youth and Skills through discussions amongst high-level experts with international and regional expertise
- reinforce and extend regional networks and partnerships for the advancement of TVET transformation towards regional harmonization and resource mobilization
- further strengthen the UNEVOC consolidation process in the region.

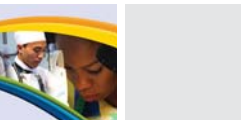
Participants

The forum was attended by thirty-four participants, representing a total of sixteen countries, mostly from the LAC region, but also from the United States of America (USA) and Canada. The majority of the participants came from UNEVOC centres in the region, although there were also participants from LAC organizations interested in finding out more about the work of the network, as well as other international organizations operating in the region (such as the International Labour Organization, ILO) and UNESCO officials from field offices. A full list of participants can be found on page 22.



Some participants of the regional forum

Opening session



Mr Jonathan Baker, officer in charge of the UNESCO Office in Costa Rica, Mr Jose Antonio Li, general manager of INA, and Mr Shyamal Majumdar, head of UNESCO-UNEVOC, gave the welcoming remarks in the opening session of the forum.

Mr Baker pointed out that in recent years, TVET has become a key topic on the international agenda. UNESCO-UNEVOC, through its strategic partners and regional activities, helps Member States to design educational and vocational policies and practices for the working world, as well as develop competencies for citizenship and employability. To invest in TVET is to invest in the future of young people, since education is the most effective way to develop the skills needed for work and for life. In spite of recent efforts only 11 per cent of students in secondary education have registered for TVET since 1999.

In his speech, Mr Li pointed out that as a result of current globalization and its related processes, human resources must be increasingly productive and specialized. This can only be achieved through education, training and work experience. To address these challenges, training must respond to the demands of the labour market, and training programmes must be updated and teachers retrained and reassessed regularly. In addition, new competencies and new professional profiles must be developed. The participants in this forum must find better ways to coordinate their daily work. Technological research, green jobs and decent work can and should be areas of joint efforts.



Mr Jose Antonio Li during the opening ceremony

Representing the main organizer of the Forum, UNESCO-UNEVOC, as well as UNESCO more broadly, Mr Majumdar thanked the host institution and participants for making this regional meeting possible, stressing that this was the first time that representatives from UNEVOC centres and other TVET stakeholders from across the region had come together to discuss the challenges they face and share good practices and experiences.



Mr Shyamal Majumdar during the opening ceremony

In his inaugural speech he pointed out three important events for TVET in 2012:

- the Third International TVET Congress which took place in Shanghai in May 2012 and resulted in the 'Shanghai Consensus'
- the publication by UNESCO of its annual Global Monitoring Report, which in 2012 focused on the topic of youth and skills
- the celebration of the tenth anniversary of the UNESCO-UNEVOC International Centre in Bonn, marked by an International Forum in November 2012.

Mr Majumdar stressed that to respond to the challenges faced by most if not all countries in the world today, profound transformations are needed in the conceptualization, governance, funding and organization of TVET. The call is therefore for transforming TVET in an integrated manner based on policy evidence and practice capable of effectively responding to multiple challenges. Member States at the Third Congress in Shanghai clearly gave UNESCO-UNEVOC the mandate to help achieve this transformation.

Summary of sessions and discussions



Introduction to Theme 1: Greening TVET

The implementation of the concept of sustainable development is one of the key challenges faced by the world today. Greening TVET (GTVET) is the strategic entry point for shaping a world of work that contributes to social cohesion and promotes environmentally sound sustainable development. Mr Shyamal Majumdar, head, UNESCO-UNEVOC, gave the first keynote speech on the first theme of the forum, Greening TVET. His main messages can be summarized as follows.

In the context of change and new educational, technological, environmental and social imperatives, TVET has become a priority for UNESCO. As the current systems of production and consumption are unsustainable, finding ways of greening TVET could contribute to sustainable social and economic development. The current crisis cannot be solved by the same educational perspective that generated it, and therefore we must encourage change in the ways people think and act.

UNESCO-UNEVOC has been asserting since 2004 that TVET is the master key to sustainable human economic development. The most recent contribution was the statement from the meeting of experts sponsored by UNEVOC in 2011 that GTVET must be implemented throughout the educational system to transform the institutions for technical education and professional training. The action strategy must be implemented at three levels: institutional, national and global. As the first tier to this approach, institutional frameworks will focus on providing strategic direction for managing a green campus, adopting a green curriculum, fostering green research, building the capacity of the green community and promoting green culture. At national level, countries will have to consider formulating coherent and coordinated policies for green growth, creating a national sustainable development strategy and strengthening the partnership between stakeholders on which a GTVET framework could be established. The third tier includes sharing evidence-based policy and practices in TVET, facilitating inter-agency cooperation, and enhancing cooperation for capacity-building in pursuit of inclusive green growth.



Mr. Leonardo Ferreira

Implementing this framework will provide a dynamic interplay of strategies and objectives for green jobs and technology development.

The development of environmental skills is a global challenge. To achieve this, there is an international working group comprised of strategic actors, including among others UNESCO-UNEVOC, the Organisation for Economic Co-operation and Development (OECD) and ILO.

Enormous efforts have been made to move forward in this field, and as a result valuable experiences have been gained and translated into good practices that may inspire institutions in other parts of the world. An example is Teaching and Learning for Sustainable Future, a UNESCO multimedia teacher education programme.

Mr Leonardo Ferreira, deputy director, ILO Sub-regional Office in San José, gave the second keynote speech on the subject of greening TVET, concentrating on green jobs. These are defined as jobs that reduce the consumption of energy and raw materials, limit the emissions of greenhouse gases and minimize waste, and protect and restore the ecosystem. Green jobs are also 'decent jobs', that is, jobs that provide an adequate income, social security and respect workers' rights. According to data from five countries in Central America (Costa Rica, El Salvador, Honduras, Panamá and the Dominican Republic), there are approximately 688,000 green jobs, comprising 5.6 per cent of total employment. In general, the number of green jobs has been rising more rapidly in the period from 2001 to 2009 than the total number of jobs.

There are four types of possible effect of a green economy on jobs: some jobs will disappear, some jobs will be replaced by others, new jobs will be created and some jobs will be transformed. The lack of necessary

skills and competencies can act as a barrier to the development of green jobs in many developed and developing countries. TVET institutions in the region are responding to these challenges through the development of new curricula, new evaluation and certification methods, and definitions of competencies.

Some of the challenges facing the sector include the lack of knowledge, particularly with regard to forecasting the number of green jobs that will exist in the future; better coordination between different sectors and ministries (such as ministries of environment, education and energy) to achieve more coherent policies; development of a new set of competencies or updating existing ones; awareness-raising on environmental issues in educational and training contexts and promotion of social dialogue; and promotion of decent work linked to green jobs and ensuring gender equality.

Panel 1: Greening TVET initiatives in the LAC region

This was a panel session on the topic of greening TVET. Five PPs on this topic were presented: two from Costa Rica, two from Colombia and one from Grenada (in collaboration with the Association of Canadian Community Colleges, ACCC). The session was chaired by Ms Astrid Hollander, programme specialist, UNESCO Regional Bureau for LAC.

The panel session shared national initiatives on promoting greening TVET, focusing mainly on innovative and transferable practices.

Discussion

Mr Javier Bonilla, head of the INA Vehicle Mechanics Section (Núcleo de mecánica de vehículos), presented the first PP in the field of greening TVET. His presentation was entitled 'Integral plan for waste management in the vehicle mechanic shops in the framework of professional training (INA/Costa Rica)'. As part of his presentation, he shared the following reflections.

In 2010, a study was carried out in INA training workshops throughout the country, which revealed that the waste from vehicle mechanic shops was not being disposed of appropriately. In 2011, the results of this study were published and it was agreed to develop a project to reduce this environmental impact, while at the same time generating green production processes and green jobs. In 2012 INA designed a course on waste management and began training the institution's teachers on this subject. In 2013 the results of this training are beginning to bear fruit. The

training workshops now have a waste management plan which was designed, and is being implemented and upheld, by teachers and students.

The imminent challenge for the upcoming years is to redesign the global training offered to promote a focus on sustainability, reorienting methodological learning activities to achieve a green culture. In addition, investments must be made in the acquisition and manufacture of equipment to promote the cleanest possible production and reduce the pollution caused by some processes.

The second PP in the field of greening was presented by Mr Carlos Sánchez, team member of the subsection of environmental management in the INA Materials Technology Section (Núcleo tecnología de materiales). The presentation explained the successful experience of having created a subsection devoted specifically to working on environmental management within INA. This subsection is in charge of designing training and professional education services for all the institutional technical areas, with the final goal of generating green jobs. To achieve this, it promotes joint efforts with other key players such as the state, private industry and non-governmental organizations (NGOs).

In Costa Rica, there are many environmental laws and initiatives (such as the Blue Flag Programme and the Proposal to Make the Country Neutral in Carbon Emissions by 2021), which call for a great deal of training in environmental management. The target audiences for training are people over the age of 15 who need to develop environmental competencies.

In 2012 over 180 training and professional education opportunities were provided in the environmental management subsector. The number of these services has been increasing every year (for example, in 2010, 120 such training opportunities were offered) and every time they deal with new technical subjects.

Among the programmes that have been designed and offered are Operator for Collection Points, Operator for Swimming Pools, and Operator for Waste Water Treatment and Potable Water Supply Systems.

Among the areas and subjects covered are management of solid waste, mitigation of water and air contamination, environmental management systems, management of hospital and hazardous waste, and fundamentals for handling waste products from some specific industries (furniture, graphics and so on).

Another aspect worth noting is participation in ILO's Training, Guidance and Employability project (FOIL)

to develop technical norms for work competency to generate green jobs.

The third PP in the field of greening was described by Ms Cruz Mira from Colombia's National Learning Service (SENA). The presentation was entitled 'The development of competencies for integral waste management through the strategy of training for projects'.

SENA's work is based on the premise that knowledge is key to the competitiveness of organizations, regions and countries. Therefore, SENA promotes what it calls 'knowledge networks' as a way to catalyse the competitiveness of businesses and regions, as a means for social inclusion. Currently, SENA has thirty-three knowledge networks, one of which is the Network for Environmental Knowledge. The thematic areas of the Network for Environmental Knowledge are biodiversity, environmental management, management of water resources, forestry resources, and agroecology and rural development.

The El Tablazo public training college (in Barbosa, Antioquía, Colombia) had a very positive experience in the management of solid waste. This initiative sought to articulate norms, activities, infrastructure and equipment so as to formulate a coherent plan to help take environmental sustainability to the target population through project development. The El Tablazo initiative included students, instructors, parents and community members, and achieved a minimization of waste and its reuse to generate economic benefits through the sale of recovered materials. Learning activity guides were published which guided efforts to raise awareness among the

project participants. The educational sessions were successful. The students developed a video¹ showing the results of their efforts and designed a mascot.

The project currently continues with the certification of businesses that receive the waste and a record of sales of recycled materials. In addition, management indicators are being incorporated to help with analysis of impact and evaluation and to make future decisions.

The fourth PP in the field of greening TVET was presented by Ms María Eugenia Mosquera, from SENA, Colombia. Her presentation dealt with the establishment of seed banks for recovering species in the region of Chocó, Colombia. The initiative involved the establishment of a seed bank to recover traditional agricultural species through agroforestry plots and encouraging the multiplication of these species through extension work with families in Alto Baudó, Chocó. Thanks to this bank of native agricultural species, it was possible to preserve food autonomy, as well as generate profits through commercial sales for 210 families. The bank stored traditional seeds (rice and corn), as well as farm animals for reproduction (ducks, pigs, hens). In addition, planting plots were established and timber trees were planted for future commercial sales.

The impact of this project can be analysed from different perspectives: **social** (production was diversified, guaranteeing access to foods and an improvement in the diet of families participating in the project), **economic** (a surplus was generated for sale), **environmental** (organic inputs were used) and **cultural** (traditional knowledge was recovered).

¹ <http://youtu.be/mzj6BL3cIWs>



Regional forum participants during a session break

The project's success is reflected in the following data: six seed banks established and working (rice and corn), two species of native pigs recovered, thirty-four planting plots functioning, thirty-four farms with timber and fruit species for future exploitation, a protein bank for animal feed and a record of traditional knowledge for the recovery of cultural aspects of the region.

The challenges faced by this project in the immediate future include the difficulty of selling the products at a commercially acceptable price because of the high costs of domestic transportation, human displacement as a result of the internal conflict in Colombia, climate conditions, obtaining and conserving seeds, and plant pests and diseases.

The fifth and final PP was presented by Mr Craig Morrison of ACCC, Canada, and Mr John Telesford of T. A. Marryshow Community College, Grenada. The presentation by Mr Morrison was entitled 'Practices from the CARICOM Education for Employment Programme', and his main contributions are summarized below.

The Caribbean region is characterized by a collection of small states with limited financial resources and insufficient human capacity. The region faces a myriad of pressing environmental challenges and governments are ill-equipped to confront them. Much of the financial and public sector human resources are now consumed in an effort to meet commitments, often of dubious value, to multilateral agreements.

A truly effective drive towards sustainability in the Caribbean remains elusive. The Caribbean is constrained by an endemic lack of coordination amongst public sector agencies and a general mistrust of the private sector – from which most environmental solutions come. This problem exists at the national, sub-regional and regional levels.

Integrating sustainability into the curriculum of TVET in the Caribbean is a huge opportunity. It is also the key tool to effect and attitudinal change in favour of sustainability.

Embedding sustainability concepts in the curriculum, and ensuring all graduates have sustainability competencies, underscores the role TVET has in shaping the future Caribbean economy. Greening TVET will



Participants from the Caribbean

help to foster sustainability within all sectors of the economy – and promote a larger role for the private sector in creating solutions.

Mr Telesford's presentation was entitled 'Environmental sustainability practices – a multi-disciplinary curriculum' and included the following points:

The Grenadian government considers the environmental component to be essential on the road towards a new, green economy. The Canadian International Development Agency Education for Employment (CIDA EFE) is a project to develop a curriculum relevant to the entire CARICOM region: a curriculum for 'eco-green' careers. T. A. Marryshow Community College (TAMCC) has spearheaded the creation of this new curriculum ever since it was chosen for this task by ACCC. The curriculum is innovative in terms of creating sustainable environmental practices, and will allow for the creation of a technical supervisory team with a regional qualification – the Caribbean Vocational Qualification (CVQ). It is also very practical, and focuses on environmental knowledge in various occupations from different fields. It identifies the environmental practices necessary so technicians can develop the skills required in this area. Within this initiative, support is being provided for the development of sixteen separate curricula.

Another key to the programme's success is the use of a multidisciplinary and multisectoral focus to create a final product. There is a central section of specific modules which provides detailed information about individual occupations by sector. The goal is to promote sustainable development, through environmental literacy, which is defined as 'An understanding of the environmental, social and economic dimensions of human–environment interactions, and the skills and ethics to translate this understanding into life choices' (Reynolds et al., 2010)².

Environmental literacy should lead to changes in the individual and the society at large, including the development of new occupations and levels of supervision. This environmental knowledge can be applied in several occupational areas, such as tourism, agriculture, transportation, construction, and the health and education of children.

²Reynolds, H.L., Brondizio, E.S., and Robinson, J. M. (Eds) (2010) *Teaching Environmental Literacy. Across campus and across the curriculum. Bloomington-Indianapolis: Indiana University Press.*

Introduction to Theme 2: Youth employment and skills development

In this session of two keynote speeches, chaired by Katerina Ananiadou, from UNESCO-UNEVOC, a general vision was given of the subjects related to youth unemployment and the development of skills, based on data from different parts of the world.



Ms Wendi Howell during her presentation

Ms Wendi Howell, programme director of CETE, known as the Center on Education and Training for Employment of the Ohio State University, made the following points on youth unemployment in the USA.

Unemployment among youth in the USA is twice that of other members of the labour force. Young people between the ages of 16 and 24 are the hardest hit by unemployment. In October 2010 youth unemployment reached a record high of 28 per cent (per U6 measurement). The recession had a more severe impact on young people than on the general population. Facts like the above demonstrate the crisis undergone by young people in the USA, and which is spreading around the world as a result of policies that are not in line with the development needed by societies.

Ms Howell discussed some of the reasons that there is a higher rate of unemployment among youth, including:

- The overall health of the economy: almost half of the youth who are employed currently work in leisure/hospitality or the retail trade, industries that have been among the most affected by the recession. The construction industry also employs a significant number of youth, and it too has been badly affected;

- In addition to the poor state of the economy, much of the increase in youth unemployment can be explained by the increasing tendency for adults to take up jobs which could be performed by young people. One force prompting this is competition from immigrants. Job take-up by immigrants and others in the adult labour market can explain at least half the drop in youth employment. So not only do youth tend to gravitate to jobs that are sensitive to recessions, they gravitate to jobs that are also sought by immigrant workers;
- Because of technology advancements in production and automation, middle-skill/middle-income jobs in the USA (as well as many other developed countries) are disappearing, while jobs at the top and bottom of the wage distribution are growing. Some of the less-educated who were in mid-level occupations have been displaced into lower-paying, lower-skilled work. This 'occupational polarization' can explain the tendency for adults to seek jobs that had previously tended to be filled by youth. Occupational polarization is well documented in the USA. Employment growth is 'polarizing' into relatively high-skill, high-wage jobs and low-skill, low-wage jobs, reducing the demand for mid-skill, mid-wage workers;
- Delayed retirement: because of the recent downturn, retirement savings are not yielding what their owners had anticipated. Baby boomers, hurt by recent stock-market downturns, are choosing to delay retirement and either continue working or go back to work because they cannot afford to retire. So not only are there fewer jobs in the economy, fewer workers are retiring and opening up positions.

Ms Howell pointed out that only a stronger economy can remedy most of the unemployment issues. Youth employment is more subject to fluctuations than adult employment, and the best way to help younger workers in the USA and elsewhere in the world is to enable a macroeconomic environment for entrepreneurship, investment and wealth creation. Other policy measures for addressing youth unemployment include education and training institutions and programmes with improved relevance to labour market needs; better linkages to local employers and local economies; career pathways or "career lattices" with multiple entry and exit points in and out of school and employment; connecting secondary education with postsecondary systems and the workplace; combining business processes with depth of knowledge in a technical area;

and applying transferable skills in a broader context, to meet industry demands for high-skill, innovative employees.

The second keynote presentation on the topic of youth unemployment was delivered by Mr Mauricio Dierckxsens, programme specialist at the ILO Sub-regional Office in San José. Mr Dierckxsens' presentation was entitled 'Youth employment: a call to action. Points for discussion'. He started his presentation with some relevant statistics: 75 million young people are currently unemployed worldwide, four out of ten unemployed people are young women or young men, and young people are three times more likely to be unemployed than adults. In addition, the quality of jobs available to young people is deteriorating rapidly: they are poorly paid, primarily to be found in the informal economy and lack protection by labour laws. Latin America has a population of 590 million, of which 106 million are young people between the ages of 14 and 24. Of these 106 million, approximately 36 million only study, 35 million only work, 14 million study and work and 20 million are neither in education or employment (NEETs).

In the next ten years we will face the challenge of creating 500 million jobs on the planet. Public policies to promote youth employment should include coherent macroeconomic and microeconomic policies; promotion of macroeconomic policies that encourage employment and increase demand; measures that promote the sustainable development of the private sector; access to financing; and help the transition to the formal economy.

The transition from school to work is also important. To improve this, a better coordination between policies that increase access to work and improve the quality of TVET is necessary. Developing systems for the validation and certification of prior knowledge (that is, knowledge acquired informally or on the job) is also important.

Other means to fight youth unemployment are early interventions aimed at preventing long-term unemployment, unemployment insurance and a social safety net. Self-employment can also be encouraged through policies to promote small and medium-sized businesses, cooperatives and other socioeconomic tools. For all of this, the strategic measures required include training for entrepreneurship, access of smaller businesses to financing under optimal conditions, and their access to government acquisition processes.

Panel 2: Youth and employability in the LAC region

This was a panel session on the topic of youth and employability. Seven PPs on this topic were presented: one from Barbados, one from Belize, one from Guyana, three from Jamaica and one from Uruguay. The session was chaired by Ms Wendi Howell, Ohio State University.



Mr. Simon Yalams

Discussion

The panel session shared national initiatives on developing skills for promoting youth employability, focusing mainly on innovative and transferable practices.

Mr Simon Yalams, of the University of Technology (UTech), Jamaica, opened this panel with a presentation entitled 'Enhancing skills development and increasing access to instructional resources in TVET through the production of instructional DVDs'. The main aim of the initiative outlined was to increase access to skills training through provision of alternative, supplementary instructional resources in TVET, in an effort to address the lack of resources and laboratory facilities currently faced by many TVET institutions in Jamaica. In addition, the initiative aimed to motivate TVET teachers to create instructional materials from locally available resources. Three instructional DVDs were developed, following a specific approach, and have been piloted. The results of the pilots have been promising and indicate that these DVDs enhance learning of knowledge and skills in TVET. The DVDs provide learners with additional access and opportunities for learning in TVET. The developers are currently exploring ways that the initiative can be taken forward on a larger scale.

Ms Natalee Plunkett of the Heart Trust, Jamaica outlined a PP in a presentation entitled 'School to Work', concerning a programme that reinforces a direct connection between secondary schools and the world of work to guarantee the employability of the participating youth. This initiative is aimed at creating a workforce that is trained and certified under international norms, in order to stimulate investment, create jobs, improve productivity, and enhance competition and the prosperity of all Jamaicans. School to Work is supported by the Heart Trust, National Training Agency, which suggests that government support is necessary for the success of policies related to work and education. The indicators gathered so far indicate that the programme has had a positive impact on number of young people enrolled in training programmes and on employability. However more data need to be collected to allow for a more rigorous evaluation.

Ms Maria Isabel Allende, from the Programa Nacional de Educación y Trabajo (National Education and Work Programme, PNET) of the Ministry of Education, Uruguay explained efforts to move young people into the labour market by PNET and the Educational Training and Production Centre (CECAP). These focus on learning and flexibility, which in turn lead to the following indicators of success:

- active citizen participation and movement
- learning through experience focused on the subject and the individual's educational processes
- subject-based educational spaces that contribute to holistic development
- follow-up on learning processes, both individually and in groups
- teachers with different types of training who work as a team to develop a holistic proposal.



Ms Maria Isabel Allende

Ms Margarita Gomez of the Ministry of Education, Belize, spoke about her country's experience with the Law to promote TVET. The initiative deals with improving the image of, and access to, TVET through a combination of the Education Law and the Law on TVET to obtain a unified Law on Training and Education under the Ministry of Education. This unified law in Belize has led to the following results:



Ms Margarita Gomez

- It grants the same importance to TVET as to academic education;
- It promotes the creation of basic structures to promote both systems;
- It provides increased access to TVET for secondary school students;
- It enables academic institutions to include TVET in their curricula if they so wish.

Mr Henderson Eastmond, TVET Council, Barbados, first gave an overview of his organization, the TVET Council, which is responsible for issues relevant to the social and economic development of Barbados, such as:

- promotion of competence-based (i.e. standards-based) TVET as the key to individual, organizational and international competitiveness;
- the development of a National Training Plan to identify the knowledge and skills needed to guide the investment in workforce training;
- provision of grants through the Employment and Training Fund (ETF) for the training and retraining of workers, the unemployed, retrenched workers and the self-employed;
- establishment of a framework of occupational standards and competence-based certification, the National/Caribbean Vocational Qualifications (N/CVQs).

In addition the TVET Council is involved in the development of new curricula or the upgrading of existing ones so that they are based on competences. The aim of much of this work is to improve the skill set of young people so as to increase their employability.

Mr Aubrey Overton from Guyana presented an initiative entitled 'Secondary Competency Certificate Programme' (SCCP), a school-to-work transition programme. Its aim is to offer students in the secondary school system technical competences in a variety of subject areas, an alternative pathway for the acquisition of knowledge, skills and desirable attributes for continuing education, further training and the world of work. The SCCP utilizes the competency-based modularized education and training (CBMET) approach for its delivery, and uses modules that are developed from industry-approved national and regional occupational standards.

The initiative has resulted in a sustainable TVET programme which produces graduates who can transfer acquired knowledge, skills and attitudes to new situations and who also meet employers' expectations. It has also had an impact on economic growth and poverty reduction, and has reduced the number of dropouts from schools and the gender bias for TVET programmes.

In the last presentation in this panel, Ms Audrey Porter-Ricketts, University of Technology, Jamaica, presented a PP entitled 'Applying family management skills (FMS) to feeding, greening, beautifying and empowering the University of Technology, Jamaica (UTech) Mustard Seed Community'.

This initiative was aimed at sensitizing students to new ways of learning and engagement, encouraging students to participate in the greening agenda, promoting sustainable education, and introducing students to the idea of becoming change agents themselves as well as extending this to their communities. Some of the outcomes were:

- diverse learning experiences
- expanded networks
- holistic approach to teaching
- satisfied participants
- transformation of a group of young people so that they can remain engaged and evolve despite moments of chaos, frustration, and limited resources.

Finally, a set of recommendations were put forward, including the creation of an electronic database of this and other such initiatives that show TVET-centred learning in non-traditional disciplines, an instructional manual based on this project, and the suggestion that faculty should be encouraged to look at new ways of teaching general, non-TVET disciplines.

Panel 3: Inter-regional perspectives

In this session the focus was on perspectives and approaches from other organizations working in TVET and skills development in the LAC region and beyond. The session was chaired by Ms Katerina Ananiadou of UNESCO-UNEVOC.

Ms Leah Jurkovic from the Association of Community Colleges Canada (ACCC) gave a presentation on the ACCC's work in the region. ACCC's mandate encompasses research, advocacy, partnerships and marketing. In addition to its work in Canada, ACCC is currently involved in over 700 projects in more than 105 countries. Ms Jurkovic first gave an overview of some of the initiatives with which ACCC is involved in Canada, with particular emphasis on the topics of greening TVET, and youth and skills. Initiatives relevant to greening TVET include developing the ACCC Pan-Canadian Protocol for Sustainability, green campuses, and community partnerships in greening TVET. For youth and skills, Canadian colleges and institutes are focusing on applied, competence-based education to ensure that young people have the skills necessary to find suitable employment. The emphasis has been on building links with employers and promoting essential and entrepreneurship skills programmes.

ACCC's Education for Employment (EFE) programmes in all regions outside of Canada focus on:

- a multi-level approach to capacity-building, involving the government or ministry for policy development; institutions, for teacher training and curriculum development; and the region, for networking and sharing
- improving access and the quality of TVET programmes for youth via support to public institutions and ministries
- increasing vulnerable youth's social and economic access to employment and self-employment.

In the CARICOM countries protection of the environment is critical to future economic stability. An environmental strategy that includes sustainability in all institutional and policy processes has therefore been developed. Environmental sustainability and renewable energy technologies have also been

included into all TVET programmes. In the Andes, the EFE programme has included a sustainability plan focusing on gender, environmental issues, poverty reduction and cultural diversity.

Mr Luiz Augusto Caldas Pereira and Ms Ana Carolina Oliveira, from CONIF (the National Council for the Federal Network of Vocational, Scientific and Technological Education Institutions), Brazil, then gave an overview of CONIF's work both in and outside Brazil. CONIF gathers together thirty-eight federal institutes, two federal centres for vocational and technological education, one federal university of technology and the Colegio Pedro II, and provides a platform for discussion of proposals and policies for the development of TVET. The overall goal is to strengthen the high quality of learning in the federal institutes of vocational, scientific and technological education all over the country.

Internationally CONIF is active in many projects in collaboration with the Brazilian Cooperation Agency (ABC) and the Foreign Affairs Ministry (MRE). Ms Oliveira highlighted two projects. Thousand Women (Mulheres Mil), in partnership with ACCC, has the aim of empowering and training 1,000 disadvantaged Brazilian women in personal, professional and social development. Federal Institutes at Border is a programme in partnership with Uruguay. Both these projects have achieved results particularly in promoting cross-country cooperation and partnerships.

Mr Luis Fernando Sanabria, of the Fundación Paraguaya, gave an overview of the work of this foundation, focusing on the concept of education that pays for itself. The schools operated by the foundation are self-sustaining, and are aimed at disadvantaged young people from rural areas of the country. The schools offer these young people TVET, but also equip them with a large range of other skills, such as entrepreneurial, communication, problem-solving and interpersonal skills. The innovative aspect of the schools is that students gain work experience and build their entrepreneurial skills through work in the schools' own micro-enterprises. These also enable the schools to generate their own funding and therefore be self-sufficient. Mr Sanabria described in detail how the learning model of the schools works, the educational principles that guide it and the curricula used. The schools have enabled a large number of young people from disadvantaged backgrounds to become successful entrepreneurs. In addition to the four schools operating in Paraguay there is currently an international network of fifty organizations in thirty countries that use a similar model of self-financing.

Ms Patricia Guadarrama Hernandez and Mr Jorge Galileo Castillo Vaquera, of CONALEP in Mexico, gave a general presentation on the work of their institution, focusing in particular on international cooperation activities and on the attempt to implement a version of the dual TVET system in Mexico. This started with a pilot project in the State of Mexico in 1990 in which 720 students participated. More recently an agreement was signed between CONALEP and the BIBB (Federal Institute for Vocational Education and Training, Germany), that will enable the further implementation of this. Training workshops have also taken place in this context, allowing the exchange of experience between German and Mexican stakeholders. CONALEP is planning to train approximately 4000 students under this modality in 2014.



Mr. Robert Parua

CONALEP is currently collaborating with the Federal Secretary of Education to formulate a public policy regarding TVET in Mexico, which will include the implementation of a dual system of TVET modelled following the the German model. A pilot project of dual training is currently under way and CONALEP is also participating in the development of an evaluation model. There is also a public commitment by the Federal Secretary of Education to present a draft law to regulate the implementation of the dual system of technical and vocational education to the Federal Chamber of Deputies at the beginning of 2014. CONALEP is also participating in this initiative with the Under-secretary of Upper Secondary Education, the Mexican Employers Association (COPARMEX) and the German-Mexican Chamber of Industry and Commerce (CAMEXA).

Ms Astrid Hollander, of the UNESCO Regional Bureau for Education in Latin America and the Caribbean, gave an overview of UNESCO's recent activities in the

LAC region in the area of TVET. She pointed out that the region is quite large and heterogeneous, and that therefore the challenges faced by one country may not be the same as those in other countries. Focusing on the two topics of youth and skills, and greening TVET, Ms Hollander highlighted some of the challenges, as well as progress made in the region.

Proposals for UNESCO's lines of action in the field of TVET in the region include facilitating South-South cooperation in topics such as governance, quality, teaching, financing, monitoring and evaluation; an information campaign on the Shanghai Consensus, the reforms of the normative instruments, and the situation in the region; increasing the number of countries undertaking a policy review of TVET; and strengthening inter-agency cooperation.

Panel 4: Sub-regional perspectives within the LAC region

The aim of this session was to provide an overview of the activities of UNEVOC centres in the region, from the perspective of the three cluster coordinators and co-coordinators of the UNEVOC Network: the Caribbean and Latin America, including Brazil. The session was chaired by Mr Robert Parua, of the UNESCO Cluster Office in Kingston.

Mr Simon Yalams of UTech in Jamaica and Ms Odette Brown of the Heart Trust gave an overview of the activities of the Caribbean cluster. First they presented the context within which these activities take place, which includes the UNESCO Global TVET Strategy, the recommendations of the Shanghai World Congress and the plan to consolidate the UNEVOC network, including the creation of clusters.

Specific activities in the Caribbean cluster included consultations and virtual meetings with UNEVOC centres, two strategic meetings with TVET stakeholders in Jamaica, the planning of a Second National TVET Forum to be hosted by the Heart Trust NTA in Jamaica in October 2013, a UK Skills Seminar for the Caribbean, and the planning of the Second Regional TVET Conference in 2014, to be jointly sponsored by UNESCO and the British Council. The focus of these activities has been:

- revitalization of UNEVOC centres and network activities
- increasing partnerships and engagement of stakeholders
- youth employment and skills development programmes

- TVET policy reviews and implementation of recommendations arising from them
- the implementation of the CARICOM TVET strategy
- strengthening of interaction with the Latin American cluster.

The Heart Trust in particular has worked on increasing its visibility as a UNEVOC centre, through the organization of a relaunch of the centre and promoting the e-forum as a knowledge-sharing platform. The national TVET Forum scheduled for October 2013 will focus on sharing TVET policy with key stakeholders, obtaining the necessary buy-in from employers and industry, and re-energizing the Jamaican Association of Technical and Vocational Educators and Trainers.

The presenters finished by outlining the future plans of the cluster. These include:

- developing a work plan for strengthening UNEVOC centres in the Caribbean
- a Caribbean Consultation for UNEVOC centres
- the second TVET Conference for the Caribbean
- a website to promote UNEVOC centre activities
- collecting annual reports of activities from UNEVOC centres
- scaling up and promoting dialogue with directors of UNEVOC centres
- mobilization of resources to strengthen the UNEVOC network in the Caribbean.

Mr Fernando Rodriguez Araya, of the Instituto Nacional de Aprendizaje in Costa Rica, presented an overview of the activities of the UNEVOC centres in the Latin America cluster.

Mr Rodriguez first presented some background information on the region, focusing especially on its diversity and challenges. For example, according to the Economic Commission for Latin America and the Caribbean (ECLAC), Latin America is the most unequal region in the world, with 31 per cent of the population living below the poverty line. The TVET priorities in Latin America include:

- labour competences (job skills and TVET teacher training)
- youth training and employment
- gender-equality training

- productivity
- information and communications technology
- entrepreneurship
- investigation, development and innovation
- greening TVET (waste management/ alternative fuels/CO2 neutrality/climate change research/ renewable energy)
- expansion of membership and participation in WorldSkills International competitions.

He then presented some programmes focusing on addressing the challenge of youth unemployment that have been carried out by countries in the region, such as 'More and better jobs for young people' (Argentina), the 'empleate' strategy (Costa Rica), the National Youth Inclusion Programme (Brazil), the Young Entrepreneurs Model (Mexico) and the Law on Youth Employment Subsidies (Chile). UNEVOC and other TVET centres in the region have also been active in connection with upcoming WorldSkills competitions taking place throughout the region.

Finally Mr Rodriguez presented two examples of regional cooperation and networking outside the UNEVOC network: the CINTERFOR/ILO Inter-American Centre for Knowledge Development in Vocational Training, founded in 1963, and the Central America and Dominican Republic Network, founded in 2000. He then outlined some of the challenges and future plans for better regional cooperation and networking in TVET: gradually incorporating more centres and good practices to the UNEVOC network, strengthening horizontal (South-South) cooperation among the network centres beyond the regional or worldwide fora, promoting student and teacher exchanges, and establishing specific and simple network rules.

Ms Sonia Ana Charchut Leszczynski, from the Federal University of Technology – Paraná (UTFPR), Brazil, gave an overview of the institution's history and its activities and links with the UNEVOC network over the years. The UTFPR is a unique institution in Brazil, as it is the only federal university of technology. The university conducts research and offers courses mostly in technological and engineering subjects.

Ms Charchut argued that communities of practice need to be established within and among TVET institutions in order to remove some of the stigma attached to TVET in many countries. Institutions need to change in order to better reflect the characteristics of new students and their diversity. This change should also be reflected in teachers' approaches and methods.

Study tour



Participants to the forum had the opportunity to take part in a guided tour of the INA campus on the second day. The group visited two sites on the campus: the agriculture and farming workshops and the car mechanics workshops. The tour gave all participants the opportunity to visit the premises of the host institution, but also to find out more about local practices, particularly in the domain of agriculture. For example, it was interesting to see how different materials can be used in agriculture to minimize the use of scarce resources such as water and utilize materials that can be found in abundance in the country (such as volcanic stones). Teaching such techniques to TVET students enables them to develop life skills that help them to make a living that can be combined for example with caring responsibilities at home.

Closing session: strengthening the UNEVOC network in LAC, conclusions and way forward



At the beginning of the closing session, two participants (Ms Audrey Ann Porter from Jamaica and Mr Luis Fernando Sanabria from Paraguay) gave their informal feedback on and reflections about the whole event. They both stated that the meeting had enabled them to gain a better understanding of the nature, scope and working methods of the UNEVOC network, and to share expertise and good practices with colleagues from across the region. They were particularly pleased with the presence of TVET experts from English, Spanish and Portuguese-speaking communities in the region, as there is not often an opportunity for these different communities to interact.

Mr Shyamal Majumdar, UNESCO-UNEVOC, then addressed the participants. In his closing remarks he first presented a brief history of the UNEVOC network and its evolution over the years. This brief history helped to explain why there are different types of

institutions involved in the network. Mr Majumdar then asked all participants to give a brief account of their centre's activity in the last year, in its capacity as a UNEVOC centre. This helped all participants to think of the dual identity of their institutions, as they are UNEVOC centres in addition to their regular identity of being, for example, a training institution or a ministerial department. Mr Majumdar encouraged all participants to enhance the UNEVOC identity of their centre, for example through allocating a small physical space for UNEVOC-related materials in their institution, which could help to publicize their identity as a UNEVOC centre, as well as UNEVOC's actual work. Encouraging staff members to register and participate in the e-forum is another way of boosting the UNEVOC identity of institutions and their staff. It is also important to use the UNEVOC logo in any activities they take part in (such as conference hosting).

Mr Majumdar also gave an overview of UNESCO-UNEVOC's clearing-house activities, including the World TVET database and the Promising Practices database. Some of the PPs presented by participants in the regional meetings taking place in 2013 will feed directly into the latter. Mr Majumdar also reminded all participants of the need to provide up-to-date information to UNESCO-UNEVOC's staff in Bonn to ensure that information on the network portal is always accurate and reliable.

Mr Majumdar informed all participants of UNESCO-UNEVOC's plans for 2014 and beyond. These include the organization and hosting of a major global conference, which will take forward the messages that come out of the five regional fora that took place in 2013 and share some of the best PPs at global level.

Two major deadlines are also approaching: the end of the UN Decade of Education for Sustainable Development in 2014 and the target date for the Millennium Development Goals and EFA in 2015. UNESCO-UNEVOC continues to be actively involved in debates and discussions surrounding both of these important milestones. In addition, the UNESCO TVET normative instruments (the Convention on Technical and Vocational Education and the Revised Recommendation concerning Technical and Vocational Education) are currently in the discussion stage. To assist this, and as part of a wide, grassroots-level consultation process, UNESCO-UNEVOC is considering organizing a moderated e-forum on this topic in 2014. Finally, UNESCO-UNEVOC, together with UNESCO HQ and Brazilian organizations, will be organizing a joint event as part of World Skills Brazil in 2015. All UNEVOC centres will be invited to take part and support this activity.

Finally Mr Majumdar thanked the host organization, INA, for helping to organize a very successful event, as well as all those present for their participation and commitment to UNESCO-UNEVOC's work.

Mr Fernando Rodriguez Araya of INA gave a closing speech. He also thanked all UNEVOC centres and other participants for taking part in the forum, and UNESCO-UNEVOC for organizing the event. Mr Rodriguez stressed the significance of this type of activity in the context of the knowledge society. The development of technical and technological capacities in developing countries is currently based mostly on the existence of and participation in knowledge networks. The stronger the knowledge networks in these countries, the greater the possibility of acquiring better and successful practices that lead to the individual and collective development of citizens. Such activities promote South-South cooperation. Participation in this type of forum increases the possibility of generating horizontal cooperation between two or more institutions, and gives them the opportunity to join forces and share experiences with representatives of other institutions in the region.

Annexes

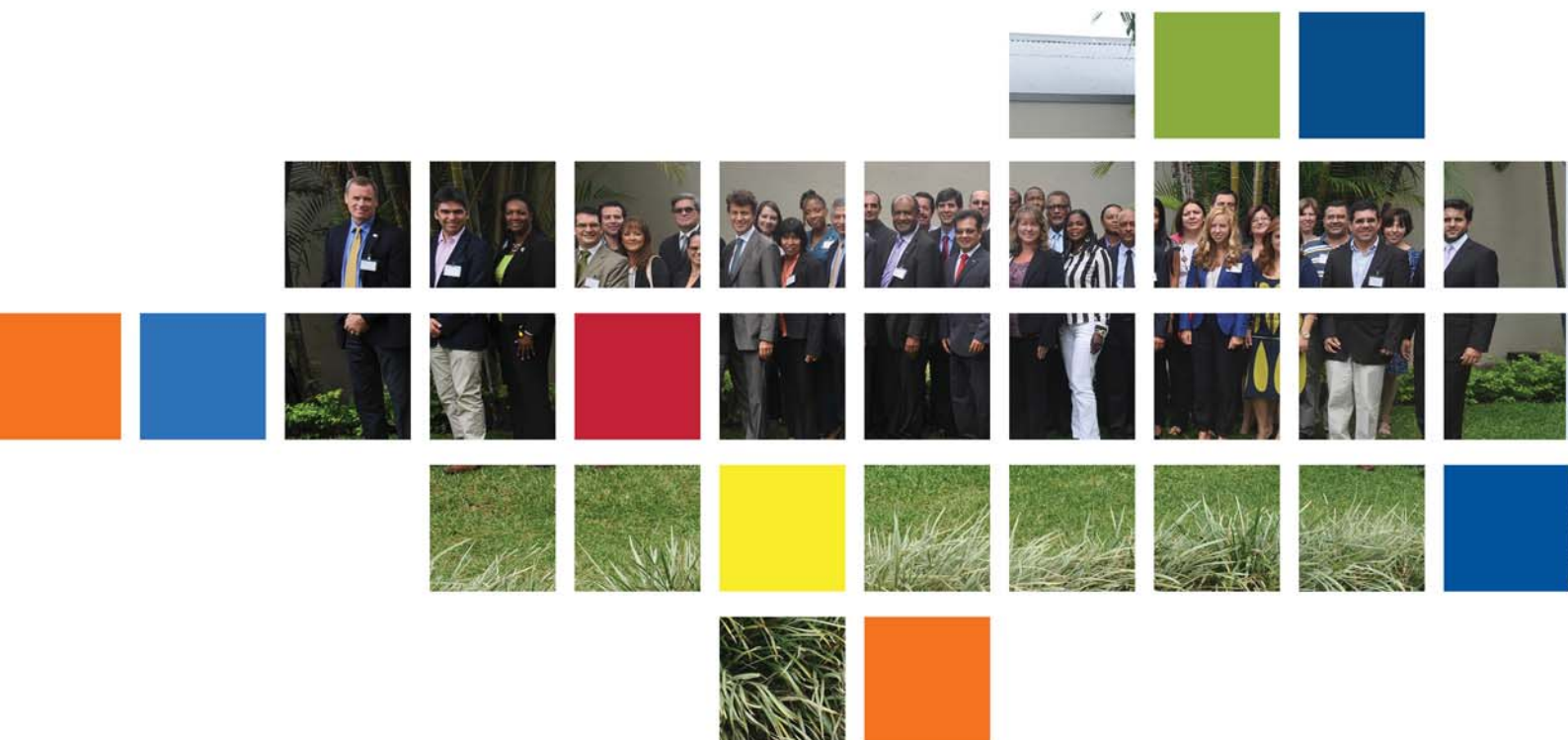
List of participants

No.	Name	Institution
1	Margarita Gomez	Employment Training and Education Services, Ministry of Education, Belize
2	Sonia Ana Charchut Leszczynski	Universidade Tecnológica Federal do Paraná (UTFPR), Brazil
3	Leah Jurkovic	ACCC, Canada
4	Craig Morrison	ACCC, Canda/Guyana
5	Astrid Hollander	UNESCO Regional Bureau, Chile
6	Cruz Yaneth Mira Zapata	Centro de los Recursos Naturales Renovables La Salada SENA, Columbia
7	Maria Eugenia Mosquera Ibarguen	Centro de los Recursos Naturales Renovables La Salada SENA-CHOCO, Columbia
8	John Telesford	TAMCC, Grenada
9	Aubrey Overton	Ministry of Education, Guyana
10	Simon Yalams	University of Technology (UTech), Jamaica
11	Natalee Plunkett	Heart Trust NTA, Jamaica
12	Robert Parua	UNESCO Cluster Office, Jamaica
13	Odette Brown	Heart Trust NTA, Jamaica
14	Audrey Porter-Ricketts	UTech, Jamaica
15	Luis Fernando Sanabria	Fundación Paraguaya, Paraguay
16	Isabel Alende	Ministerio de Educacion, Uruguay
17	Wendi Howell	Ohio State University, USA
18	Henderson Eastmond	TVET Council, Barbados
19	Jorge Galileo Castillo Vaquera	CONALEP, Mexico
20	Patricia Guadarrama Hernandez	CONALEP, Mexico
21	Ana Carolina Oliveira	CONIF, Brazil
22	Luiz Augusto Caldas Pereira	CONIF, Brazil
23	Henderson Wiltshire	Ministry of Education, Barbados
24	Javier Bonilla Herrera	INA, Costa Rica
25	Gloria Acuna Navarro	INA, Costa Rica
26	Carlos Sánchez Calvo	INA, Costa Rica
27	Fernando Rodriguez Araya	INA, Costa Rica
28	Erick Roman Sanchez	INA, Costa Rica
29	Mark Matheis	INA, Costa Rica
30	Katerina Ananiadou	UNESCO- UNEVOC, Germany
31	Shyamal Majumdar	UNESCO- UNEVOC, Germany
Partial attendance		
32	Jonathan Baker	UNESCO Cluster office San José, Costa Rica
33	Leonardo Ferreira	ILO Sub-regional office San José, Costa Rica
34	Mauricio Dierckxsens	ILO Sub-regional office San José, Costa Rica

Resources

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