

# KomaKids: Promoting Global Competence Through Media Creation in Elementary School

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**Keywords:** Elementary School, Global Competence, Media Creation, Cross-Cultural Program, 21<sup>st</sup> Century Skills.

**Abstract:** This research proposes a cross-cultural program in elementary school aiming at fostering global citizenship education in a classroom through media creation in a program called “KomaKids” In this program, the students' global competence is expected to be developed in four main steps: (1) through learning about foreign culture; (2) by reflecting on their own culture through the production of stop-motion animation; (3) by sharing their impressions through “pen-pals” letter; and, (4) through connecting in real-time with peers from foreign cultures. Since March 2015, 23 workshops were periodically conducted at Japanese, Thai, Brazilian and USA elementary schools. However, the focus of this paper will be on the 2017 academic year program with Japanese, Thai, and Brazilian schools. The result according to the observation shows that the implementation of “KomaKids” program produced noticeable changes in students' global competence of their age.

## 1 INTRODUCTION

### 1.1 Background

This study was undertaken to foster elementary school students' Global competence through the production of creative media works. In today's world of globalization, the disposition and capacity to understand and act on issues of global significance, so-called “Global Competence,” is considered an essential skill for the future. The next generation of children is expected to live, learn and work with anyone regardless of their nationalities and cultural backgrounds.

According to the research from Institute of Future, global competence ranked on the essential skills for all workers over the next decade. The idea of promoting global competence has evolved over decades. Tye suggests that Global Education should be implemented into school, where children spend most of their time during their younger age, to create quality human resources for the future (Tye 1990).

During the past century, many organizations such as UNESCO and The Partnership for 21st Century Learning released global education frameworks for promoting global competence in school with an aim to stimulate students' awareness, curiosity and interest in the world and how it works.

The challenge lies in how to implement this into today's classroom. Still today, the effort to promote this skill in the school is still hindered. Most schools' curriculums only focus on improving academic skills through lecture style teaching method, which is no longer competent. Although many schools around the world have started their action to revise the curriculum for global education, there is still a lack of supporting research and evaluation (Mundy and Mundy, 2007).

To succeed in this challenge, schools and other stakeholders should work closely together. As each school may encounter different problems, such as lack of budget, technology resources, and human resources. The curriculum should be tailor-made, to provide students an experience to connect with the world and develop their global competence. In hopes of equipping them with a tool to survive in the diverse society.

This research began its roots in March 2015 under the “KomaKids Program” in Global Education Project, Graduate School of Media Design, Keio University, Japan. The cross-cultural program was designed and implemented based on fieldwork experiments in classrooms. This was with the aim of developing a program that could provide an opportunity for students to learn about the world outside the classroom in a playful way. The program's name, KomaKids, came from the word ‘Koma

' in Komadori anime (コマ撮りアニメ), in Japanese, which means stop-motion animation that is the main media used in this program, and the word 'Kids.'

This paper will describe the implementation of this cross-cultural program over the last academic year 2017 in the Japanese, Thai and Brazilian elementary school using media creation. This paper will discuss the plan, operation, and evaluation of a diversity experience program and go into further detail about the program and suggest the new future of preschool education for a global society.

## 1.2 Research Goal

The objective of this study is to design a program to foster global competence in elementary school through the approach of media creation in a hybrid of physical and digital media. Through this approach, the goal is that this program will bridge classroom students in two countries together through their creative media works. It is also expected to create a bound and an opportunity for them to interact with foreign peers and learn about each other's culture without requiring them to go aboard.

Based on this research objective, following research questions are posed with respect to the current process:

1. Can media creation activities help cultivate students' global competence at their age?
2. What are key elements in creating a school program that can promote global competence in elementary school level?

## 1.3 Related Work

### 1.3.1 Global Citizenship Education in School

Education to promote global competence is a topic, which has been discussed in the education field for over a decade. Although this term is becoming more widely used, its meaning is not always clear (Mundy and Mundy 2007).

Mansilla and Jackson defined Global competence "as the capacity and disposition to understand and act on issues of global significance" (Mansilla and Jackson 2011). Moreover, Downey et al. also discuss that globally competent individual has the ability to work effectively with others who have a different cultural background. They develop and deploy this expertise when facing such issues and try to figure out the solution to improve conditions (Downey et al. 2006).

The UK is one of the pioneering countries in developing global education curriculum into school (Maekawa 2015). In the UK, teachers considered global citizenship and human rights as essential values to put in the curriculum and teach in the elementary classroom. They aim at cooperation and caring rather than contentious issues (Davies 2006).

The USA has been working on implementing global citizenship-oriented education in their systems. In recent year, there are many organizations and NPOs in the USA, which propose frameworks as well as support for global education. Examples range from The Partnership for 21st-century learning, Partnership for Global learning, and NPOs World Savvy.

In Japan, Ministry of Education, Culture, Sports, Science, and Technology recently launched many policies to promote global education in school. One example is the World Friendship Project under the Olympics and Paralympics education program, which aim to cultivate the global mindset and global perspective in Japanese youth in order to be ready to host Olympics and Paralympics games in 2020.

In Thailand, the government aims to foster the education system for children from every background, including migrant. In Thai schools, social studies is no longer a stand-alone subject but now covers a larger presence through various subjects such as "Society and Humanity", "Life Skill and the World of Work" and "ASEAN, Region and the World" (Thailand MOE 2008).

### 1.3.2 Media Creation in Education

One of the principal ways in which schools seek to develop students' global competence is through a media creation approach. The New Media Consortium defines 21st-century literacy as the set of abilities and skills where aural, visual, and digital literacy overlap. (Consortium et al. 2005).

Lenhart and Madden point out that children who create their media are more likely to respect the intellectual property rights of others because they feel a greater stake in the cultural economy (Lenhart and Madden 2005).

Media resources such as photographs, mass media, and digital learning experience helping children to develop their understanding of multicultural society. Children naturally see their school as a place to discover. When digital media is used in classrooms, it can help to broaden students' point of view (Hobbs and Moore 2013). New media-related activities such as production activities, blogs, and wikis, augmented reality games can be used in

classrooms to help students to engage in real-world. (Clinton et al. 2006).

Loveless suggests that in order to implement digital media into classrooms, teachers need to plan and understand how to use digital media effectively. The use of ICT in this activity gives children opportunities to look, think, refine and evaluate their works. It results in a unique contribution and collaboration between two classrooms (Loveless 2000).

## 2 RESEARCH DESIGN

### 2.1 Summary of the Program

“KomaKids” program is a cross-cultural program aiming at fostering Global Competence in elementary school students, through the production of creative media works. Through the creation of media, such as stop-motion animation, “pen-pals” letter and real-time show and tell, students are encouraged to think critically, create media works from their point of view and learn from each other. The students’ global competence is expected to be developed in four main ways: (1) through learning about foreign culture from gameplay; (2) by reflecting on their own culture through the production of stop-motion animation; (3) by sharing their impressions through “pen-pal” letters; and, (4) through connecting in real-time with peers from foreign cultures.

### 2.2 Subjects of Research

The subjects of this study are students aged 10-12 years old in Yanagida elementary school in Japan, Colégio Latino a Brazilian school in Japan and Saint Mary’s Uttaradit School in Thailand. The number of participants for each session is around 25 children.

Children in elementary school level are selected as a target group of this program for three reasons. First, regarding the cognitive development theory, children in this age (approximately age 7-12) are in the concrete operations stage. Their physical skills have been developed and they are more mature in their thinking and reasoning. (Siegler 1991).

Second, elementary school students are at the age of being a “creative doers.” They have a potential to create creative works and to be capable of creative expression. Tylor argues that children in elementary school level tend to produce more creative works, compared with those who are in higher levels of education, where academics become more prominent (Tylor 2015).

Lastly, as noted by Mundy, global citizenship education in school, particularly at the elementary level, can produce noticeable results, and therefore need to be strengthened (Mundy and Mundy 2007).

## 2.3 Design Methodology

### 2.3.1 Flow of the Program

The “KomaKids” program is divided into four phases: 1. learning; 2. creating; 3. sharing; 4. connecting. Throughout the school semester, four phases of workshops were periodically conducted in the Japanese, Thai and Brazilian elementary schools. Details of each phase is below. [Figure 1]

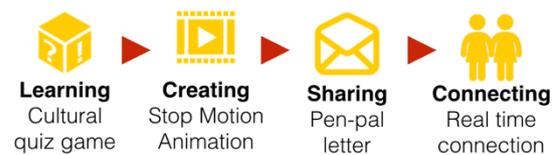


Figure 1: Program flow.

**Learning:** In the first phase, Students are introduced to their partner school’s information and cultural content through a presentation and quiz game. Next, they learn how to produce an easy stop-motion animation using iPads, and try to create a sample work. Creating the stop-motion animation involved four main steps: 1. writing storyboard; 2. creating a background; 3. creating characters, and 4. shooting using iPad application.

The application used in this program is called “KOMA KOMA for iPad.” With the simple four-button user interface of ‘Shoot,’ ‘Erase,’ ‘Play’ and ‘Save,’ it allows the students to run all of the production processes without help from adults. For sound recording, students use “iMovie” application to record their sound and edit the video.

**Creating:** In this phase, Students create a longer version of stop-motion animation to present their cultural story to their foreign friends. Before this session, students have the storyboard and characters created. Then they use iPad to produce the stop-motion animation. The videos range from 1-1.5 minutes. To prevent shaking while holding iPads in their hands, an iPad stand is prepared for them to use. After shooting, students add sound to their story. Musical instruments from music class are used to produce some background music and sound effects.

After, all the works are uploaded to the “KomaKids” project website, which the students, teachers, and parents can access to watch and

comment on the videos, after the session [URL: www.komakids.com].

**Sharing:** There are two activities in this phase. First, students access to the project website to watch foreign students' works. Then, in the group, they discuss the similarities and differences between each country's cultures from the video.

In the second activity, students are asked to send "pen-pal" letters to foreign students. To help them communicate with each other directly without help from adults to translate their letters, phrase cards written in four languages; English, Japanese, Thai, and Portuguese are provided for them to use. Using these, students could simply cut out a message they want to send to foreign student and paste it into the letter.

They can also add a new word which would later be translated and added to the list. Also, there is also free space on the top of the letter for students to try writing the greeting or short sentence in English, as all students who join in the program are currently studying English, as a second language.

**Connecting:** In the last phase, students are connected for a real-time show and tell session. Students bring things existing around them and make presentations about their culture and daily life to foreign students. Some example stories are school lunch, traditional costumes, and traditional music. Students first complete worksheet in English to prepare to present their story. Then, they are connected to a foreign classroom and each present story one by one using English. Facilitators on each side help to deliver messages they presented to the other side.

### 3 EXPERIMENT

#### 3.1 Program Schedule

From March 2017 to January 2018, the workshops have been conducting periodically at Japanese, Thai and Brazilian elementary schools to develop an effective program to promote global competence in school. Below is the summary of the whole workshops in this study. [Table 1]

Table 1: Program schedule.

Date	Venue	Program
Jun 21, 2017	Japan	Learning session
Jul 14/18, 2017	Japan	Creating session
Aug 16, 2017	Thailand	Learning session

Aug 17, 2017	Thailand	Creating session
Oct 18, 2017	Brazil	Learning session
Oct 19, 2017	Brazil	Creating session
Oct 24, 2017	Japan	Sharing session
Nov 24, 2017	Thailand	Sharing session
Nov 29, 2017	Brazil	Sharing session
Dec 5, 2017	Japan	Sharing session
Jan 23, 2018	Japan/Thailand/ Brazil	Connecting session

#### 3.2 Classroom Environment

The activity takes place inside the classroom. The present classroom format in Japan and Thailand are similar to each other with the traditional lecture-style arrangement. As this program focuses on hands-on works, the classroom layout is rearranged to provide the space that is best suited for creative content. The tables are put together as a group. In the middle is a resource center where students can get the materials they want. There is a camera set at the back corner of the classroom for recording students' behavior. The program, also, requires the use of a projector and computer with internet access for students to present their work. These are already equipped in the classroom as basic facilities.

### 4 EVALUATION

#### 4.1 Evaluation Criteria

A benchmark for program assessment is designed based on two frameworks, targeted at students aged 10-12 years old: The Teacher Guide K-12 Global Competence Grade-Level Indicators of the Partnership for 21st Century Learning [Table 2] and the Global Citizenship Education Topics and Learning objective of UNESCO [Table 3]. The checkpoints used are shown below:

Table 2: Global Competence Grade-Level Indicators.

Domain	Indicators
Understanding	Students can see how culture shapes individual and community perspectives and points of view
Investigating	Students can demonstrate multiple literacy skills
Connecting	Students can present their research findings and projects to audiences using multiple technology tools and formats
Integrating	Students can communicate what they have learned to diverse audiences, and craft specific presentations tailored to those audiences (in face-to-face settings and through online publishing)

Table 3: Global Citizenship Education Topics and Learning objective.

Domain	Indicators
Cognitive	B3: Media literacy and social media skills (different forms of media, including social media)
Socio-Emotional	B6: Understanding the similarities and differences between societies and cultures
Behavioral	B9: Engaging in projects and written work B9: Participating in decision-making at school

### 4.2 Evaluation Result

During the program, children were observed their behavior to evaluate the result based on the domains presented in Table 2 and 3.

Children were able to think back about their culture and demonstrate those cultural stories to foreigner from their point of view.

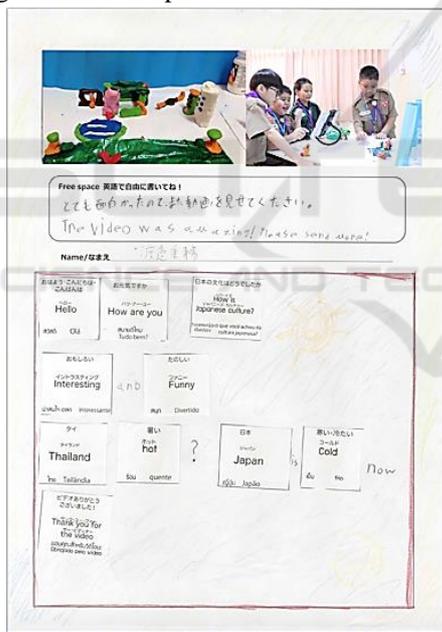


Figure 2: Student’s letter.

By watching animation from different countries and discussing in a group, children were able to see the similarities and differences between cultures. For example, there were stories about New Year day created by three groups of students from three countries. After watching those three stories, students were able to point out different traditions in each country in discussion time. The student mentioned that they were impressed with the cultural differences in their “pen-pal” letter to foreign students. [Figure 2]

Through this activity, students learned to collaborate with each other. This time, we mixed girls and boys in one group. At first, many groups had some arguments between girl students and boy students since they rarely have a chance to work together. But with help from facilitators, they eventually started communicating and were able to work as a team. [Figure 3]



Figure 3: Students creating stop motion animation.

Stop motion animation which is an optimal balance between craftwork and digital media creation could help students foster their creativity, storytelling skills and also digital literacy. According to the teacher’s interview, they mentioned that those skills are rarely tough in school. It could be seen in many groups of students as they were struggling at the beginning of the activity of how to deliver a message to audiences. For this stage, worksheet and help from facilitators played an important role to guide them to shape their idea and story.

Almost all of the students were quick to learn how to use the application. Regarding the teachers’ interview, many of them have a chance to use digital devices at home. Still, it is important to teach them about digital literacy to help them use technology wisely.

Time management is another big challenge for this activity. It is needed at least 3-4 hours to run the activity. In Japanese elementary school session, many groups of students were unable to finish their task due to time constraints. One way to solve this problem is that the school can integrate this activity into general school class, for example, using some time in a language class to let the student write a storyboard, or let the students spend time in social class to do research and find information for their story.

## 5 CONCLUSION

According to the result from several times of the practice, it can be said that this program can provide an opportunity for students to realize and learn about diversity of the world in a playful way that suits with their age.

The program is also easy to adapt to curriculum and resources that school already have. By using stop motion animation as a tool, it helps promote students to work with hands and also use digital media to create a story.

However, it is needed to observe and evaluate the result more to see this change in students' interest and behavior. Thus, at the end of the program in February 2018, the questionnaire is planned to distribute to students and teacher to evaluate a more concrete result of the program. The questionnaire is designed based on the evaluation criteria mentioned in Table 2 and 3.

In the long run, to maintain the program, developing a platform for this program is considered an important tool to help bridging and create a network between the classrooms in different countries. This platform will contain a guideline of this program which is developed based on the insight from the practices of this program. It is hoped that it will help connecting school around the world and create bound and foster students' global awareness.

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