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UNESCO World Conference on ESD

Reports on Workshops in Cluster II: Reorienting education to build a better future for all

Contents

The reports were submitted by workshop coordinators to UNESCO, who subsequently reviewed and consolidated them. Minor editorial changes have been made to the original reports for the sake of clarity and consistency of style across the reports. The workshop coordinators are responsible for the choice and presentation of the facts contained in them and for the opinions expressed therein, which are not necessarily those of UNESCO and do not commit the Organization.

1. The development of concrete practical initiatives and GAP commitments pertaining to ESD initiatives for Early Childhood Care and Education

Co-coordinated by the World Organisation Early Childhood Education (OMEP) and the Association for the Development of Education in Africa (ADEA)

Workshop presenters

- *John Siraj-Blatchford*, Professor, Early Childhood Care and Education, OMEP, United Kingdom of Great Britain and Northern Ireland

- *Ingrid Pramling Samuelsson,* UNESCO Chair in ECE and ESD, Department of Education, Communication and Learning, University of Gothenburg, Sweden

Workshop rapporteur

- *Eunhye Park*, Regional Vice President for Asia Pacific, OMEP, Republic of Korea

Key points from presentations

First, Siraj-Blatchford provided the introduction to ECCE and ESD and made the following points:

1) ECCE should be based on a holistic perspective that includes the following: safety, nutrition, hygiene, attachment, stimulation, and communicative interaction from birth to starting school.

2) Pre-primary school of high quality should be available, at the latest from three years of age, since it supports the individual child, his/her family and society.

Concerning the relations between ESD in ECCE, there are two ways of looking at them:

1) To give all children access to ECCE is by itself a sustainable action.

2) To create ECCE programs framed within ESD requires revisiting curricula and pedagogy to ensure that:

   a. content is related to environment, social/cultural and economic questions;

   b. self-confidence, collaboration, critical thinking, problem solving and creativity, and the 3Rs are addressed; and

   c. a pedagogy based on interaction, communication and relationship is promoted and adopted.

Second, Samuelsson's presentation focused on the integration of sustainability practices into ECCE and teacher training purposes. In her introductory remarks she underscored a key aspect of the UN Convention on the Right of the Child (CRC): that it does not say anything about a specific age when the right to education for children begins. In other words, children are entitled to education right from birth, hence the importance of ECCE.

With regard to the integration of sustainability into ECCE, she referred to four large-scale projects implemented by OMEP that marked the organization's shift from Peace Education to ESD. These projects highlighted the importance of:

(i) developing awareness of ESD very early on among children and teachers (, illustrations of which were provided using interviews carried out across the world on children's perceptions and thoughts with regard to the earth and their physical, cultural and social environments);

(ii) implementing ESD together with children in early childhood education practices (, illustrations of which were provided using concrete examples from OMEP projects);

(iii) bringing teachers and children to engage in intergenerational dialogue on ESD issues; and

(iv) being aware of a body of teaching and learning approaches and materials available to tackle ESD's interlocking dimensions (social/cultural values and attitudes, environment and economy) within ECCE.

In conclusion, Samuelsson underlined that children have agency from early years and a central pre-condition for integrating ESD in ECCE is the availability of educated and trained ECCE teachers.

Activities

The workshop was designed to be highly interactive and aimed at identifying the rationale and vital importance of establishing ESD in ECCE in every country/region. The participants were organized into three small groups to discuss issues that were relevant to their contexts and to identify actions. The group work consisted of two stages comprising (i) an initial discussion to share experience and facilitate discussion on the current state of ECCE and ESD development in the participants' countries/regions and (ii) a card sorting activity in which everyone in the group had a card and the group then collectively organized the cards in order of challenge/difficulty (to teachers/children).

Although the initial plan to have discussions focused on regional contexts did not work out, one of the three groups formed brought together mostly African participants. The group was facilitated by ADEA. It was evident that the Africa region has to first ensure that ECCE is further developed across the continent. Moreover, very few countries were aware of the UN Decade for ESD and the Nagoya Conference provided an eye opener. A contrasting picture of ECCE development, in terms of access and quality, emerged from the discussions. Most of the limited progress achieved could be attributed to ADEA and UNESCO, thanks to their advocacy and capacity development work over the last 17 years.

The other regions represented in the two other groups (America, Europe, Asia, Middle-East) have made significant progress in providing access to ECCE but issues of integration of ESD remains a challenge.

Recommendations and conclusions of the workshop

The discussions within the small groups resulted in the following recommendations.

1) Invite stakeholders from a variety of countries to campaign with UNESCO towards the declaration of a Decade of Early Childhood Care and Education. Sufficient funding should be allocated to ECCE. To give all children access to ECCE is by itself a sustainable action.

2) Commit resources specifically to encourage the early and continuing education for girls (Priority Action Areas 1 and 2).

3) Promote the UNCRC (UN Convention on the Right of the Child) to the public, parents, policy makers and teachers. All ECCE curriculums should reflect it (Priority Action Area 3).

4) Develop an illustrated user handbook for the OMEP Environment Rating Scale for Education for Sustainable Development (ERS-ESD)

5) Create an ECCE for SD resource pack for initial and continuing teacher training (OMEP/ ADEA). (Priority Action Area 3)

6) Develop an ESD 'Kite Mark' for Early Childhood Teacher Education. Support each country to set up a Green School certificate system (in association with OMAN) (Priority Action Area 3, 4)

7) Encourage preschools to engage in inter-generational dialogue to build the capacity of communities and families, to strengthen their roles within learning, doing, being, and transforming. One concrete contribution towards this is to be developed by ADEA ('Childhood Cultures') (Priority Action Area 5)

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2. Children as change makers: primary and secondary education

Co-coordinated by Ministry of Education, Chile, and Swaziland Environment Authority

Workshop chairs

- *Irma Allen,* Advisor, Education for Sustainable Development, Swaziland Environment Authority, Swaziland
- *Maria Elena Ponton,* Professional, Curriculum and evaluation unit, Ministry of Education, Chile

Workshop presenters

- *Laura Barcia,* Head, Environmental Education Section, Education Department, Ministry of Education and Culture, Uruguay
- *Ana Maui Taufe'ulungaki,* Minister, Ministry of Education and Training of the Kingdom of Tonga
- *Jim Taylor,* Director, Environmental Education, Mission Project Development, WESSA, South Africa

Workshop rapporteur

- *Gail Townsend,* Executive Director, Education Commissioner, Ministry of Education, Cook Islands

Key points from presentations

Introduction

With one fifth of the world's population in school, young learners provide a real opportunity to mobilise action around ESD. Shifts in curriculum and pedagogy are changing classrooms from places of transmission to places of facilitation with greater emphasis on critical thinking and problem solving. This allows children to move from learners to doers to changer makers.

Following the introduction, Barcia noted that ESD is a paradigm that involves all education methods that exist already and ones that have yet to be created. ESD necessarily implies a change in the way of relating human beings to nature. Schools are a place of social change so a successful implementation of ESD involves students, teachers, the total school culture and the school's community. ESD is not just about science and defending nature. It is across all areas of learning and is also about enjoying and respecting nature and our environment. We need to be more creative and innovative with our teaching of ESD. There are many current successful ESD activities, but repeating the same activity year after year is not ESD. ESD is holistic – it is based on belief and a worldview. It provides a connection between the physical, spiritual and emotional being. ESD is about the relationship between humans and their environment, where relationships and values are more important than any individual wealth.

Minister Taufe'ulugaki noted that ESD supports the socialisation of young people – especially with the inclusion of beliefs, culture and customs. ESD need to be localised – what are its foundations in that community? For example, in the Pacific, identity, belonging, self-worth and the world are the foundations. It is important to use local practices that have been in place for centuries that lead to sustainable livelihoods. ESD can allow research to be linked to traditional practice. Our ancestors had the courage to be creative, innovative, and resilient and act sustainably in the face of natural disasters that still happen today. ESD needs curriculum re-orientation that acknowledges the holistic

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school leaver profile. All nations must collectively subscribe to ESD – but this will need leadership and commitment. The UN and UNESCO can take a lead – and share their success stories.

Finally, <u>Taylor</u> introduced the workshop to a new tool for testing the health of water through bio-monitoring rather than grab sampling. The level and type of invertebrate life in the water acts as the indicator of water quality. Further information can be found on www.minisass.org. The resource will also soon be available as a smart phone application.

Activities

Participants worked in small groups on one of five questions relating to the theme of the workshop. As multiple groups addressed the same question, one member of each group for each question then shared their discussion with others who addressed the same question and prepared a summary response to that question. The questions and summary responses are shown below:

1) From the presentations and your own experiences, suggest at least two ESD initiatives that could be applied in primary and secondary schools that would support effective implementation of the GAP.

   Participant responses emphasised the need to empower students to define both the problem and the solution and about having genuine platforms for hearing students' voice.

2) Environmental citizenship education is one way of integrating traditional sustainable practices and innovation. How can we engage learners meaningfully to find out about and apply local knowledge and practice?

   A paradigm shift from quantitative evaluation (e.g. how education gets you a job) to skills based qualitative sustainable living evaluation. Recognise the word 'citizenship' and what that means on a daily basis in school, in terms of being responsible and living together. We need to: develop quality resources with relevant localised materials; build teacher capacity (both pre-service and in-service) to use pedagogical approaches that support the implementation of ESD programmes (e.g. more student-centred).

3) How can we better promote/accelerate partnerships between schools and local communities for more effective and efficient sustainable development efforts and programmes?

   Engage stakeholders in ESD activities outside of school settings. Use social media to promote events. Use community events as access point for involving students so that the two become integrated.

4) How can learners at primary and secondary schools be assisted and motivated to bring about transformation (change to more sustainable development practices) at family level?

   Involve parents in the learning process of their students. Empower parents with knowledge about what their child is learning and why. Schools with families can create opportunities for real life learning. Improved relationships between schools and PTAs.

5) How can we encourage local government to work with primary and secondary school children and youth to develop community-based ESD programmes?

   We need to have the role of students/youth strengthened in the community by local government. Local government needs to provide a platform for youth engagement and opportunity to be involved in decision making and finding and implementing solutions.

6) What are some of the desired student qualities for sustainable development and how can institutions (schools) and communities support the development of these qualities?

A shift from exam-based academic qualities to an emphasis on the holistic person—someone who is respectful, is innovative, is a critical thinker, is creative, shows care, love and compassion, and demonstrates the core values of their community.

Recommendations and conclusions of the workshop

- Whilst cognizant of the underlying principles and concepts of ESD, countries need to develop their own definition of ESD based on the priorities, values, knowledge and culture of their communities in order to be able to translate these into policy that leads to meaningful ESD learning for young people. This will involve research and consultation. (GAP 1)

- There needs to be a balance between an ESD focus on "doing for tomorrow" and actually what can have an impact today. So ESD as an approach needs to have outcomes that are both immediate and forward thinking. (GAP 2)

- Learning in ESD should not only focus on solving problems but also on enjoying the environment and creating opportunities for innovation. (GAP 5)

- Education needs to focus on the holistic development on an individual student and not just quantitative exam/career success indicators. (GAP 3)

- Pedagogy that is participatory, practical and interactive – teachers as facilitators better supports the intent of ESD and the holistic development of the person (this includes the integration of ICT). This will require a shift in curriculum and pedagogy. (GAP1 and 3)

- Relationships between schools, parents and communities need to be enhanced and sustained so that learning is a partnership between all stakeholders and more relevant to the student through linkages to their day-to-day life and possible future livelihoods. This will involve developing public-private partnerships (PPPs) with local industry/sectors and mechanisms for recognizing ESD in day-to-day life (GAP 5).

- Largely due to the DESD, pedagogy has become more learner-centered, action-based, and results oriented. This is empowering students to take ownership of their learning and become more effective change agents. Consequently, it is suggested that ongoing work in ESD should give special attention to helping the transformation of children and youth from active learners to "doers" and change makers in their homes, schools and communities (GAP 1, 3 and 5)

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3. Transforming the world into a better place through higher education and research

Co-coordinated by International Association of Universities (IAU) and Rio+20 Higher Education Sustainability Initiative (HESI)/GUPES-United Nations Environment Programme (UNEP)

Workshop presenters
- *Dzulkifli Abdul Razak,* President, IAU, Former Rector, Universiti Sains Malaysia, Malaysia
- *Jean Christophe Carteron,* HESI representative, Director of Corporate Social Responsibility, Kedge Business School, France
- *Yuji Suzuki,* Professor, Department of Global Politics, Faculty of Law, Hosei University, Tokyo, Japan; Chair, ProSPER.Net

Workshop rapporteurs
- *John Holmberg,* Vice President & UNESCO Chair, Chalmers University of Technology, Sweden
- *Carolee Buckler*, Carolee Buckler, Manitoba Education, Advanced Learning and a representative of the UNECE ESD Steering Committee

Key points from presentations
The three speakers set the stage by highlighting decade commitments and status reports as well as higher education commitments to the Global Action Programme (GAP), which provides a follow up to the decade. They presented a selection of 'unsustainable' issues impacting on our societies today. Teaching and Research were addressed separately and together to show how both interact to create the basis for innovative approaches to answer the issues the world faces.

Specific IAU and HESI projects and initiatives were introduced to kick off the discussions and invite others to present their initiatives while briefly highlighting potential contributions to the GAP. The speakers presented concrete initiatives that universities can use to become more involved individually and jointly in higher education for sustainable development (HESD) such as the Sustainability Literacy Test[1], the IAU global portal on HESD[2], and ProSPE.Net[3] .

All three presenters stressed the need to focus on whole-institution approaches and to mainstream ESD into both education and sustainable development policies to create enabling environments for ESD and bring about the systemic change required to better address the issues and challenges of today. The Power Point Presentations used in support of the three presentations made can be made available upon request (please contact Hilligje van 't Land at h.vantland@iau-aiu.net) .

Activities
The group split into small groups (5 to 10 people maximum per group). In a world café style, each sub-group was invited to successively discuss the following three broad issues:

A: The "desirable future"
- In 2030, targets set for the newly defined and to be adopted SDGs are being met, what would the contribution of higher education (HE) in term of research have been?
- In 2020, where do you imagine we will stand?
- How and what kind of universities and other higher education institutions would you see operate in the future?

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[1] http://www.sulite.org/en/substainability_home
[2] http://www.iau-hesd.net/
[3] http://prospernet.ias.unu.edu/

B: "Challenges and barriers"
- What barriers to success can you identify? What makes it impossible to achieve A?
- What facilitators are there? Which enabling factors can you highlight?

C: "Trouble shooting"
- What should be done to create the conditions to develop the kind of universities and other higher education institutions (HEIs) envisaged under A?

15 minutes discussion time slots were allocated to each group with a report back from each group to the full group. The discussions were very lively and constructive and allowed to build bridges between ideas and viewpoints.

A. The <u>future</u> was much seen from a values point of view and participants in the workshop depicted a fairly idealistic world where 'Universities without walls' would allow fostering community engagement, universal access, co-creation of societies, innovation.

B. <u>Barriers</u> identified included short term mind-sets, limited resources, limited relevance of teaching and research, massification and impact on quality, too little space available for innovation in all HE dimensions.

C. To <u>transform the system</u>, participants for instance stressed the need to generate new pedagogies, transform the leadership, develop new policies for ESD, empower students, generate learning space to creativity and innovation.

Recommendations and conclusions of the workshop

The workshop resulted in a number of recommendations outlined below.

1) First, it is essential to mainstream ESD into both education and sustainable development policies to create an enabling environment for ESD and bring about systemic change (GAP Priority Action Area 1). The 'enabling environment' could be generated through:

   - Advancement of policies at a national level on ESD in higher education;

   - Development of SD policies and strategies at the university level;

   - Exchange of practice at the policy level;

   - Integration of ESD into curricula and national quality standards; and

   - Development of indicators and measurement frameworks to establish standards for learning outcomes.

2) In line with the previous point, the workshop participants advocated for the integration of sustainability principles in education and training settings (GAP Priority Action Area 2: whole-institution approaches). This could be achieved through:

   - Development of sustainability leadership development programs for university leaders so they can demonstrate the need for change;

   - Provision of a learning space and option for creativity;

   - Creation of a matrix organization in order to deal with complex challenges together with public and private sector; and

   - Development of strategies for new learning and training environments.

3) Participants noted the importance of increase the capacities of educators and trainers for effective delivery of ESD (GAP Priority Action Area 3)

   - to facilitate opportunities for transdisciplinary teaching and learning; and

   - to include academic, administrative staff and especially, senior leadership in ESD professional development programmes to set the stage for the transformation required for more sustainable.

4) Generating actions among youth (GAP Priority Action Area 4) also received support in order to enable the students to be change agents and act as bridge between universities and other higher education institutions and society.

5) Finally, participants also advocated for encouraging local communities and municipal authorities to develop community-based ESD programmes by:

   - Recognizing the important role HEIs have in transforming communities towards sustainable development; and

   - Noting that HEIs' unique long-term perspectives and their neutral status in society are well placed arenas for bringing relevant stakeholders together to challenge business as usual and to foster transition.

Following up on the workshop the presentations with key WCESD documents and links were sent to the workshop participants and made available online in the virtual workspace for the workshop.

4. Greening Technical and Vocational Education and Training: unlocking the potential for sustainable development

Co-coordinated by UNESCO-UNEVOC International Centre for TVET/ Interagency Working Group on TVET and Mauritius Institute of Training and Development

Workshop presenters

- *Gita Subrahmanyam,* Research Associate, London School of Economics, "Emerging expectations of TVET for advancing your employability and sustainable development" ***(Workshop Chair)***
- *Gabriella Prata-Dias,* Senior Expert, Energy Charter Secretariat, Brussels, "Skills and training needs in the renewable energy and energy efficiency sectors"
- *Sanjay Prakash, Principal Consultant,* SHiFt India, "How the greening of jobs and the green economy – formal or informal – develop together"
- *Osman Mahomed,* Executive Chairman, Mauritius Ile Durable (MID) *& Sayadaly Maudarbocus,* Acting Deputy Director, Mauritius Institute of Training and Development, "Maurice Ile Durable for the green future"

Workshop facilitators

- *Kenneth Barrientos,* Programme Officer, UNESCO-UNEVOC
- *Sayadaly Maudarbocus,* Acting Deputy Director, Mauritius Institute of Training and Development, Mauritius

Workshop rapporteurs

- *Frans Lenglet, Director, SWEDESD - Swedish International Centre of Education for Sustainable Development, Sweden*

Key points from presentations

The workshop elaborated on the skills requirements for supporting economies', communities' and societies' green transitions.

Setting the context, Subrahmanyam presented the highlights of a global synthesis report on the UNEVOC Network's level of progress in advancing youth employability and TVET for skills development based on five regional fora reports and promising practices within the TVET network. TVET has become a top priority for tackling global unemployment in five regions while contributing to the construction of more sustainable societies and transition to low-carbon economies. Across regions, progress in making TVET more relevant, attractive and effective are observed, albeit at different phases of development. Similarly, there have been evidences that support the development of competences for green jobs in all the regions.

TVET's low prestige remains a main challenge. Reforming TVET is seen as contributory to advancing the SD agenda supported by multi-stakeholder partnerships, harmonization of policies, the use of the "whole institution approach" to strengthen TVET to be(come) a nucleus around which to promote employment, decent jobs and sustainable development at the same time.

Prata-Dias explained how skills could support a full low-carbon transition in the energy sector. Traditional energy production, distribution and consumption processes are becoming obsolete or made more efficient, while renewable and alternative energy technologies and processes are expanding. This has repercussions on the quantity and quality of employment, including the shifts in skills requirements. Job losses are occurring due to the rise of automation, restructuring, and

outsourcing. Especially in OECD countries, wind and solar energy sectors are expanding which translates to the greening of existing jobs. The emergence of smart grids, on the other hand, is generating new types of jobs needing a range of broad skills and specific green skills at the lower, medium and higher levels (i.e., design, maintenance, management and repair skills for energy production/distribution/installations). There is a need for developing a broad green training strategy aligned with the energy efficiency and renewable energy value chains not only in Europe but also in countries that are beginning to rely on alternative energy sources.

In the third presentation, Prakash reflected on the experience of creating community-based value-added and decent jobs in the construction/habitat sector. For countries like India, with a large increasingly educated labour force, it would make more sense to pursue SD through sectors driven by internal demand, like in habitat and construction, than by some industries that are to a great extent regarded as "sunset" industries (i.e., fossil fuel industries). He argued that few direct green jobs were to be gained in switching from sunset to sunrise technologies. In contrast, many more indirect jobs – even decent ones – could be had by upgrading conventional jobs, for example greening of existing jobs or topping-up of skills in both the formal and informal sectors. However, green economy is not about plugging waste, efficiency and substitution alone; rather sufficiency, identity, equity and resilience. With examples of up-skilling village-based masons (men and women) in combination with locally sourced and low-energy-input materials and technologies, the speaker illustrated that new skills, convivial livelihoods and high value "green" jobs could be created.

Mahomed and Maauderbocus shared the "Mauritius, Ile Durable" (MID) strategy and its efforts to transform the environmental, economic and social landscape of Mauritius while increasing the percentage of green jobs by 10% by 2020. The initiative has served as a model for an inclusive and holistic growth; the people at the helm of sustainable management. The strategy is implemented within the context of the challenges faced by the small islands developing states (SIDS) such as Mauritius. Green jobs are inclusive, innovative, resilient, robust and diversified. They form part of the pursuit of innovative, green economic growth interlinking with the other objectives of the MID strategy. The skills response of the TVET sector is adapted to this strategy to include training for new skills, knowledge and attitudes (related to sustainable development in e.g. tourism, installation, maintenance and repair of photovoltaic panels and solar water heaters).

Activities

About sixty participants attended. The Chair, Gita Subrahmanyam, stimulated analytical discussions and Q&A. It allowed participants to share their own experiences in addressing low-carbon transitions through skills development and TVET programmes. The critical role of TVET and the bottlenecks in fulfilling expectations were debated upon. The Chair summarized the discussions and reflections as follows:

Essentials in facilitating low-carbon transitions
1) There is a need to produce workforce that possess low-, medium- and high-level skills in existing efficiency-increasing industries and those making transitions to low or non-fossil fuel technologies (e.g. renewable energy sector), especially in OECD countries. In contrast, in many other situations (e.g. rural areas in Asia and Africa) the driver for new and value-added skills are the demand for decent and valued jobs, contributing to community development while making use of locally developed "green", "appropriate" and low CO_2 technologies. In (small island) emerging economies low to medium skills are needed for greening the economy while maintaining international competitiveness.

2) Political leadership is essential in order to encourage TVET systems to adopt ESD principles and to adapt themselves to changing conditions. In the process, skills training becomes training for

employability for decent jobs, which enhance the value of the learners and their communities. This also helps increasing the prestige of the entire TVET sector.

TVET expectations and opportunities

3) There are sound evidences of progress in greening TVET and skills in the context of needs within local communities. A variety of initiatives could be located in UNESCO regions focused on developing skills needed in green emerging jobs and at the same time, empowering the youth through employment. TVET strategies should take these issues up in a single track.

4) The TVET sector should actively engage with employers in order to develop new and flexible training offerings, while involving representatives of industries, enterprises and communities in training delivery to translate what skills for sustainability means in both the formal and informal sectors. This would require a critical analysis of the value chain that links TVET and industries' training strategy vis-à-vis the needs for skills that can support green transitions.

5) There is also a need to address the bottlenecks in skilling the workforce and linking skills strategies to the construction of skills that respond not only to the jobs in the formal sector. Skills should also be able to respond to opportunities in the informal sector premised on promoting skills for using locally-sourced and low-energy-input materials for self-sufficiency, equitable and sustainable development.

6) TVET should develop new curricula that are sufficiently flexible to meet the continuous demands from both employers and job seekers. Apart from inculcating specific skills, TVET should empower its learners to become active and responsible "agents" in their future jobs and communities and to "learn to learn" throughout the rest of their lives.

The discussions echoed messages that TVET has indeed a key role to play in implementing the Global Action Programme (GAP); inter-agency, multi-sector and community level coordination and participation are necessary elements to make it work. TVET's entry points are particularly strategic through the mainstreaming of ESD into integrated policies, championing teacher training and local community actions, analysing the value chain that links skills training with industry needs and developing 'live curricula' that illustrate the classroom- and work-based applications of greening TVET and skills.

Recommendations and conclusions of the workshop

To further strengthen TVET's catalytic role in low-carbon transitions and utilize its capacities to mainstream the relevant GAP on ESD priorities in skills development initiatives, following recommendations were made.

1) **Increase the capacities of educators and trainers for effective delivery of ESD (Priority Action Area 3)**

Training and re-training of TVET educators and trainers should be prioritized for them to be actively involved in the development of and experimentation with new training content, methods and schemes.

2) **Generate actions among youth (Priority Action Area 4)**

TVET should focus strategically on the employability of young people and in adopting approaches to impart skills relevant to low-carbon transitions in order to prepare them for decent jobs and empower them to contribute to the sustainable development of their communities at the same time.

3) **Encourage local communities and municipal authorities to develop community-based ESD programmes (Priority Action Area 5)**

The greening of societies and communities require that TVET programs are designed, offered and governed at the community and local level (including public authorities, employers and other sustainable development actors). They should reflect, anticipate and be part of the development of the creation of a sufficient number of decent jobs in order to meet the demand of large numbers of job seekers, while associating them with the development of sustainable societies.

5. Teacher education: ESD, contributing to quality education in a rapidly changing world

Co-coordinated by Asia Pacific Centre of Education for International Understanding (APCEIU), Education International (EI) and International Network of Teacher Education Institutions

Workshop presenters

- *Dennis Sinyolo,* Senior Coordinator, Education and Employment, EI (Moderator)
- *Munawar Mirza,* Head, National Accreditation Council for Teacher Education, Pakistan
- *Rosalyn McKeown,* Secretariat, International Network of Teacher Education Institutions, United States of America
- *Jeongmin Eom,* Chief, Research & Development Team, APCEIU, Republic of Korea

Workshop rapporteur

- Pierre Varcher, Member, Monitoring and Evaluation Expert Group for the Decade of ESD; Chargé d'enseignement emeritus, University of Geneva, Institute for Teacher Education, Switzerland

Key points from presentations

Sinyolo, moderator, began the workshop by stating that during the UN Decade of Education for Sustainable Development, ESD evolved greatly in the realm of teacher Education. ESD efforts began with awareness raising and moved to capacity building, then, to experimentation, and finally, implementation of good practice.

Mirza spoke about an accreditation program for teacher education in Pakistan. She noted that accreditation of teacher education programs is an effective method for bringing elements of ESD into teacher education on a national basis. Administrators of teacher education institutions (TEIs) need professional development opportunities to understand how an accreditation process will be beneficial to their institutions. Accreditation can be done on a cyclic basis so that teacher education programs can improve over time and as administrators and lectures in teacher education improve their understanding and practice of ESD, their level of certification can improve.

McKeown reported on the results of a survey of ESD activities in teacher education institutions (TEIs) from around the world. ESD is being implemented in teacher education along a continuum from no awareness of ESD to ESD is fully integrated in teacher education programmes. It is important to know what the most advanced TEIs are doing to implement and institutionalize ESD, so that this information can be used to scale up ESD efforts in TEIs in the implementation of the GAP. ESD is being institutionalized in TEIs by:

- Including the terms ESD and sustainable development in the mission statements.
- Creating new courses, certificate programs, and degrees in ESD.
- Incorporating ESD into course and instructor evaluations; internal and external evaluation of teacher education programmes; professional standards for teachers, and teacher education programme accreditation standards.

The greatest challenges to TEIs implementing ESD were: lack of financial resources, lack of awareness of ESD and support for implementing ESD, and lack of human resources. These three challenges will face TEIs that are new to ESD during the GAP. As a result, creators of GAP activities should be mindful of these challenges. More specifically, lessons learned during the DESD were:

- Reorienting in TEIs takes time and persistence.
- Building faculty expertise is essential.

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- Inclusiveness and responsiveness to Indigenous communities and traditional societies are important.
- Support and commitment from senior administrators are vital.
- Support from Ministries of Education makes implementing ESD easier and in some cases possible.
- Building networks is essential—do not work alone.
- Financial constrictions are a reality for TEIs, programmes and networks.

Next, Eom noted in reference to the GAP Priority Action Area 3 Educators that educators will have several domains of activity, such as pre-service teacher education carried out by TEIs; teacher standards, credentials, and policy; and professional development as lifelong learning, which often is carried out by organizations other than TEIs. Professional learning circles, where teachers commit to research, study, and action, are a good method of professional development for teachers and teacher educators. ESD has many entry points around the world, such as global citizenship education, education for international understanding, peace education, gross national happiness, human rights education, environmental education. Eom also emphasized that teachers need institutional support and pedagogical support to be able to implement ESD. Challenges and barriers for teachers to practice ESD fall into two categories: structural (e.g., examination oriented culture, lack of awareness and support of school leadership, heavy workload of teachers, political climate and disciplinary curriculum) and pedagogical challenges (e.g., lack of ESD experience, lack of professional development opportunities, and lack of teaching/learning material in local languages).

McKeown took the floor again and reported that a survey of TEIs showed that in the GAP TEIs need:
- Materials and collections of best practices that deal with field studies, community-based assignments, and assessment methods for those community-based assignments.
- Guidelines for evaluating ESD materials, which proliferated during the DESD. These guidelines should also influence the future development of ESD materials so that they are of high quality.
- Ministries of Education to incorporate ESD into qualification frameworks for teachers.
- Policy related to teacher education to reflect good practice.

McKeown further emphasized that for effective start up in the GAP, it is important that the activities we proposed are based on what we have learned during the DESD. It is also important that as we scale-up ESD activities related to teacher education that we draw on the experience and wisdom of those who are pioneers and leaders in the field.

In concluding the introductory segment, Sinyolo noted that we need to keep in mind the following points as we deliberate and design activities for the GAP.
1) The concept of quality. Every ministry of education and every school jurisdiction asks the same questions "How can we deliver a quality education in a cost effective manner?" It is important that ESD's contribution to a quality education be part of all of our conversations today.
2) Education systems are complex and they require interventions at multiple points to create enduring change. We need to think about activities that involve not only programmes but also practices and policies.

Activities

The participants divided themselves into small groups according to their interest in teacher education. Groups were formed on: ESD materials development, interdisciplinary professional development for teachers, incorporating ESD in teacher education policy, professional development of teacher educators, professional standards for teachers, accreditation of teacher education programs, harmonizing formal and non-formal education, marketing and advocacy of ESD, and

evaluation. Each small group completed a template that identified key actors and change agents as well as key leverage points, barriers, and enablers.

The discussions in small groups revealed large differences from country to country related to teacher education. Some countries have no standards for the preparation and employment of teachers, while in other countries such standards are defined and enforced. The importance of teacher education to a quality education was perceived as fundamental and was uncontested. Small group discussions also revealed that teacher education is interconnected to other elements of the educational system. Change in the realm of teacher education will require action from policy makers, curriculum developers, administrators in TEIs, teacher educators, students in teacher-education programmes, and primary and secondary schools.

Recommendations and conclusions of the workshop

Potential concrete activities, initiatives and proposals for the effective implementation of the Global Action Programme on ESD include:

- Develop training modules for the professional development of teacher educators. (Priority action area 3)
- Incorporate ESD in teacher education policy (for example by: reviewing curriculum, developing guidelines, institutionalising capacity building, developing capacity building programmes for teachers). (Priority action areas 1 and 3)
- Establish and require accreditation of teacher-education programs and TEIs. (Priority action area 1).
  - Establish and require accreditation of TEIs/HEIs.
  - Establish and require accreditation of teacher-education programs, which has progressive levels of accreditation—minimal to advanced—that can be earned and then changed over a period of evaluation cycles.
  - Initiate accreditation of *in-service* teacher-education programmes.
  - Embed ESD in the career ladder of teachers.
  - Link school curriculum with pre-service and in-service teacher-education programmes.
  - Develop professional standards for teachers/teacher educators in teacher education institutions.
- Embed ESD in established professional standards for the certification of teachers.
  - Require completion of a teacher-education programme as a pre-requisite for being employed as a teacher. (Priority action area 1)
- Provide interdisciplinary professional development for teachers to let them catch the complexity of the issues of sustainable development. (Priority action area 3)
  - Place student teachers in schools that practice interdisciplinary teaching. (Priority action area 3)
- Be aware of synergy amongst policy level, curriculum matters, teacher education, professional standards for teachers, and accreditation of TEIs. (Priority area 2)
  - Identify and publicize existing samples of teacher education standards.
  - Bridge the gap between old and new teachers.
- Create guidelines for ESD materials development and evaluation of existing ESD materials. (Priority action area 3)
  - Guidelines should address local contexts and cultural contexts (e.g., culturally sensitive content)
- Harmonizing formal and nonformal education (for example by identifying approaches used in non formal education which can be useful in formal education (i.e. songs and theatre) and include them in curriculum and tools).
  - Hold workshops on innovative teaching methods in a multi-stakeholder environment.

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- Focus on evaluation and certification of pupils (e.g. secondary school graduation requirements): development of participative processes and elaboration of adequate references including ESD. (Priority action area 3)
- Marketing and advocacy of ESD (for example school campaigns, social media campaigns, empowering workshops, engaging role models, showcasing achievements of schools/teachers, developing advocacy tools, and setting up teacher ESD clubs for networking opportunities). (Priority action area 3)

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6. Local communities in action: Lifelong learning for sustainable development

Co-coordinated by Okayama City Government and UNESCO Institute for Lifelong Learning

Workshop Chairpersons
- *Masao Omori,* Mayor of Okayama City, Okayama, Japan
- *Arne Carlsen,* Director, UNESCO Institute for Lifelong Learning

Workshop presenters
- *Jose Roberto Guevara,* Vice-President, International Council of Adult Education (ICAE); President, Asia South Pacific Association of Basic and Adult Education (ASPBAE); and Associate Professor, International Development, RMIT University, Australia
- *Hiromi Sasai,* Director, Department for Lifelong Learning Policy Research, National Institute for Educational Policy Research, Japan; and Advisor of Steering Committee of the "Kominkan-CLC International Conference on ESD"
- *Takushi Terasaka,* Student, Okayama Municipal Hayashino High School
- *Ella Yulaelawati,* Secretary, Directorate General of Early Childhood Education, Non Formal and Informal Education, Ministry of Education and Culture, Indonesia; Board Member, Southeast Asian Ministers of Education Organization (SEAMEO) Regional Center for Lifelong Learning

Workshop rapporteur
- *Kim Smith,* Coordinator, GPSEN/RCE Greater Portland, United States of America

Key points from presentations

Introduction (Carlsen)

The Global Action Programme on ESD set "Accelerating sustainable solutions at local level" as one of its five priority action areas. Local communities in urban and rural areas are expected to implement ESD in cooperation with authorities at national and municipality levels and other partners. Post-2014 we should scale up actions and build bridges from knowledge, skills, and values to practice. To ensure a better future for all, education should be reoriented to enhance lifelong learning. Multi-stakeholder networks at local level are one of the key elements needed to develop creative solutions and increase collaborative action. This workshop highlights how community-based learning institutions such as Community Learning Centres (CLC) and Kominkan (CLCs in Japan) function as platforms for learning and action at community level and promote sustainable development.

Greetings (Mayor Omori)

Okayama City is long famous for cherishing its natural and cultural resources. It is one of the initial seven Regional Centres of Expertise (RCE) on ESD (since 2005) and Okayama University has held the UNESCO Chair in Research and Education for Sustainable Development since 2007. Kominkan in Okayama City are key institution for promoting ESD at local level. ESD and Kominkan coordinators in the 37 Kominkan in total, run in every Junior High School District, are very active in offering a diverse range of activities with local people voluntarily learning and acting together.

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Over the last ten years, the range of issues and ESD activities covered has grown, as has the number of partners involved across the city. Building on these initiatives, Okayama City hosted the "Kominkan-CLC International Conference on ESD" with the participation of over 650 people from 29 countries. The participants discussed roles and contributions of institutions facilitating community-based learning for the DESD through presentations and visits to Kominkan. The *"Okayama Commitment 2014 – Promoting ESD beyond DESD through Community-Based Learning"* was adopted as future directions and commitments to carry forward after the Decade.

Community-Based Learning through Kominkan-CLCs (Sasai)
Kominkan and CLCs provide the social platform for realizing and securing community-based learning in many countries. As non-formal education institutions, they provide opportunities to multiple stakeholders (children, youth and adults) living in local community to gather, learn, connect and act. Community-based learning can stimulate the active engagement of community members in identifying challenges and taking actions to overcome these challenges. This process of individual empowerment and community development is helping to address global sustainable development challenges through local actions. Following his presentation, a short slide show on CLC from around the world was shown.

Sharing "Okayama Commitment 2014" (Guevara)
In the "Kominkan-CLC International Conference on ESD" (9–12 October, Okayama City, Japan) the roles and contributions of institutions which facilitate community-based learning, such as Kominkan and CLCs, were discussed, and 15 commitments beyond the DESD were agreed. The outcome document, *Okayama Commitment 2014 – Promoting ESD beyond DESD through Community-Based Learning*, was adopted in a participatory and transparent process in line with the concept of ESD. The Commitment includes the overall agreement that "Community-based learning through Kominkan-CLCs and similar mechanisms needs to be carried out collaboratively with all providers and stakeholders in national learning and education systems to achieve ESD and the broader goals of sustainable development."

ESD based at Kominkan and CLCs (Sasai)
Examples of ESD practices by Kominkan in Okayama City, featured in *Ren Men Men* published by Okayama Municipal Kominkan, were presented. The themes of ESD activities range from environment conservation, inheritance of traditional culture, and community development through coexistence and mutual support. For example, Kominkan coordinates environmental research in area in which many local people from different generations participate. It provides opportunities for people to know more about the community, and allows individuals to play a major role in improving their communities. Such research has diversified into wide range of efforts such as film-making and reviving traditional festivals and dance. Kominkan and CLC are a setting where many local people acquire knowledge and skills, change consciousness and behaviour, establish relationships and build trust, leading to safer and more sustainable communities. For community-based learning to be sustainable, five elements are important: systematization (i.e., legal and regulatory frameworks), capacity development of facilitators/coordinators, attractive and relevant learning resources, financial resources, and networking and collaboration.

The Role of CLCs for Sustainable Development (Yulaelawati)

Indonesia applies lifelong learning principles, especially in non-formal and informal education, in which partnerships are nurtured across government sectors, also involving private corporations and societies such as Association of Ministers' Wives. Different types of CLCs in Indonesia provide lifelong learning opportunities in various learning settings, helping community members to become self-reliant and improve their quality of life. These also meet environmental, social and economic development goals. The community members are responsible for ownership, partnership and decision-making in CLCs. The role of government is to provide support in terms of regulation, financing, capacity development, monitoring and evaluation, and facilitation for further partnership. It is difficult to meet all the financial needs. Having clear performance indicators and evaluation of good practices is essential in justifying and securing funds and support from government and partners.

The *Jakarta Statement – Nurturing a Care, Fair and Share Society through CLCs* is an outcome of the International Seminar on Empowering CLCs in Enhancing Learning Society through ESD, which was organized from 2 to 5 September 2014 in Jakarta. Together with the *Okayama Commitment*, it acknowledges, reaffirms, reflects and reiterates the pivotal role of community-based learning as a part of lifelong learning.

Speech by a representative of UNESCO Associated Schools Project Network (ASPnet) International ESD Event (Terasaka)

A high school student shared "The Joint Declaration of UNESCO ASPnet International ESD Events for Students and Teachers Platform for Students" adopted in Okayama City. He stressed the need to have youth involved in creating sustainable communities. Furthermore, he insisted that if high school students could work together around the world, they can make a difference in finding solutions to a wide variety of problems. Social networking can be a useful tool for global communication. Respecting different opinions of people, new common knowledge and vision should be created to build sustainable communities and future.

Activities

Following the presentations, participants were divided into 4 groups (2 English, 1 French and 1 Japanese group) and discussed the following key questions:

1) What are the major enabling factors and challenges to increase the impact of community-based learning and action for sustainable development?

2) What concrete activities, initiatives and proposals are needed to support community-based learning and action for sustainable development?

The ideas, opinions and proposals in response to the key questions were as follows:

Enabling factors
- Create space for learning (without political ideology).
- Bottom-up approach, community engagement and also network for service agencies facilitate volunteerism.
- Engage NGOs and civil society to meet community needs.
- Gather local support in ideas and self-determination by community members.

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- Utilize existing networks.
- Capacity building
- Political support to promote community-based learning for ESD
- Develop locally appropriate methods/programme and communicate their relevance for local people
- Utilize local resources and expand capacity
- be a neutral body which helps transcend conflicts among stakeholders with different interests, facilitate dialogue across sectors, and coordinates efforts of diverse partners

Challenges
- Political and financial support
- Capacity building of stakeholders engaging in community-based learning
- Different interests among community, private sector, government, etc.
- Gaps between different generations in values, thinking and positions

Concrete proposals
- Make ESD activities more fun and interesting to engage people in different age groups
- Utilize local media (e.g., radio, social media) to raise awareness of ESD and deepen their understanding
- Honour traditional knowledge while using modern technology to share information for peer-to-peer, cross generational and international learning and cooperation
- Use grassroots approach to get community involved to help create a sense of ownership and participatory engagement
- Offer teacher and facilitator training courses in community-based learning and non-formal education
- Conduct research with expert guidance to improve quality of existing ESD actions
- Include schools and families in community-based learning to promote dialogue and action
- Find common themes and interests through dialogue across groups to close the gaps in communication

Recommendations and conclusions of the workshop
1) Local lifelong learning institutions such as CLCs and Kominkan can provide meaningful models for ESD at local level. To enhance local learning and actions for sustainable development, empowerment of individuals and communities is fundamental. Such empowerment is happening in many countries through community-based learning.
2) Despite the workshop focus on local initiatives, enabling factors, challenges and concrete proposals from participants cut across the other priority areas of Global Action Programme on ESD. This indicates that the community-based learning spaces and centres need to engage with policy, involve transforming learning environments, build capacities of educators and engage across generations with a focus on youth.
3) Reorienting education policy and system for better future could be done by building stronger linkages among non-formal, informal and formal education and enriching informal learning through families, media, youth and marketing of ESD.
4) Embed, engage and sustain ESD through community learning centres.

References
Okayama Commitment 2014 [English, French, Japanese]
Jakarta Statement
Kominkan-CLC International Conference for ESD [English and Japanese]

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7. ICT, a transformative approach for ESD

Co-coordinated by UNESCO Chair "Education, training and research for sustainable development", University Michel de Montaigne Bordeaux 3, France and Young Masters Programme on Sustainable Development, Sweden

Workshop Chairs and Facilitators

- *Michel Ricard,* UNESCO Chair for Education, Training and Research on sustainable development, Bordeaux University France
- *Heidi Johnson,* International Relations Officer, Young Masters Programme (YMP) on Sustainable Development, Sweden

Workshop presenters

- *Clara Doly,* Head of Strategy and Development, Paris Seine University, France
- *Torvald Jacobsson,* Director, YMP, Sweden
- *Liz Yoon,* Senior Manager, Corporate Citizenship, Samsung Electronics, Republic of Korea

Workshop rapporteur

- *Vassilios Makrakis,* UNESCO Chair in Information and Communication Technologies (ICTs) in ESD, University of Crete, Rethymnon, Greece

Key points from presentations

At the start of the workshop, Johnson and Ricard, the two coordinators of the workshop, raised several points designed to facilitate dialogue and reflection. The four main points were presented to guide group discussions:

1) How can we use ICT and e-learning better to integrate them into all levels of ESD?
2) In the era of digital literacy, how can we help a large part of the population attain a sufficient level of digital literacy to get the skills, knowledge and attitudes needed for sustainable development?
3) To build and strengthen the capacity of educators and trainers, how can we ensure the educational workforce has the necessary e-learning and technical skills to employ technology effectively?
4) How can we best use young people, with their knowledge of new technologies and new pedagogies, to transform learning and training environments?

The coordinators' introduction was followed by three presentations by Doly (Paris Seine University), Jacobsson (Young Master Programme) and Yoon (Samsung Electronics). Doly noted that ICTs were especially relevant to the following two priority action areas of the GAP: Area 3 (increasing the capacities of educators and trainers for effective delivery of ESD) and Area 4 (generating actions among youth). Jacobsson indicated that the Internet had accelerated the adoption, use and applicability of ICTs and was already supporting many people to make a difference in their given contexts. In the midst of a paradigm shift brought about by ICTs, the Internet and the resulting networking, they not only increase access to information, they also increase the teacher's and the learner's competencies in seeking and finding relevant information, as well as developing critical reflection on the use of that information. Consequently, the teacher is not merely a provider of information but supports students to find and analyse relevant information. Teaching is changing to meet the expectations of a connected and networked generation that has been empowered not only to consume knowledge, but also to produce knowledge. Yoon highlighted the contributions of the private sector towards identifying niche areas and creating an inclusive, positive and enabling

environment for disadvantaged, disabled and technologically challenged groups, thus contributing to the general sustainable development effort.

Following these presentations, <u>Makrakis</u> (UNESCO chair on ICT for ESD and main rapporteur of this workshop, with a complementary contribution by Sushita Gokool-Ramdoo, Education specialist, Mauritius) noted three points critical for the full use, application and integration of ICT: (i) Availability, (ii) Accessibility, and (iii) Affordability. Makrakis reminded the audience that the four billion people who earn less than 2 USD a day are relevant to the use of ICTs and should not be left behind in the global connecting and networking initiative.

Activities

Following the plenary presentations, participants were divided into four groups to discuss the different questions raised by the workshop coordinators. Because digital literacy was the least popular among the four main questions, participants first examined their assumptions on what was meant by digital literacy and competencies for sustainable development.

1. Challenging assumptions

After an initial examination of existing assumptions, participants proposed that assumptions and definitions regarding *digital literacy, skills and attitudes for sustainable development* needed to be challenged. There was the realisation that, despite significant advances in their development, application and use, ICTs had not been spread uniformly in all countries of the world. There were still many competing priorities that had to be acknowledged and taken on board. Participants grappled with the following questions:

1) How do we define digital literacy? What is meant by digital literacy?

Was the user of a mobile phone (especially smartphones) digitally literate or was this term reserved for people who only use a computer? It was agreed that digital literacy was inclusive of knowledge and understanding of the applications and implications of digital technologies in addition to the skills subsumed in computer literacy. It was agreed that digital literacy included the competencies required to use digital devices like smartphones, tablets, laptops and computers that promote networking along with computing.

2) In which context are we using the term digital literacy? Is this term geographically appropriate/relevant?

Participants agreed that priorities are geographically, economically, culturally and contextually determined. It was generally agreed that in the so-called 'poor' countries, electricity or food may be given higher priority than issues like connectivity or ICT-savviness, which may be seen as a luxury. On the other hand, even in the so-called 'rich' countries, there were still regions that were deprived of access to, and availability of, ICTs. Therefore digital literacy could apply to more areas and groups than had already been identified as being in ICT-deficit situations. **It was important to challenge the existing profiling of countries and regions.**

3) Who is the teacher? Who is the learner?

Along the same line, the participants argued that the assumptions concerning the teacher and the learner had to be challenged. Technology provided a platform whereby barriers between the teacher and the learner were increasingly blurred and their traditional roles had become interchangeable. The other element of interest was the context of teaching and learning. It was agreed that with regard to teaching/learning context(s), the relevance of lifelong and lifewide settings need to be maintained. Digital literacy was therefore applicable to those individuals that were not necessarily in formal educational settings but who were in informal and non-formal learning environments.

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2. Do people really need digital literacy?

This group looked at Question 2, "*how can we help a large part of the population attain a sufficient level of digital literacy in order to have the skills, knowledge and attitudes needed for sustainable development?*"

The main question was whether digital literacy was a *sine qua non* for the development of sustainable development-compliant competencies. The group concluded that, when all elements and variables like social, economic and cultural development, as well as inter-connectedness and networking were taken into consideration, ICT skills and general digital literacy skills were crucially important for people to be more aware of opportunities regarding sustainable development. Aspects of ICT such as internet-based broadcast media, sites like YouTube and open source environments were seen as contributing to the **accessibility** of information that may be of vital importance, **especially** in life-threatening situations. ICTs were seen as highly important instruments in situations of impending disaster. Finally, ICTs were seen as helpful to broadcast principles of sustainable development in life-long and life-wide settings to equip increasingly diverse groups of individuals with the knowledge and competencies that lead to the attitudinal and behavioural changes that have been identified as crucial to promote sustainable development.

3. Who is the large part of the digital population that we are referring to?

It was agreed that profiling is highly important when framing issues pertinent to widening access to an increasingly diverse groups of **individuals** to promote sustainable development. Special arrangements/solutions, like those researched and provided by the Samsung Group, were required for the following groups: the poor, the elderly, the disabled and the technologically challenged.

4. Are pipe providers consulted in educational activities involving ICTs?

Participants were of the view that a lack of consultation with pipe providers (especially in terms of bandwidth and broadband) largely accounted for the slowing down of sustainable development initiatives through ICTs or for rendering ICT use and applications sustainable development-compatible. The Group proposed that pipe providers be consistently consulted during the promotion of ESD initiatives to better match local requirements and broadband/bandwidth capacity.

5. Is our mind-set inclusive enough?

Accessibility, affordability and availability should always shape how ICTs are integrated into given situations. The group agreed on the need for our minds to be elastic and inclusive. It was important to think inclusively and to ascertain that thresholds could be stretched as well as new groups and needs identified/addressed. An important issue that came up during group discussions was the need to be realistic. Developments in ICTs were unending and not static. The group agreed on the need to aim for excellence at whatever level of development countries/groups found themselves in. At any given level of development, one should consistently aim towards continuous improvement or progress from that given level of development. Thus it is realism not optimism or pessimism that should influence the use of ICTs. Rather than thinking the *glass is half-empty,* it was suggested that it be better to think *the glass needs a re-fill.* In the quest for excellence, groups of interest should graduate from being mere consumers of ICT to being producers and developers of ICT. ICTs should be relevant in the promotion of environmental and health literacy for instance, as well as other principles of sustainable development like equity and employability.

6. Are UN Agendas talking to one another?

Finally, the Group felt that there were different existing agendas of development pertaining to ICT that were not necessarily talking with one another. This was leading to duplication of effort, inefficiency in resource utilization and delay in outcome achievement. There was some discussion on how the ICT4 Development agenda was interacting with the Paris OER Declaration 2012. The group

concluded that there was need to consolidate the dialogue between these agendas, especially since they had broadly similar goals, for a more sustained effect. The main conclusions coming from the group discussions was that ICTs would play a more relevant role in the above-identified priority action areas of the GAP once elements like accessibility, affordability and availability were resolved for specific groups in given contexts/countries.

Recommendations and conclusions of the workshop

Participants were drawn from many parts of the world and their responses have been summarised above. First, they all found it interesting to observe how digital literacy was the least popular among the four main questions that were put up for discussion. Digital literacy either did not appeal or was seen as a persisting challenge or was not worthy of consideration. This led to the need to first understand what was meant by digital literacy and the need to re-examine our existing assumptions.

For the Workshop key-note speakers and the workshop participants, ICTs now offer a plethora of solutions to challenges with regard to Education for Sustainable Development. They cautioned however on the need to be contextually- and culturally-sensitive with regard to the use and applications of ICTs in different countries. The presenters highlighted the transformative potential of ICTs for teaching and learning, recognizing the constantly changing role of teachers and learners and their potential to harness the transformative promise of ICTs.

With regard to the GAP, ICTs were especially relevant to the following two priority action areas of the GAP: objective 3: increasing the capacities of educators and trainers for effective delivery of ESD; and objective 4: generating actions among youth.

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8. World Heritage and Arts Education: towards a culture sensitive ESD

Co-coordinated by International Network for Research in Arts Education (INRAE) and UNESCO World Heritage Centre

Workshop presenters

- Ralph Buck, Executive Committee Member, INRAE, New Zealand

- Rut Carek, Secretary-General, Croatian Commission for UNESCO, Ministry of Culture, Croatia

- Carméla Quin, Focal Point for UNESCO World Heritage Education, UNESCO World Heritage Centre

- Ernst Wagner, UNESCO Chair in Arts and Culture in Education, University of Erlangen Nuremberg, INRAE, Germany

Workshop rapporteur

- Paquita Perez Salgado, UNESCO Chair in Knowledge Transfer for Sustainable Development supported by ICTs, Open Universiteit, The Netherlands

Key points from presentations

First, Quin presented several topical and current examples of ESD from all over the world in which the UNESCO World Heritage Centre plays a role, stressing the interdependence of cultural and natural aspects in education. She explained how the Youth Forums for Preservation of Heritage combine educational programmes with local activities. She showed the Programme for World Heritage Volunteers, and explained how educational methods are used to give them preservation skills, and how outreach is achieved with local communities. Recently the focus has shifted towards achieving action for sustainability, and in this Quin showcased Patrimonito, representing a young heritage guardian, and showing examples from several continents. Patrimonito is being used as the international mascot of the World Heritage Education Programme, and aims at educating and activating youth in this field.

Carek reinforced this with a presentation on World Heritage in Young Hands (WHYH) Kit 'Educational Resource' which is a result of a project launched by UNESCO and Associated School Network (ASP net) in 1994, focusing on its approach and implementation in Croatia. She explained that the most significant feature of the 1972 World Heritage Convention is that it links together in a single document the concepts of nature conservation and the preservation of cultural properties. The Convention recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two. She further stressed that the WHYH Kit seeks to encourage and enable tomorrow's decision-makers to participate in heritage conservation and to respond to the continuing threats facing our World Heritage. She presented why the manual WHYH is different, by stressing its interactive and interdisciplinary approach and how this can fit into an existing curriculum, its more flexible uses and that its cross-curricular approach gives existing programs an added value and a new perspective. She demonstrated this by presenting several educational programmes operating in Croatia and explained the conceptual units of the WHYH manual, such as, World Heritage and Identity, World Heritage and Tourism, World Heritage and Environment, World Heritage and Culture of Peace. Within each unit she showed how educators, youth, students, local communities and tourism organizations cooperate in order to raise awareness, which values to

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advocate, which methods and educational approaches to use in order to be most effective and create platforms for action to preserve cultural and natural sites in Croatia and worldwide.

Wagner then introduced INRAE and gave an overview of the value of and role that arts education has in respect to ESD. He stressed that one cannot talk about sustainability without taking the "cultural factor" into account. One cannot talk about ESD without talking about Cultural (or Arts) Education. He presented two examples of narratives which can be used for an innovative arts education:

- the story of Great Buddha of Todaiji which is connected with the idea of "a world where all animals and plants shall flourish". It has been reconstructed several times by the will of two single monks – whereas the majority of people today said it would not be possible to reconstruct it again: too expensive, technically impossible, that there are other priorities etc.

- the story of the Brazilian photographer Sebastião Salgado, introduced by the German film-maker Wim Wenders. Salgado has travelled to many countries on photographic projects, dealing with wars, refugees, droughts, hunger etc. After the experience of the genocide in Rwanda he stopped his work, as he had lost his faith in the human race. Starting to replant his father's farm in the Brazilian Atlantic Forest helped him to survive and to work on his last photographic project, 'Genesis', a wonderful homage to our planet.

Individuals create pieces of 'art', e.g. a Buddha, or photos, gardens, a dance, or a piece of music. These pieces of art tell us important stories – and they allow us to believe in the future. Arts educators are people who share these stories with younger generations, and give children the chance to realize their own pieces of art – and by doing this – to shape our future - in a better way.

Buck facilitated the interactive part of the workshop, aimed at developing concrete actions that relate to how arts education and culture can contribute towards ESD.

Activities

After the presentations small groups were created. The method used is called D-thinking, an interactive, dialogic, problem-solving process, using diverse means of thinking and sharing to refine ideas. Around the walls there were questions and, in groups of four to six, they tried to answer the question in new ways using the experience of the participants. Each group developed ideas and ways to enact the question. Afterwards the groups pitched to another group and gave feedback on the results. Returning to the original group, the ideas were refined and presented to the audience.

Examples of questions include: How might we strengthen the arguments on the importance of including culture and creativity in the global sustainable development goals? How might we value intergenerational knowledge to create learning opportunities that enhance understandings of sustainable development? How might we strengthen the role of educators, trainers in the art and heritage education to foster educational change and facilitate learning for sustainable development? How might art and heritage education contribute to transformative change and reconciliation in post-conflict areas? Twelve questions were developed, of which six were used in the workshop.

Recommendations and conclusions of the workshop

- Interconnectedness of Culture and ESD *(Priority Action Area 2)*

    Culture is an essential component of Sustainable Development as it is both an enabler and driver in creating an inclusive, equitable and sustainable society. Cultural education is needed for the promotion of positive values and creativity – two essential components of ESD.

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- Situating ESD in the Local Context and Involving the Community *(Priority Action Area 5)*

  Sustainability cannot be achieved without taking into account the local community, cultural context and identity issues. Heritage sites or art schools can become effective pilot sites for ESD.

- Mainstreaming indigenous knowledge *(Priority Action Area 1)*

  Indigenous knowledge needs to be mainstreamed in national and international policy debates. The Aichi-Nagoya declaration should clearly and explicitly recognize the contribution of indigenous people to SD.

- Target specific innovative teaching and learning materials *(Priority Action Area 2)*

  Different art forms and different artistic narratives should be used for sharing good practices, e.g. in peace-making. Also, a multimedia artistic manual for intergenerational audience should be created. Issues such as biodiversity conservation should be communicated visually for better understanding of the issues.

- Empowering young people *(Priority Action Area 4)*

  Young people should be trained to participate in heritage conservation as well as to develop themselves and societies through creative and innovative formal and non-formal training programmes (like the WHYH Kit).

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9. Reviewing Practical Approaches to Twenty-first Century Education: Global Citizenship, Ecopedagogy and Sustainable Development

Co-coordinated by Paulo Freire Institute, University of California, USA, Instituto Paulo Freire, Brazil, and North-South Centre of the Council of Europe

Workshop presenters

- *Alicia Cabezudo*, Vice-president, International Peace Bureau, North-South Centre of the Council of Europe, Switzerland (Chair)
- *Carlos Alberto Torres*, Director, Paulo Freire Institutes (speaker)
- *Miguel Silva*, Programme Manager - Global Education, North-South Centre of the Council of Europe, Portugal (speaker)
- *Utak Chung*, Director, Asia-Pacific Centre of Education for International Understanding (APCEIU) (discussant)
- *Susan Wiksten*, Paulo Freire Institute at UCLA (summary)

Workshop rapporteur

- Zabariah Matali, Chief Executive Officer, Islamic Information Centre, Malaysia

Key points from presentations

Paulo Freire Institutes:

- Torres highlighted the Human rights discourse as a resource, a principle of respect for human dignity.
- The Paulo Freire Institutes promote the advancement and active development of social and environmental justice models.
- Global citizenship as a concept is based on diversity.
- To advance global citizenship, critical, transformative education is needed.
- Tensions are experienced between cultural and universal rights. We need to decouple Human Rights from imperialism.

North South Centre:

- Silva highlighted the importance of cooperative work for advancing a participatory global citizenship.
- On the theoretical level, holistic approaches are needed, as well as the inclusion of multiple perspectives.
- Methodological approaches recommended by the North South Centre include: cooperative learning, problem-based learning and dialogue-based learning.

From the groups:
- The groups proposed that it would be beneficial if the teacher would take on a role as facilitator of discussion in classrooms, rather than leader of the discussion, to allow the development of experiences and habits for democratic practices among students.
- It was suggested that Global Citizenship Education could work as an umbrella concept under which ESD can be nested.
- The groups underscored the importance of alternative ways of learning, constructing meaning, of using a wide curriculum with arts and music.

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- Challenges identified by the groups included: How will Global Citizenship Education take into consideration de-militarization? What can be done in schools now?
- Implementation was seen as encompassing more than technical dimensions, as was the fostering of hope.

Activities

Participants were asked to form groups with those sitting close by, to discuss practical and applicable examples or concepts of relevance for:

- advancing work in GCE and/or ESD
- and/or major challenges to advancement

Discussion groups were asked to take into consideration and comment where appropriate on the applicability to the five priority action areas identified in the UNESCO *Roadmap for Implementing the Global Action Programme on ESD* (2014).

The primary goal of working with discussion groups was to draw on the experience and expertise of participants.

Recommendations and conclusions of the workshop

Conclusion:
To improve the quality of education, it is necessary to make room for thoughtful dialogue and critical thinking at all levels of education - from individual classrooms to international collaborations.

Recommendations: bridge policy and practice better
A number of recommendations were formulated by the groups:

- Two of the groups noted that intergovernmental co-operation on the global level should be continued beyond this initial decade. Continued efforts to further the global level policy discourse are needed to support the identification of common goals and resource allocation. Continued work to develop multi-stakeholder approaches and dialogue in the formulation and implementation of an international framework for post-2015 goals is needed. An international agenda serves as a support and reference in the formulation of national policies and curriculum in support of Global Citizenship Education.

- Facilitate access to education for all.

- Two of the groups formulated bullet points addressing a concern with regard to the gap between policy and practice, identifying a need to move towards a more consistent relationship between policy and practice.

- To engage local communities, both formal and informal education should be acknowledged in policy frameworks. Also, practices need to reflect the policy support by consistent and genuine practices connected to real community life.

- Assessments are needed to see what is translated and implemented into practices, so that policy frameworks can be updated to reflect learner needs and the development of critical reflection.

- Education for Sustainable Development and Global Citizenship Education should be seen as complementary concepts and integrated into one theoretical framework.

- Support networking and mobility of higher education institutions by policy and funding. This and other forms of peace platforms are good examples of how to network across different value-frameworks and identities.

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Feedback in support of concrete activities

The groups proposed a number of points for working on ESD and/or GCE:

1) Advancing policy
   - In order for ESD to integrate communities, families should be taken into consideration as a starting point.
   - Bring private and public sector leadership and community leaders together in concrete problem solving oriented activities, such as workshops. Discuss a topic together to share different ideas through which important learning can take place.
   - Curriculum review with a two level approach: training of teachers needs to be challenged itself as well as the students' curriculum in the local framework. Curriculum must allow flexibility for teachers in different contexts to adapt.

2) Transforming learning and training environments
   - ESD should be taught in schools.
   - Using a wide range of teaching and learning approaches that incorporate not only text focused learning but also visual arts and creativity to address the emotional development of pupils. A practical example of this is the use of visual arts for working with questions related to individual identity and emotions.

3) Building capacities of educators and trainers
   - Teachers should be supported to take on the role of facilitator in groups of learners, to support student and pupils to become primary actors of the learning process. Genuine education takes place only when it connects to the learner's world-view and interests.
   - Teachers should be supported to build on participation and complementarity. Schools should likewise be supported in their role as experts in their local context with local experiences, similar to the way NGOs are currently positioned in the world system.

4) Empowering and mobilizing youth
   - Youth should be included in curriculum and policy development in general. Public efforts are required to ensure the effective engagement of youth by dialogue and by promoting equality.
     - Engage young emerging leaders from diverse backgrounds to engage their different identities to plan for a shared future, on the local level. Anchoring the discourse in the local is crucial for being able to speak and connect to the global level.
     - Platforms for inter-generational learning should be created. Talking together about the future of the community on inter-generational platforms would allow mutual learning to take place and would support sustainable decisions.

5) Accelerating sustainable solutions at local level
   - Dialogue across different perspectives should be promoted.
   - Methods that link universal concepts with individual value systems should be advanced.
   - Holistic approaches that connect people and the surrounding environment and nature should be promoted.
   - Practices should support the development of skills for active listening of others. In particular those who are not typically heard, for example children or even living things other than human.
   - It is important to contextualize approaches and to support coherent systemic approaches, rather than piecemeal activities.
   - To meet the challenge of differing attitudes, the values of ESD and Global Citizenship Education should be incorporated into teaching and learning so that inquisitive, critical and problem-solving skills are nurtured.

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