



## 48<sup>TH</sup> SESSION OF THE INTERNATIONAL CONFERENCE ON EDUCATION Inclusive Education: The Way of the Future

### SIDE-EVENT 2 REPORT

<b>Date</b>	Tuesday, 25 November 2008
<b>Side-Event Title</b>	SIDE-EVENT 2 Role of ICTs in Curricular Innovations
<b>Organisers</b>	International Bureau of Education (IBE-UNESCO)
<b>Speakers</b>	The panel had four speakers: <ul style="list-style-type: none"><li>• <b>Moderator Ms Miriam Nisbet</b> (Director of UNESCO Information Society Division),</li><li>• <b>Mr. Illah Nourbakhsh</b> (Professor of Robotics from Carnegie Mellon University)</li><li>• <b>Mr. Juan Ignacio Martinez de Morentin</b> (Executive Director of the UNESCO Center of San Sebastian)</li><li>• <b>Mr. Kiichi Oyasu 10 minutes</b> From UNESCO Dakar/Bangkok</li></ul>
<b>Documentation</b>	The Side-event was supported by the following documentation: <ul style="list-style-type: none"><li>• Project summery document for GigaPan (English),</li><li>• Flyer of the GigaPan project (English),</li><li>• Powerpoint of the GigaPan project (English),</li><li>• Powerpoint of UNESCO Animators Programme (Spanish),</li><li>• Powerpoint of the Community Living Centers and ICTs project (English).</li></ul>

## Objectives

The objectives of this side-event were:

- Deepen the understanding of the role of ICTs in curricular innovations and support of inclusive education;
- Discuss selected initiatives by UNESCO, IBE and others in this field;
- Identify concrete results from three projects

## Discussion

### Introduction by Miriam Nisbet

The moderator provided a brief explanation of the relevance of the Communication and Information (CI) Sector of UNESCO taking part in the International Conference on Education (ICE) and in particular the side event on the “Role of ICTs in Curricular Innovations”. The CI Sector works closely with the Education sector to promote the use of Information and Communication Technologies (ICTs) to improve, enhance and innovate. Close collaboration creates a coherent UNESCO approach to the topic. The moderator went on to mention that the term ICTs denotes all technologies for communication, including mobile phones, databases, etc., but also traditional media, such as radio, TV.

The moderator then posed the question “How to use technologies for education?” She explained that UNESCO’s vision statement on ICTs is “A world without boundaries where technologies support education to build inclusive knowledge societies.” The use of ICTs is an opportunity to improve education, as well as teacher training at all levels of education, including Technical and Vocational Education and Training (TVET), Early Childhood Care and Education (ECCE), Learning to Live Together (LLL), etc.

Finally, before introducing the speakers on the panel she concluded by pointing out that speakers would be presenting three practical examples of UNESCO activities in the field of ICT and education.

### Presentation by Mr. Illah Nourbakhsh

Professor Nourbakhsh presented the joint UNESCO IBE CMU project on ICT and inclusive education entitled: “GigaPan Conversations: Diversity and Inclusion in the Community”. Professor Nourbakhsh demonstrated how the GigaPan robot was developed with technology that was used by NASA for research for its Mars mission. He went on to explain how this technology could be used in the classroom.

The GigaPan Conversations seek to promote empathy and understanding between cultures and create a greater sense of community through exchanges between students internationally. Using a robotic camera provided by the programme, children in

participating schools take explorable, high-resolution panoramic images of the world around them, and share them with their contemporaries around the globe. The sharing of their community's sites, landmarks, events, and places of importance encourages self-reflection and a deeper understanding of community and self-identity. Students are challenged to think deeply about inclusion and diversity in their communities. They then embark on a 21st-century community-networking journey to explore, document, and discuss the images and community identity.

Tangible outcomes of the programme include a gallery or presentation for the outside community showcasing the images, discussions and what the children have learned. Furthermore, children come out of an exchange with skills in digital photography, ICTs, internet research, communication and social media, deeper understanding and awareness of their partner community, and an enhanced sense of identity that comes from documenting one's life with pride and dignity.

#### **Presentation by Mr. Juan Ignacio Martinez de Morentin**

Mr. Ignacio Martinez presented the San Sebastian on-line training programmes of UNESCO Animators with a particular focus on Latin America.

The Training Programme of UNESCO Animators provides educational instruction to respond to the training needs of those who are working in UNESCO affiliated roles (National Commissions of Cooperation with UNESCO, UNESCO Associations, Centers and Clubs, Chairs and Schools associated with UNESCO). The curriculum of the programme is composed of materials based on the purposes and objectives of UNESCO.

The training of UNESCO Animators is intended to contribute to international cooperation and peace. As such it involves promoting human rights education and fundamental liberties while furthering projects, methods and techniques that encourage cultural diversity, promote sustainable development, democracy and help to promote inclusive education through ICTs.

The fundamental themes of the programme are:

1. - The improvement of non-formal education systems in countries with curricular needs. That is, offering Life Long Learning based on continuity and flexibility so that those interested can have the greatest opportunity to receive continuing education.

2. - The empowerment of social agents and teachers for the implementation of educational “processes” with an inclusive character.

3. - The understanding that sustainable human development is associated with education, health, personal well-being, cultural progress and environmental sustainability.

4. - The attainment of a worldwide association for the development and deployment of new educational technologies and, in particular, information and communication technologies.

Mr. Juan Ignacio Martinez de Morentin concluded by presenting concrete results and some demographics of how many people had been taught in the training programme.

#### **Presentation by Mr. Kiichi Oyasu**

Mr. Oyasu presented the experience of Community Learning Centers (CLCs) as good examples of instances where non-formal education and ICTs could work well together.

The presentation provided an overview of Community Learning Centers (CLCs) and ICTs. CLCs are local education institutions outside the formal system; which are set up and managed by local people, using local infrastructure. They provide various learning opportunities for community development and improvement of people’s quality of life.

Positive findings from the 24 participating countries were: (1) CLCs provide a venue for individual and community development in: literacy and quality of life improvement, confidence building, empowerment of disadvantaged people; (2) a learning environment was developed in communities targeting all ages, allowing for discussions about global/developmental issues and parents’ interests in their children’s education; (3) inter-country collaborations on joint planning, resource development and sharing, networking.

Challenges faced, are the allocation and mobilization of resources (financial, material and human), abilities of personnel and leadership in the centers, decentralized management and the ability to maintain the quality of activities while coping with changing needs.

Prior to beginning the project, the identified potential benefits of ICT for CLCs were: improving the efficiency of management, improving teaching-learning process, enabling self-learning, providing tools for quality of life improvement, information sharing and networking. Community empowerment and youth

were seen as driving forces to introduce computer based activities to the project. Considerations for using ICTs for community empowerment included: quality of local infrastructure, availability computers/tools, locally relevant content, language issues, awareness and commitment at all levels, capacity to manage ICTs, and mental barriers against ICTs, especially amongst adults.

The project addressed monitoring and evaluation by using ICT tools with data management software, documentation through multi-media and direct information sharing using the Internet without having to go through administrative hierarchy.

### **Question and Answer Session**

The moderator summarized the projects, the results and outlined the different uses of technologies at various levels of education. She also emphasized that ICTs are a tool that allows curriculum to value, address and utilize local content and issues. These technologies not only enable individual access to and use of technologies, but also provide a means to share knowledge and experience with others, using local languages and communities. This assists in supporting the production of local content. In fact the three projects illustrated instances where local, grassroots initiatives were successful in creating tangible results through employing ICTs in education. This issue was one of the most encouraging results linking the three presentations.

Mr. Nourbakhsh commented that technologies and the use of them empower students, learners and teachers to collaborate and learn more effectively from their peers. This enables ICTs to support local, learning initiatives.

Representatives from NGOs asked questions on how best to integrate these ICT programmes into the official school curriculum. That is how to incorporate such project when schools already experiencing overloaded classroom time.

Mr. Nourbakhsh responded by acknowledging that this is a central issue with regard to integrating ICTs in education. Indeed, the GigaPan project encountered this problem, as classroom time is limited and often subject to curriculum standards and evaluations. There are several ways to deal with this: 1) Cut into official school time and/or assign a specific time within the curriculum to use ICTs for this project. 2) Use a partial design and create short compact modules that the teacher can design and use in their classroom when there is some free time. This solution also empowers teachers to adapt things to their own programme and use it. 3) Use the out of school time of students, as it was the case for the GigaPan project in Tobago.

Mr. Martínez de Morentin added that some ICT programmes can be integrated into the official school curriculum through an on-line curriculum. He stated that establishing a web page for his course on the Training of UNESCO Leaders created a virtual place to connect. This virtual space allowed student to access online resources and enrolment applications. The online platform has been designed so that the students can receive additional training, as well as to obtain personalized, complementary help through email.

The online component of the Course created a virtual area that is both very real and dynamic. Online resources can be shared, content can be simulated and connections made by linking information stored physically disparate locations. The virtual online sharing of resources means fewer real world resources need to be spent physically offering the services found online. This frees up resources within the programme to integrate ICTs into the curriculum.

Mr. Oyasu mentioned that his project was started at school/community level, and therefore was a result of local decision-making. Time allocation and the programme was already included and developed within the curriculum and implemented by the Ministry.

**Links and implications for the 48<sup>th</sup> Session of the ICE**

The role “Role of ICTs in Curricular Innovations” was directly reflected in the official “Conclusions and Recommendations of the 48<sup>th</sup> Session of the International Conference on Education (ICE), where Member States recommended “strengthening the use of ICTs in order to ensure greater access to learning opportunities, in particular in rural, remote and disadvantaged areas”.

Furthermore, this side event illustrated that ICTs can improve inclusion by empowering local communities, enabling them to create home grown, native content and allowing students to collaborate with their peers around the world on topics that they may not have had access to with out ICTs.