

MULTICULTURAL EXCHANGE & NEW MEDIA

Global Education Solution for Children

Marcos Sadao Maekawa, Takehiro Suzuki and Keiko Okawa
Graduate School of Media Design, Keio University, Yokohama, Japan

Keywords: Cross-cultural, Exchange, Digital Media, Children.

Abstract: This paper introduces the Global Education Kids Project and its research on educational programs and activities able to provide global experiences for children around the world, supported by new media technologies. A global experience can be understood as a situation in which kids can get together with others, collaborate on works and actions, share knowledge, feelings, and moments of cultural exchange, reflection and friendship. This paper explains some of the elements necessary for designing an effective program for multicultural exchange that we discovered while conducting research and promoting and/or observing experiments.

1 INTRODUCTION

In the last two decades, the development and globalization of media technologies have been changing not only the way people communicate and work, but also the way they learn and study. Changes in the whole world were brought up, making information exchange more accessible and speeding its dissemination. On the other hand, new issues on a scale never seen before have been challenging the global society to find new solutions. Though one effect of globalization is the homogenization of lifestyles and cultures, it is necessary to preserve and teach the next generations to respect cultural diversity.

Introducing Global Education supported by new media technologies will encourage school-age children to think and reflect about local and global issues. Interacting directly or indirectly with other children around the world, they become more motivated to participate in exchange activities and more interested in communicating. This sort of programs will also stimulate children's creativity. Furthermore, those cultural exchange experiences will prepare and inspire the next generation to meet the challenges of living in a global society.

1.1 Cross-cultural Communication and Cultural Exchange

The demand for cross-cultural communication skills has increased dramatically because of globalization. A wide variety of cultural exchange activities can be found around the world aiming to promote mutual understanding between different cultures. Knowing more about cultural differences and similarities is essential to achieving mutual understanding and making cross-cultural communication effective. Those activities applied to children's education can provide them with their first notions of other cultures and view of the world. In many countries, projects have already started promoting cultural exchange and dialogue and stimulating globally focused educational programs introducing global citizenship.

According to the Commissioner's Advisory Group on International Cultural Exchange of Japan (2003), the Japanese government invested heavily through the 60's in cultural exchange to restore its position in international society after World War II. In the 70's, trust in Japan among the international community was restored and during the same period there was "a surge of international exchange initiatives by local governments as well as by civil and grassroots organizations." (p. 5) Today, the Ministry of Foreign Affairs of Japan (2009) holds yearly the event Global Youth Exchange Program in order to promote dialogue and international mutual

understanding among young people from many parts of the world. (“MOFA: Global Youth Exchange Program”)

1.2 Global Citizens, Global Issues

The *Get Global!* Project is an initiative from the UK. Price et al (2003, p. 3) points out that one of the core themes of this project is to develop an understanding of the world as a global community and discuss the political, economical, environmental and social implications of this. In this project guidebook, a MORI pool indicates that 80% agreed with the following statement: “Young people need to understand global issues so they can make choices about how they want to live their lives.” (Price et al, 2003, p. 3)

Another relevant factor in global society that raises the needs of the spread of global education is the international migration phenomenon. According to International Organization for Migration (IOM), there are over 214 million international migrants in the world in 2008. IOM’s website (2009) considers migration one of the defining issues of this century and points that it is necessary “to manage migration effectively to enhance its positive and reduce its negative impacts.” (“Fact & Figures”) This research believes that global education and respect of diversity can help children, both those hosting and those migrating, to experience a smooth adaptation to cultural environment changes.

Information and Communication Technology (ICT) has led to enormous transformations to education and will continue going forward. The smart use of ICT can bring multicultural activities closer to children, and provide them with new valuable opportunities to feel global.

2 BACKGROUND

The use of digital media has been revolutionizing education as a whole, overcoming barriers of distance and time difference with E-learning and online boards, educational websites and social network services (SNS). This trend is very clear in higher education, with the spread of universities and their open courses online, giving opportunities for students from many locations to access contents at the national and international level. We looked for related works in the same area of cross-cultural exchange and multilateral digital communication, mainly videoconferencing, for elementary students. Most of the academic bibliography found was related to the use of SNSs and other Web2.0 tools,

but mainly for language exchange and was concentrated in secondary or higher education. On the other hand, various projects that focused on elementary students were promoted on blogs and websites. We found, basically, two categories of activities: (1) independent initiatives and (2) educational online platforms.

2.1 Linking Classrooms with ICT

In those independent initiatives, interaction occurs through digital communication software with videoconferencing functions, mainly Skype, that can be downloaded for free from the web and that costs little to operate. Some of the initiatives reached a global scale, such as the *Around The World With 80 Schools* project, from the US, that holds short sessions (1 to 5 minutes long) for kindergarden up to 6th grade students and aim to connect with at least 80 schools in different countries and continents, as described in its website (2010). Although they have been successful and are an example for other teachers, software limitations do not allow multilateral videoconferencing because all activities must be made peer-to-peer only.

On the other hand, there are online educational projects with bigger organizational structures aiming to link classrooms around the world. They usually are totally supported by government or public organizations, develop programs and online instructional materials, and have their own platform of interaction online. Europe has some of the biggest examples, such as the British Council’s *Connecting Classrooms* project and *e-Twinning*.

In Asia, one example of an innovative online educational platform is focused on higher education; the SOI (School on Internet) Asia Project, SOI Asia utilizes a satellite-based network to provide Internet access in a less expansive, easy to deploy, and more feasible way.” (“About SOI Asia”) Through this network, 27 universities and research institutes in 13 countries have access to live lectures and online archives.

One strong point is the use of a satellite-based network that enables regions with low internet infrastructure—one of the reasons for the digital divide—to reach content for higher education. As a distance learning environment and research network, SOI Asia promotes multilateral interaction enabled by self-developed video and audio applications. Depending on the hardware infrastructure of the site, it is possible to receive high-definition quality image and sound.

2.2 A Demand for Contents

The rush to introduce ICT has brought together organizations and local governments to work on providing hardware for children. The demand for cross-cultural programs focusing on children is increasing at the same pace.

For example, recently, Uruguay announced Plan Ceibal, their ambitious program that provides one laptop for every student and teacher in the country. Plans on a smaller scale are more frequently mentioned in the mass media. Now, that the world is intent on giving children more access to computers, which is a very important part of the process, it is time to go beyond providing hardware and connectivity at schools. It is also necessary to develop programs capable of utilizing the potential of this environment, to work on developing the teachers to teach ICT literacy to children and to give the opportunity of a global experience to as many children as possible. This will awake their awareness of other cultures as a whole and will also begin to prepare the next generation to face global issues that arise in the future.

3 EXPERIMENTS

As researchers, we have been observing and participating in the design of new cultural exchange programs, supported by at least one new technology or new medium. All of them have more than two countries participating, in order to create a multicultural environment and observe children's motivation and immediate reactions during and immediately after each activity. Through this hands-on experience, we expect to discover more ideas and refine them to enhance the program's design.

3.1 Connecting the World through Komadori Anime

Komadori Anime is the Japanese term for snapshot animation. Eighty elementary students (ages 8 to 14 years) from Japan, Italy, Cambodia and Brazil participated in animation production workshops designed to promote cultural exchange. Participants did not have any direct interaction with peers abroad, but they were expected to accomplish two tasks; reflect about their own culture and find cultural differences and similarities.

In this program, new media tools, such as video and digital camera, played an important role supporting children's creativity. ICT (regular public

internet) was essential to the smooth communication and operations management among the sites.

3.1.1 Methodology

This program was divided into three stages in four countries over 1.5 months, on different dates.

In the first stage, participants were divided in groups of approximately 5-6 members and were given a brief introduction to all of the other participating countries. Since the age range was broad (1st to 6th graders), basic data about each country, relevance in sports, typical food and other easy-to-understand topics were used as introduction information.

After that, children were given coloured pencils, paper, and digital cameras and expected to produce material such as characters and objects (drawings) and also backgrounds (photos). They were guided to produce pieces that could represent their original culture as much as possible.

Once the session ended, the drawings were scanned and the material was exchanged with other countries' participants so that each site had the same contents available to be used to prepare animations. The exchange process occurred online, since an FTP server was available for file transfers among the sites. In the case of Cambodia, where Internet infrastructure is very poor, all data was recorded on a CD-ROM and sent by regular post.

In the second stage, participants experienced animation production. The exchanged material was briefly introduced and children quickly started discovering cultural similarities and differences so they could select some of the pieces, create an original story, and record a narration. Each groups' facilitators operated the software (Windows XP, Movie Maker, Audacity), but the children guided them. During this session, participants also viewed some messages recorded by their international colleagues in the previous session.

In the third and last stage, held only in Japan, all of the participating sites' animations were screened for the participants, parents, guardians and other stakeholders. For other countries, the movies were uploaded to a website for their viewing in four languages: Japanese, English (for Cambodia), Italian and Portuguese.

3.1.2 Evaluation and Results

After observing participants and analyzing interviews with parents and stakeholders, it can be concluded that the children enjoyed learning about other cultures and were motivated to introduce

elements of their own culture to others, though most of them couldn't identify what those elements should be. Organizers had anticipated this, and guided the children with books and references they had prepared for this purpose.

In Japan, 4th to 6th graders were more interested and focused on thinking about elements from their own culture than younger participants were, but all of them were very excited while watching video messages from other countries.

Internet access was essential to the management of these workshops; written communication was by email, the conversations were over VoIP software such as Skype, and materials were exchanged using FTP servers.

The results of this program were the base of discussion for a symposium—held in Japan—about the mission and views of the future of ICT, children, the digital divide and cultural exchange.

3.2 Global Kids Eclipse 2009

On the morning of July 22, almost 500 students from eight countries—Japan, Brazil, Indonesia, Thailand, Bangladesh, Philippines, Malaysia, and United Arab Emirates—gathered at 13 different locations in Asia to share the longest total solar eclipse of this century and a multicultural exchange experience.

This program provided a common virtual space where the students—the majority were 6th graders—could watch eclipse images transmitted from remote sites and also participate in other real-time interaction sessions. The participants were connected through the SOI Asia network, utilizing video and audio applications developed originally to offer multilateral communication. This was also a good opportunity to investigate how the SOI Asia platform performed in activities other than the usual online lectures for higher education.

3.2.1 Main Goals

The program was designed with two main objectives: to *promote science* and to have all of the participants *feeling global*.

FEELING GLOBAL - By connecting different places around the world remotely, it was hoped that the students would increase their awareness of the world (overseas, time differences, other countries) and be inspired by the opportunity to interact and share experiences with other students from different backgrounds.

PROMOTING SCIENCE - In the International Year of Astronomy 2009—declared by the United Nations and endorsed by UNESCO—GLOBAL KIDS ECLIPSE 2009 attempted to encourage

student interest in science and astronomy and support the central theme of IYA2009: “The Universe, Yours to Discover.”

3.2.2 Methodology

Since regular education curriculums vary from country to country, and to give more time to participants to be involved in this activity, the program was divided into two days.

All locations were asked to hold a pre-event, in which students would hear a lecture about the eclipse phenomenon and also create an art piece on the theme “My ideal Star/Planet.” Drawings were used for the cultural exchange corner in the main event.

The main event schedule was divided in two themes: multicultural exchange and eclipse observation. It started with a very simple language exchange that also served to break the ice.

Next, participants from each site had time to introduce some of their drawings, explain concepts, techniques, and included messages. In this part, students from any site could ask questions of or make comments to the authors. Since the majority of participants were not fluent in English, a simultaneous interpretation network was design to make multilateral communication flow smoothly.

Between sessions, students enjoyed quizzes that made the learning fun; they were motivated to express that which they had learned previously and also could see other participants' immediate reactions, stimulating interaction.

For the eclipse observation corner, live images of the total eclipse, provided by the National Astronomical Observatory of Japan (NAOJ), were received in the main site in Yokohama, Japan and then transmitted to other locations through the SOI Asia network. This technical structure enabled the transmission of high quality images to all sites. This is an essential factor to facilitate communication among children; facial expression and voice tone are very important elements in cross-cultural communication, especially because they didn't have a common language to rely on. High quality images of the total solar eclipse also allowed the 500 participants to share the emotion and the experience with those in countries where the total eclipse could not be seen.

3.2.3 Evaluation and Results

In order to evaluate this activity, surveys were distributed for children and teachers in Japan and Indonesia. When asked about their impressions and thoughts about participating in this event, children gave very positive feedback on the opportunity to

interact. Although more than 90% of the answers referred to the eclipse as the main learned lesson, as expected by the Promote Science goal, 32% of the students added that cultural exchange was also part of the main lesson.

In a deeper reading of the surveys, a syntactic analysis of the material revealed that the high number of substantives such as *country*, *world* and *exchange* reveals that this program made them reflect about the *feeling global* aspect. Collected data revealed they enjoyed sharing; they used a relevant number of words like *together* and *everybody/everyone*.

Teachers and other stakeholders also gave positive feedback and demonstrated interest in participating in new activities like this. They also suggested new programs to nurture teachers.

Multilateral communication was smooth, other than a hardware problem; one location had a faulty microphone. ICT, specifically the existing infrastructure of SOI Asia, made it possible for all of the operations and management to run smoothly.

3.3 Mekong Kids 2009

The Mekong Kids 2009 program was held during the Mekong Festival 2009, a celebration of the 90th anniversary of exchange between Japan and the Mekong countries (Thailand, Vietnam, Cambodia, Myanmar, Laos and Yunnan Prefecture in China).

This activity aimed to encourage children from each Mekong country and Japan to show their culture and daily life to friends within the Mekong area and in Japan. It was an opportunity for them to know more about their own home country, and (re)discover colours, forms, views, sounds and flavours.

Using new media such as Twitter, they were able to share these experiences and discoveries and to deepen the exchange between the Mekong area countries and Japan.

On the Japan site, Mekong Kids 2009 aimed to provide all visitors a chance to see the contents and messages created and posted by children and also the opportunity to interact with people from the Mekong area countries.

3.3.1 Evaluation and Results

It was not possible to evaluate the effectiveness of this program because not many children were able to participate. In the Japan site, participants felt motivated to show their culture, such as origami or Japanese characters. One Japanese girl was

motivated to participate because she wanted to see the response from the Mekong Kids.

However, a survey collected from visitors of Mekong Festival 2009, in which a question about the importance of cultural exchange programs for children was included, revealed that almost 100% of the visitors considered it to be important for kids' education.

4 FUTURE WORKS AND CONCLUSION

Although surveys and feedback from children, teachers, parents and other stakeholders showed that there is more room and demand for multicultural exchange programs in formal and extracurricular education, there are still many lessons to be learned and possibilities to be explored.

One of the lessons from related works, and confirmed by the practices described in this paper, is that having a good partnership with schools, universities, local government and/or organizations is essential to make this sort of program feasible and sustainable. Teachers and facilitators have to be developed in parallel. This would also help improving scalability of the operational structure. In order for these programs to be effective they should be held on a regular basis. Furthermore the effects of these programs should be evaluated in the mid- and long-term basis.

Beyond getting computers into children's hands, this research aims to give them opportunities and experiences made possible by the new media technologies. Results from the experiments observed have confirmed one of the most important results: children are ready to have global experiences like the ones described in this paper. This can be the basis for dialogues, diversity and other new experiences.

This research into improving children's interactions and new contents design will continue. We also expect to create sustainable program development and deployment to be expanded in Asia and other developing countries and regions.

These kinds of programs widen children's view of the world, make them reflect on local and global acts and their responsibilities to society, and definitely inspire them to face global issues and to help find solutions for them.

REFERENCES

- Around The World With 80 Schools, 2010.
 <<http://aroundtheworldwith80schools.wikispaces.com/>>
- Commissioner's Advisory Group on International Culture Exchange, 2003. *About the Future and Promotion of International Cultural Exchange*. Agency of cultural Affairs, Japan. Retrieved from <<http://www.bunka.go.jp/english/index.html>>
- International Year of Astronomy 2009. <<http://www.astronomy2009.org/>>
- International Year of Astronomy 2009 Japan. <<http://www.astronomy2009.jp/>>
- Ito, M. and others, 2008. *Living and Learning with New Media: Summary of Findings from the Digital Youth Project*. Cambridge, MA: MIT Press.
- Ministry of Foreign Affairs of Japan, 2009. *MOFA: Global Youth Exchange (GYF) Program*. <<http://www.mofa.go.jp/policy/culture/people/youth/gye/index.html>>
- National Astronomical Observatory of Japan, 2007. <<http://www.nao.ac.jp/>>
- Portal Ceibal. Retrieved January 25, 2010, from <<http://www.ceibal.edu.uy/>>
- Price, J. and others, 2003. *Get Global! A Skills-Based Approach to Active Global Citizenship*. ActionAid, London. Retrieved from <<http://www.getglobal.org.uk/>>
- SOI (School on Internet) Asia Project, 2007. <<http://www.soi.asia/>>



Scitec Press
 Science and Technology Publications