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Master’s Thesis
Academic Year 2016

KomaKids
Promoting Global Competence through Media Creation in Elementary School

Keio University Graduate School of Media Design
Komkid Topoklang
A Master’s Thesis
submitted to Keio University Graduate School of Media Design
in partial fulfillment of the requirements for the degree of
MASTER of Media Design

Komkid Topoklang

Thesis Committee:
Professor Keiko Okawa (Supervisor)
Associate Professor Nanako Ishido (Co-supervisor)
Associate Professor Kai Kunze (Member)
Abstract of Master’s Thesis of Academic Year 2016

*KomaKids*

Promoting Global Competence through Media Creation in Elementary School

Category: Action Research

Summary

This research proposes a cross-cultural program in elementary school aiming at fostering global competence from the practice of KomaKids program, a cross-cultural program through media creation. 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. Yet, the effort to promote this skill in the school is still hindered. Although many organizations have released the framework for the school, the challenge lies in how to implement it into practice. In this program, through media creation approach, the students’ global competence are expected to be developed in four main ways: (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-pal” letters; and, (4) through connecting in real-time with peers from foreign cultures. Between March 2015 and February 2016, thirteen workshops were periodically conducted at elementary schools in USA, Japan and Thailand. The result according to the observation, student surveys and teacher interview shows that the implementation of KomaKids program produced noticeable changes in students’ global competence of their age.

Keywords:

Global Competence, Media Creation, Cross-Cultural Program, 21st Century Skills, Elementary School

Keio University Graduate School of Media Design

Komkid Topoklang
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Chapter 1
Introduction

1.1 Background

“Education should enable students to understand and appreciate their own cultures and to respect the diversity of others”
(Ken Robinson, 2016)

In today’s globalization world, our next generation of children is expected to live, learn and work with anyone regardless of their nationalities and cultural backgrounds. The capacity and disposition to understand the global issue so-called “global competence”, is considered one of the main key skills in the 21st century. According to the research from Institute of Future, global competence ranked on the essential skills for all workers over the next decade. It is said that an innovative organization is driven by a group of people with different ages, races, skill and thinking styles. Thus, today’s organizations are looking for individual with the ability to working in diverse environment regardless places, colleges nationalities, races and cultural differences (Davies et al. 2011).

In the interconnected world, adult and also children commonly move between various cultural and subcultural communities (Robinson and Aronica 2016). Learning about how to live in the diverse society is not only essential for adult but it also crucial for young children. The idea of promoting global competence has evolved over decades. Tye suggests that the 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).

The challenge lies in how to implement this into today’s classroom. Now, the effort to promote this skill in the school is still very hindered. Most schools’ curriculum 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 are
still lack of supporting research and evaluation assessment (Mundy and Mundy 2007).

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. To foster global competence, it is necessary to rethink about the way we educate our youth at school. The school needs to be transformative, building the knowledge, skills, and attitude toward global issues to students to be able to think critically and know what it means to be a citizen of this world. Robinson suggests that there are three cultural priorities for schools: first, to help students understand their own cultures, second to understand other cultures, and lastly to promote a sense of cultural tolerance and coexistence (Robinson and Aronica 2016).

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, one curriculum could not answer all of the schools’ need. Thus, it is needed the collaboration from government sections, policymakers, and educational researchers. The curriculum have to be a tailor-made one in order to provide students an experience to connect with the world and develop their global competence to use as a weapon for them to survive in the diverse society.

1.2 Research Objective and Questions

The objective of this study is to foster global competence in elementary school through the use of media creation approach. As mentioned previously, there is a need for developing an education program to promote the global competence in school. The program needs to be precisely designed in order to apply to the school curriculum and match children development of their age.

By working closely with elementary schools in Japan, USA, and Thailand, this research proposes a cross-cultural program with the approach of media creation in a hybrid of physical and digital media. Through this approach, it is hoped that this program will bridge classroom students in two countries together through their creative media works. It is also expected to create bound and an opportunity for them to interact with foreign peers and learn about each other culture without requiring them to go aboard. Besides, creative works allow students to
INTRODUCTION

1.3 Introducing the Field

Communicate and exchange their ideas without language barrier which is one of the problems that many cross-cultural programs are facing now.

Based on the objective of the research, two following research questions are posed with respect to this design:

1. Can media creation activities help cultivate students’ global competence of their age?

2. What are key elements in creating a school program that can promote global competence in elementary school level?

1.3 Introducing the Field

1.3.1 Elementary School

The field of this research is elementary school. UNESCO defines “elementary school” as a place which provides primary or elementary education to children (UNESCO 2007). In most parts of the world, it is set as a compulsory education. The age range of the student varies by country but typically it starts from five to twelve and divides into grade based on the student’s age starting from grade one to six. In many countries, there is an after-school program which provides activities for children to join after class.

Children in elementary school level were 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. They physical skills have been developed and they are more mature in their thinking and reasoning. They can reason and apply logic to problems and also can take multiple perspective (Siegler 1991). Second, elementary school students are in the age of being a “creative doers.” They are considered to 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 comparing 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 the noticeable results, and therefore need to be strengthened (Mundy and Mundy 2007).

This study was conducted in two after-school programs and two elementary schools in USA, Japan, and Thailand which have different education system and
curriculum depending on each countries’ policy.

**Ohlone elementary school (USA)**

Ohlone elementary school is a English and Mandarin Chinese bilingual school located in Palo Alto, California, USA. The English speaking students and native Mandarin Chinese speaking students are taught together in the same class using both English and Mandarin Chinese to develop bilingual academic fluency. The school program began from kindergarten to grade six. Besides, the after-school program called Ohlone Kid’s Club is also provided by Palo Alto Community Child Care (PACCC)

**Takinokawa after school (Japan)**

Takinokawa after-school program provides an environment where students can play, learn and exchange with each other after school. It is a community-based organization run by Kita ward, Tokyo.

**Koyo elementary school (Japan)**

Koyo elementary school is a public school in Kita ward, Tokyo, Japan. The school has six levels from grade one to six. Each grade has one class with around 20 to 40 students. The curriculum of the school consists of both academic and nonacademic. The academic subjects include Japanese language, social studies, arithmetic, and science. English language is taught from grade five to six. For nonacademic, the subject covers art, handicraft music, physical education, homemaking and moral education.

**Anubaan Watparinayok (Thailand)**

Anubaan Watparinayok school is a public school in Bangkok, Thailand. The school has two type of programs: a standard program which is taught in Thai and an English program which is taught in English. The school starts from grade one to six with eight core subjects: Thai language, mathematics, science, social studies, physical education, arts and music, technology and foreign language (English)
1.3.2 Stakeholder

In this study, five groups are considered as main key stakeholders who impact this action.

**Educator**

Here, the educator refer to the member in the KomaKids program in Global Education project, Graduate School of Media Design Keio University. The educator takes part in designing the program together with the teacher, implement the program in the school as well as evaluate the result of the program.

**Teachers**

In this research teacher design the program in conjunction with the educator. They also play a role as one of facilitator who support student when they face problem and run an off-session to prepare student before each session start. During the session they can also observe the student behavior for evaluation.

**Elementary school students**

First is students in elementary school level who obtain a basic education at the school in Japan, Thailand and USA. They have different cultural backgrounds and speak different languages. All of them are students in public school and have limited chance to exchange with peers from other countries. Although many of them are used to digital technology as they had a chance to access the technology such as smartphone and computer at home, they rarely have an opportunity to use a digital device in class.

**School principals**

School principals contribute and arrange school time to hold the program during class.

**Parents**

Parents support students in work preparation after school. Also, they observe their children’s behavior on and off class time and give feedback to the program.
INTRODUCTION

1.4 Significance

Facilitators

Facilitators moderate and provide a support to students when they meet the problem during the activity. They also act as interpreter during the real time connecting session.

1.4 Significance

As mentioned, it is important for schools to help students develop their global competence in order to thrive in the rapidly changing world. Compared to other cross-cultural program, KomaKids program contributes a number of features.

First, it helps students develop their understanding of their own culture and foreign culture through the creation of creative media works.

Second, the media creation activities introduced in this program are an optimal balance between the craftwork and digital work which can develop students creativity and media literacy.

Third, by connect students in different countries together with creative works, it allows them to communicate through visual, sound and audio which can help to reduce the language barrier problem.

Finally, this program provides an easy, clear structure with minimal requirement for ICT infrastructure which school can adapt to their curriculum.

1.5 Thesis structure

This thesis is divided into six chapters as follow:

- **Chapter 1** The introductory chapter which describes the background, field of study, research questions and objective and contribution.

- **Chapter 2** The literature review presenting related studies in three areas: (1) The importance of global competence (2) Promotion global competence in school (3) Media creation for education.

- **Chapter 3** The design process of the action plan including concept, target, material, learning environment and evaluation.

- **Chapter 4** The Action. The precise framework of each activity in this study is presented with findings from each action cycle.
• **Chapter 5** The result and analysis. The analysis from the results in each cycle and guideline for replication the process.

• **Chapter 6** The conclusion and future works.
Chapter 2
Literature Review

This chapter discloses the related researches regarding the promotion of global competence in elementary school. Relevant literature and existing works in three areas are examined: (1) Global competence in the 21st century (2) Promoting global competence in school and (3) Media creation for education.

The first part addresses the definition and rationale of global competence to understand what it is. Several frameworks are explored, and crucial skills are also elaborated. Second is the current situation of global competence promotion in school, with example researches and activities. Lastly, the third section displays publications related to media creation approach which provided insight in building the basic framework proposed in this thesis.

2.1 Global Competence in the 21st Century

2.1.1 What is Global Competence

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

Mansilla and Jackson noted that “Global competence is the capacity and disposition to understand and act on issues of global significance” (Mansilla and Jackson 2011). Besides, Grandin and Hedderich define this term as a highlight onset of skills such as cultural empathy, foreign language ability, or capacity to practice ones profession in an international setting (Grandin and Hedderich 2009). A person with global competence has an awareness, curiosity and interest in the world and how it works. They develop their skills such as language ability, communication skill, and critical thinking skill to engage in the global issues. Moreover, Downey et al. also discuss that globally competent individual have 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).

2.1.2 Global Competence: Why Is It Needed?

The partnership for 21st century learning discuss the rationale for the need of global competence in several perspectives (Skills 2008). Here, three most salient rationales are addressed.

First is the changes in the economy and business. Over the last several decades, due to the impact of globalization, companies around the world have transformed their business. Employers are hired from another country, goods and products are sold to consumers in the third country, transactions are aided by high-speed internet communication and government incentive for foreign companies and investment. This has an effect on in-demand jobs. Many companies today are looking for competent, reliable, and innovative individuals who can work with everyone regardless of nationalities or cultural differences. Mansilla and Jackson also point out that robots and machines are going to replace routinized or scripted tasks in the developing world with a very low cost. Thus, the jobs which demand will still grow are jobs that require expert thinking and complex communication (Mansilla and Jackson 2011).

The flattened global economy leads to the second rationale: New, different skill demands. As mentioned that businesses in the globalized world keep changing, the industrialized economy based on manufacturing has shifted to a service economy driven by information, knowledge, and innovation. Multiple skill sets have been put forth as essential in preparing the future workforce (Levy and Murnane 2012). Organizations are now hunting for more educated workers with the ability to respond flexibly to complex problems, communicate effectively, manage information, work in teams and produce new knowledge. The 21st century workplaces demand that graduates possess a completely different set of knowledge and skills to compete and succeed in a global economy (Colligan market research 2012). Thus, the more compelling and relevant education program that can help to prepare the youth to thrive in this competitive world are now focused by many business sectors (Mansilla and Jackson 2011).

Lastly is the demographic transformation. The world is now facing a large-scale change of the demographics. According to the United Nations, in 2015 the number of migrants worldwide went up to 244 million people, reaching the highest number over the past fifteen years (United Nations 2015). A politico-
economic union such as EU and ASEAN leads to the rising number of foreign residents in many countries who came for business, study and other purposes (Action 2014). While in Japan, in 2015 the number of foreign residents reached an all-time high with the number of 2.2 million (Ministry of Justice Japan 2015).

Suárez-Orozco et al. note that the situation of growing percentage of new migrants is part of transnational migrants. Besides, they are likely to maintain their homeland culture and beliefs. This leads to the diverse society. People we met in daily life such as in schools or workplaces have become more hybrid (Suárez-Orozco et al. 2009). Young generation needs to understand, and ready to live and contact with those whose identity, culture, values, languages, and lifestyles are different from them (Mansilla and Jackson 2011). Suárez-Orozco et al. argue that schools are expected to create a new fundamental responsibility to prepare students for difference and complexity. In order to prepare them to get a deeper understanding of this complex society, a curriculum which engages them to think about their own nations history, languages, geography and cultural contribution, and multiple relationships with other society in the world is required (Suárez-Orozco et al. 2009).

### 2.1.3 The Crucial Skills for Next Generation

Beyond the fundamental academic skills such as reading, mathematics and science, next generation of children need to develop their new competency for the 21st century that will increase their marketability, employability and readiness for global citizenship (Mansilla and Jackson 2011). Several organizations published frameworks for schools to use as a guideline to develop the global education curriculum. Here, three frameworks which are used as a basis for program developing in this thesis are reviewed.

Firstly, *Partnership for 21st Century Learning* proposes a framework which provides K-12 curriculum for school to prepare students and teachers to global realities of work and life in the 21st century (P-21 2014). The Partnership for 21st Century Learning (P21) founded in 2002, is an organization that brings together the business community, education leaders, and policy maker to define a powerful vision for 21st century education to ensure that every child succeed as citizens and workers in the 21st century. The methodology integrates educational tools that build global awareness and cultural understanding while utilizing the technological resources. The framework proposes four learning spirals: Understanding, Investigating, Connecting, and Integrating which indicate the expected
three outcomes. The three expected outcomes are:

**Attitude**
- Teachers understand and explore cultural and global topics.
- Students explore their own culture, make comparisons with other cultures and investigate global issues and challenges.

**Skills**
- Teachers use effective pedagogical skills to integrate global themes into their classrooms.
- Students improve their critical thinking, problem solving, perspective-taking and research skills.

**Knowledge**
- Teachers integrate globally-infused content into their classrooms.
- Students develop awareness of cultural diversity and global issues.

Next is *The Global Citizenship Education: Topics and learning objectives by UNESCO* (UNESCO 2015). UNESCO published this framework in 2015 with an aim to prepare learners for the challenge of the 21st century. The publication is the result of extensive researches and consultation processes with experts from different parts of the world. The framework consists of three core conceptual dimensions: 1.**Cognitive** 2.**Socio-emotional** 3.**Behavioural**. Its aim is to be transformative, building the knowledge, skills, values and attitudes that learners need, in order to be able to contribute to a more inclusive, just and peaceful world. The detail of three core conceptual are:

**Cognitive**
- Learners acquire knowledge and understanding of local, national and global issues and the interconnectedness and interdependency of different countries and populations.
- Learners develop skills for critical thinking and analysis.

**Socio-emotional**
- Learners experience a sense of belonging to a common humanity, sharing values and responsibilities, based on human rights.
• Learners develop attitudes of empathy, solidarity and respect for differences and diversity.

**Behavioural**

• Learners act effectively and responsibly at local, national and global levels for a more peaceful and sustainable world.

• Learners develop motivation and willingness to take necessary actions.

Lastly, *Partnership for Global Learning* (Mansilla and Jackson 2011) proposes a conceptual framework for global competence that comprises four domains as:

• **Investigate the world** beyond their immediate environment, framing significant problems and conducting well-crafted and age-appropriate research.

• **Recognize perspectives** of others’ and their own, articulating and explaining such perspectives thoughtfully and respectfully.

• **Communicate ideas** effectively with diverse audiences, bridging geographic, linguistic, ideological, and cultural barriers.

• **Take action** to improve conditions, viewing themselves as players in the world and participating reflectively.

The framework focuses on fostering students’ global competence from the disciplinary and interdisciplinary understanding of the world. Disciplines are academic subjects such as literature, history, economics, and mathematics. While interdisciplinary understanding requires students to apply their knowledge to criticize world issues, explain phenomena, solve problems and create products (Mansilla and Jackson 2011).

### 2.2 Promoting Global Competence in School

This section examines relevant literature within two contexts: (1) Global education in school in six countries are addressed here. (2) Example of program to promote global competence.
2.2.1 Global Education in School

The education for promoting global competence is now spreading around the world. Several frameworks were published with the hope to guide the school for implementation to foster the global competence to students. This section reviews researches which shows examples of global education in school around the world.

**The UK** is one of the pioneer 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). However, Lynn Davies’ ethnographic study of global citizenship education in eight UK elementary schools found out that schools in the UK still faces problems of the limitation of collaboration between schools and districts. Besides, some other problems such as a lack of material, limited time, and anxiety about teaching controversial issues also are raised in this study (Lynch 1989).

In **Canada**, there are attempts to promote global education by a large number of federal departments and non-governmental actors who engage in global education activities. Yet, they still face problems such as losing coordination with policy maker or run out of funding (Mundy and Mundy 2007). Mundy also points out that the attention to promote global education in elementary school in Canada is a relatively new phenomenon. Although most school curriculum has been revised for global education, there are still lacks of supporting research and evaluation assessment.

**USA** has been working on implementing global citizenship oriented education in their systems. In recent year, there are many organizations and NPOs in USA which propose a frameworks as well as support for global education. Examples range from The Partnership for 21st century learning \(^1\), Partnership for Global learning \(^2\), and NPOs World Savvy \(^3\).

While there is a big movement in global education in western countries, in Asia it is still in the early stage (Maekawa 2015). In **Japan**, Ministry of Education, Culture, Sports, Science and Technology recently launched many policies to promote global education in school. One example is the Olympics and Para-

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2. [http://asiasociety.org/education](http://asiasociety.org/education)
3. [www.worldsavvy.org](http://www.worldsavvy.org)
lympics education which aim to cultivate the global mindset and Olympics spirits in Japanese youth 4.

In South Korea, the government in collaboration with provincial government and schools start to promote global citizenship in school. The national curriculum outline emphasis on the importance of being a global citizen, equipped with relevant competencies such as tolerance, empathy and cultural literacy (UNESCO 2015).

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).

2.2.2 Example of School Program to Promote Global Competence

This section presents examples of school programs for promoting global competence in the school. The insight leads the basis of program design in this program.

Global Kindergarten

Global Kindergarten is a project in Global Education research project in Keio University Graduate School of Media Design with an aim to build an environment for diversity education in pre-school level through ICT. The Global Kindergarten project utilizes ICT and distance communication tools to connect children in two different countries and provide them an opportunity to join in a cross-cultural activities which help to stimulate multicultural interaction and experiences of diversity 5.

Global Workshop

Global Workshop is the project for High School student to foster their attitudes towards problem-solving and global awareness, as well as improvements in communication, collaboration, and digital literacy skills. The program is conducted

4 https://www.o.p.edu.metro.tokyo.jp/index
5 http://g-edu.kmd.keio.ac.jp
under the Japanese government’s education project ‘Super Global High School (SGH)’\(^6\), which aims to foster global leaders for 21\(^{st}\) century society. This program is part of the school curriculum and it is conducted during the whole school semester\(^7\).

**World Museum**

The World Museum is an online collaboration project for children from Graduate School of Information Media Technology, Chukyo University Japan. Children around the world are connected through Scratch, a visual programming language developed by MIT, USA, to share their cultural stories. The World Museum project creates the environment for children to learn basic programming skills as well as develop their global awareness by sharing their stories with foreign students around the world\(^8\).

**OneWorld Classroom**

OneWorld Classrooms is a United States-based non-profit organization which builds bridges of learning and understanding between the US and global K-12 classrooms in the context of the curriculum.

‘The Classroom conversations with the world’ is the program which matches two classrooms around the world together to let students share their works and hold a discussion through VoiceThread, a web-based communications network. Teachers can choose a topic, regional and grade level. Then, students and teachers conduct the conversation with their partner class by posting text, audio or video comments in the VoiceThread. Now, the conversation is conducted only in English. It takes one to three hours per session with two or three months for the whole program\(^9\).

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\(^7\) [http://g-edu.kmd.keio.ac.jp](http://g-edu.kmd.keio.ac.jp)

\(^8\) [http://sns.hiroba.sist.chukyo-u.ac.jp/miyata/world-museum-project-english](http://sns.hiroba.sist.chukyo-u.ac.jp/miyata/world-museum-project-english)

\(^9\) [http://www.oneworldclassrooms.org/](http://www.oneworldclassrooms.org/)
World Savvy Classroom

World Savvy is an education non-profit organization in USA that works with educators, schools, and districts to integrate the highest quality of global competence teaching and learning into K-12 classrooms.

The World Savvy Classrooms is the project-based learning program. Through this program, students, educators, and World Savvy associates use project-based learning to take on the world in the classroom. They engage in deep exploration of significant global issues chosen by the students, bring them to life through an in-depth project, and then take concrete action toward developing a solution. As they advance through the semester-long program, students build the skills necessary to thrive in the 21st century, including empathy, an appreciation for multiple perspectives, and collaborative problem solving 10.

2.3 Media Creation for Education

One of the principal ways in which schools seek to develop students’ global competence is through media creation approach. The New Media Consortium’s define 21st century literacy as “the set of abilities and skills where aural, visual, and digital literacy overlap. These include the ability to understand the power of images and sounds, to recognize and use that power, to manipulate and transform digital media, to distribute them pervasively, and to easily adapt them to new forms” (Consortium et al. 2005).

Lenhardt and Madden point out that children who create their own 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). Beck and Wade also argue that people who spend time with new media environment feel comfortable to interact with one another via electronic channels and be able to collaborate better with people from diverse cultural backgrounds (Beck and Wade 2004).

Media resources such as photographs, mass media, and digital learning experience help children to develop their understanding of multicultural society. Children naturally see their school as a place to discover. When digital media is used in class, it can help to broaden students’ point of view (Hobbs and Moore 2013).

10 http://www.worldsavvy.org/
Clinton et al. assert that new media literacy should be integrated into a group work at schools as well as long-distance collaborations across different learning communities. 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. Students develop their skill through the process in the activity such as searching out information, interviewing experts, connecting with other students around the world, and generating and sharing multimedia (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 case study of “The Bristol Internet Project” is illustrated to describe how teachers can develop the lessons using digital media for creative collaboration. This project involved two elementary classrooms in different local areas to collaborate using ICT and creative works. The children in each school worked in pairs to take photos using a digital camera and used simple software to edit the photos by changing color or cutting out a background. Then, the photos were sent to children in the other schools via electronic mail where they were asked to complete the photo using similar software and send the works back. The use of ICT in this activity gave children opportunities to look, think, refine and evaluate their works. It results in a unique contribution and collaboration between two classrooms (Loveless 2000).

2.4 Summary

From reviewing the three aspects of pieces of literature - global competence in 21st century learning, promoting global competence in school, and media creation for education - it could be said that the media creation method has potential to promote the global competence in classrooms.

Today the world becomes more interconnected. Children need to develop their global ability in order to thrive in the diverse society. To acquire global competence does not only mean to develop academic skills but also other soft skills such as global understanding, media literacy, creativity, collaboration, and critical thinking. Schools should be the place that provides opportunities for children to advance this competency. However, many classrooms around the world are now facing the challenge of how to put it into practice. To prepare students, one way is to put effort into curriculum developments. The program needs to guide students about the world and also help them develop their soft skills.
Many global education programs were examined in this chapter. The most common approach is to use digital technology to connect children in different countries together. Yet, there still many limitations in those programs that could be found for example a lack of IT infrastructure in school, the concern of overuse digital media in young children, and language barrier.

To alleviate those limitations, media creation activities is considered as one of the potential solutions. By implementing a digitally augmented physical media creation activities into classrooms, it helps students develop their understanding of themselves and the world around them. Their soft skill also can be developed. Besides, it allows them to communicate their ideas through visual, sound and audio without language interference.
Chapter 3
Research Design

As mentioned previously in Chapter 1, this study aims to answer two research questions:

1. *Can media creation activities help cultivate students’ global competence of their age?*

2. *What are key elements to create a school program that can promote global competence in elementary school level?*

This chapter reveals how this study will elucidate them. To find the answer, “KomaKids” the cross-cultural program through media creation activity was designed and implemented in the elementary schools in Japan, Thailand, and USA. From March 2015 to February 2016, the program was periodically conducted and revised through the four steps of action research approach: Plan, Do, Observe, Reflect.

To answer the research question one, in each action cycle, the students’ behaviors are monitored by the methods of observation, student survey and teacher interview to see the change of students’ global competence.

Besides, from the result of each cycle, the program components are analyzed to answer question two. It brings to a model lesson plan and guideline for schools to replicate which will be described in Chapter 5.

This chapter addresses the detail of the program including the program concept, program design, program assessment, and action plan.

3.1 Concept

KomaKids program is a cross-cultural program aiming at fostering Global Competence in elementary school students through the production of creative media
works. The project name came from the word “Koma” in “Komadori anime” which means stop motion animation in Japanese and the English word “Kids”. In this program, the media creation method was implemented, with an aim to bridge between in-school classroom and out-school world.

Through the creation of media such as stop motion animation, “pen pal” letter and real-time show and tell, students are encouraged to think, create media works from their own point of view and learn from each other. The students’ global competence is expected to be developed in four main ways: first, through learning about foreign culture; second, by reflecting on their own culture through the production of stop motion animation; third, by sharing their impressions through pen pal letters; and fourth, through connecting in real-time with peers from foreign cultures. The objectives of KomaKids program are:

1. To encourage students to explore their own culture and make comparisons with other cultures.
2. To enhance students’ awareness of cultural diversity and global issues.
3. To develop students’ Information Communications Technology (ICT) literacy by the use of a tablet device in media creation process.
4. To foster students’ critical thinking, problem-solving and creativity through the production of media creation.

3.2 Program Design

3.2.1 Activity

The activities in KomaKids program are designed based on the media creation approach. The final KomaKids program proposal comprised four activities: cross-cultural quiz game, stop motion animation, “pen pal” letter, and real-time show and tell.

After many trials and errors, those four activities were selected as the main activity due to three main reasons. Firstly, it can create a bound between students in the school in different country. Students are encouraged to think, do, and share their cultural stories in the form of digital storytelling with each other in this activity. Secondly, it could promote the ICT literacy in a classroom by utilizing technology as a tool to present their story. Finally, those activities especially stop
motion animation allow students to communicate with visual and sound, which helps to reduce barrier between students in two countries who speak different languages.

The precise detail of each activity will be described in Chapter 4.

### 3.2.2 Material

**iPad**

iPad is utilized as main digital device in this program. Students use it to create stop motion animation, edit video, and access the project website to watch and comment on foreign peers’ works. Two applications are used in this program: KOMA KOMA for iPad for stop motion animation creation and iMovie for video editing.

**iPad Application: KOMA KOMA for iPad**

“KOMA KOMA” is a free animation application currently only available for iPads (Figure 3.1). Its feature is user-friendly interface with only four symbols buttons. Students can easily learn how to use it without getting confused. However, regular digital cameras or webcams can be used in conjunction with iMovie or Windows Movie Maker. For Android tablets have their own animation applications such as Stop motion studio.

![Figure 3.1: Application KOMAKOMA for iPad](image)

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iPad Application: iMovie

iMovie is used for video editing. It is a free application which comes with every iPad. Students add sound and edit their animation using this application.

iPad Stand

To create smooth animations with a tablet, it is best to provide the students with tablet stands. Tablet stands can be made of anything—styrofoam cups and plexiglass, wood scrap and plywood, or cardboard. In this program, kitchen stands were used as iPad stand prototype (Figure 3.2). The basic requirements are that the tablet can lie flat on a surface with the camera viewfinder clear and students have room to manipulate their characters underneath.

“Pen pal” Letter Template

In order to help students to communicate directly, the letter template with phrase cards written in three languages was provided to students. In the letter set, it consists of two part; first, the photos of student’s stop motion animation and photo of students who create the animation and second, the phrase cards written in three languages. Students can simply choose a phrase they want and paste it to letter form. They can also add new phrase which will be translate and add to the template later (Figure 4.15).
Skype

Skype is an application that provides video chat and voice call services. It is selected for real-time connection session as it is stable and widely used in many countries. Thus, it is easier for the facilitator to conduct the session since they already acquainted with the program.

Project Website

KomaKids project website: (http://komkidtopo.wixsite.com/komakids) is created to use as a platform for students to share their works. Here, they can access to watch and comment on their friends' works. The teacher also can find the detail of the program through this website (Figure 3.4).
3.2.3 Learning Environment

The activity take place inside the classroom. The present classroom format in Japan, Thailand, and the USA are similar to each other with the traditional lecture-style arrangement. As this program focuses on hands-on works, the classroom layout was rearranged to provide the space that is better suited for creative content. The tables were 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’ behaviour. Besides, the program required to use projector and computer with internet access for students to present their work. These were already equipped in the classroom as basic facilities.

3.3 Program Assessment

3.3.1 Evaluation Method

In order to evaluate the program and its effect on the target, both qualitative and quantitative methods are used. For qualitative method, a naturalistic observation method and video-recording were implemented to closely observed the participant while engaging in the activity. Aside from the observation, the teachers interview were conducted in the action cycle 3 to discuss problem, share opinion regarding the program and students’ reaction toward the program. Another evaluation method is the quantitative survey with students. The objective with this questionnaire is to get responses from the students about the program. The survey was distributed to students at the end of the action cycle 3.
3.3.2 Evaluation Topic

Program

This topic shows the program performance, point for improvement, and the impacts of the program on the participants.

Output

The number of works produced by students in each session was summarized in this topic. Number of outputs are varies depending on student number and age group as they have different working performance.

Participant

This topic analyzes the reaction of participants toward the program such as engagement, motivation, and curiosity to know more about other countries. The evaluation is conducted via teachers’ and facilitators’ observation in each session.

Infrastructure

An environment where the program took place is described. This topic explains the available equipment and IT infrastructure in each school. Besides, the issues regarding the infrastructure of each school are also reported with the suggestion for improvement.

Feedback

This topic display a result of the survey and reflection from students, teachers, and parents. Both qualitative and quantitative evaluation were conducted. After each cycle, students submit a reflection sheet which presents their impression toward the program. In the third cycle, the survey was distributed to evaluate students’ change in global competence.

3.3.3 Evaluation criteria

The benchmark for program assessment is designed based on two frameworks: the Teacher Guide K-12 Global Competence Grade-Level Indicators of the Partnership for 21st Century Learning (Table 3.1) and the Global Citizenship Education
Topics and Learning objective of UNESCO (Table 3.2). The checkpoints used are shown as follow:

1. **K-12 Global Competence Grade-Level Indicators** (Table 3.1)

   Table 3.1: K-12 Global Competence Grade-Level Indicators

<table>
<thead>
<tr>
<th>Domain</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding</td>
<td>Students can see how culture shapes individual and community perspectives and points of view</td>
</tr>
<tr>
<td>Investigating</td>
<td>Students can demonstrate multiple literacy skills</td>
</tr>
<tr>
<td>Connecting</td>
<td>Students can present their research findings and projects to other students, teachers, administrators and people from their community using multiple technology tools and formats</td>
</tr>
<tr>
<td>Integrating</td>
<td>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)</td>
</tr>
</tbody>
</table>
2. Global Citizenship Education Topics and Learning objective (Table 3.2)

Table 3.2: Global Citizenship Education Topics and Learning objective

<table>
<thead>
<tr>
<th>Domain</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>B3: Media literacy and social media skills (different forms of media, including social media)</td>
</tr>
<tr>
<td>Socio-Emotional</td>
<td>B6: Understanding the similarities and differences between societies and cultures</td>
</tr>
<tr>
<td>Behavioural</td>
<td>B9: Engaging in projects and written work</td>
</tr>
<tr>
<td></td>
<td>B9: Participating in decision-making at school</td>
</tr>
</tbody>
</table>

3.4 Action Plan

From March 2015 to February 2016, thirteen workshops were conducted at four elementary schools in Japan, Thailand, and USA in order to develop an effective program to promote global competence in school. Below is the summary of the whole workshops in this study. The precise detail as well as findings and evaluation will be addressed later in Chapter 4 (Table 3.3).
<table>
<thead>
<tr>
<th>Cycle</th>
<th>Program</th>
<th>Date</th>
<th>Duration</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle I:USA</td>
<td>Proposal 1</td>
<td>March 2,2015</td>
<td>120 minutes</td>
<td>Ohlone After School, California USA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>March 3,2015</td>
<td>120 minutes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>March 6,2015</td>
<td>120 minutes</td>
<td></td>
</tr>
<tr>
<td>Cycle II:Japan</td>
<td>Proposal 2</td>
<td>March 20,2015</td>
<td>120 minutes</td>
<td>Takinokawa after school program Japan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>March 24,2015</td>
<td>120 minutes</td>
<td></td>
</tr>
<tr>
<td>Cycle III:Japan &amp; Thailand</td>
<td>Proposal 3</td>
<td>August 18,2015</td>
<td>60 minutes</td>
<td>Anubaan Watpari-nayok Thailand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>August 18,2015</td>
<td>60 minutes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>September 14/16,2015</td>
<td>90 minutes</td>
<td>Koyo Elementary School, Japan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>December 16/25,2015</td>
<td>90 minutes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>January 27,2016</td>
<td>90 minutes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>February 9,2016</td>
<td>60 minutes</td>
<td>Thailand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>February 16,2016</td>
<td>45 minutes</td>
<td>Japan &amp; Thailand</td>
</tr>
</tbody>
</table>
Chapter 4
Action

Following the action plan described in Chapter 3, this chapter addresses the detail of each action cycle. The actions were conducted in four elementary schools in Japan, Thailand and USA under the four steps of action research approach: Plan, Do, Observe, Reflect. Findings from each cycle are analyze based on the evaluation topics noted in Chapter 3. The activities framework of every cycle follows a similar structure with minor modification.

In every action cycle, the students are monitored and evaluated based on the benchmarks discussed in Chapter 3 to see their development in global competence of their age. As a result, it shows a noticeable result in students’ change in global competence of their age that proved that this program can cultivate student global competence. Besides, the final outcome produces the guideline for teachers through media creation activity to conduct the global competence promotion in school which will be addressed in Chapter 5.

4.1 Action Cycle 1: USA session

4.1.1 Overview

The first cycle of KomaKids program was conducted in California, USA during a six-week-joint program between Keio University Graduate school of Media Design and Learning Design and Technology Program, Stanford University. Three series of the workshop were held at Ohlone Kids Club, an after school program at Ohlone Elementary school in California USA. The prototype workshops in this cycle are: a “Guess and See” cultural quiz game show, a stop motion animation creation workshop, and a talk show and fashion show production workshop. The program was run over the course of one week on March 2, 3 and 6, 2015 (Table 4.1).
Table 4.1: Action Cycle 1: USA session

<table>
<thead>
<tr>
<th>Program</th>
<th>Date</th>
<th>Duration</th>
<th>Participant</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal 1</td>
<td>March 2, 2015</td>
<td>120 minutes</td>
<td>8</td>
<td>Ohlone After School, California USA</td>
</tr>
<tr>
<td></td>
<td>March 3, 2015</td>
<td>120 minutes</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>March 6, 2015</td>
<td>120 minutes</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

4.1.2 Program

The first proposal of KomaKids program consists of three activities: (1) Guess and See Cultural Quiz Game (2) Stop Motion Animation (3) TV Show Production (Figure 4.1). Each session was conducted separately on different days. The students can choose to join in any of the activities they like.

Figure 4.1: Proposal 1

Guess and See Cultural Quiz Game

This is a game-show style activity which introduces students to foreign vocabulary and cultural story in an engaging, stress-free environment. In each round, four to five students will come in front of the class. From the presentation, they will see a word in a different language as well as a few clues. The rule is that they have to guess the meaning of that word based on the clues. They can answer by writing or drawing a picture. Each round will be 30-45 seconds. The other students will be the timekeeper by passing a ball around to countdown the time. When the time
is up, the participant will show the answer to other students and the audience will vote for their favorite answer. The participant who gets the most audience votes gets one sticker. After that, the answer will be revealed and those who guess the right answer gets two stickers. Then, the facilitator will explain the meaning and story related to the answer and have the whole class practice saying the foreign word aloud. In the following round, a new group of student came to join. The activity repeated for 30 minutes.

The goal of this game is not to answer the right meaning but to encourage them to guess and imagine about foreign culture. Besides, it is a playful activity which allows students to get to know about the foreign country (Figure 4.2).

Figure 4.2: American students during Guess and See cultural quiz game

Stop Motion Animation

In this activity, students were asked to reflect back on their culture and create an easy stop motion to present their story to foreign peers. IPad was utilized in order to allow students to conduct all of the production by themselves.

Facilitators first introduced the three steps of animation creation to students. It composed of: 1. writing story 2. creating background and character and 3. shooting. Samples of the stop motion animation were also shown to the students.

After the introduction, students can choose to work individually or in pair or group. The facilitators then distributed Mad Lib sheet consisting of three topics about their school life, weekends and holidays. After filling in the blank of Mad Lip
ACTION 4.1 Action Cycle 1: USA session

sheet, students picked one sentence to animate a stop motion animation. Then, they entered the second step of drawing a background and creating characters using clay or drawing. Next, they animated a stop motion animation by using an iPad application called “KOMA KOMA for iPad”. Using this application, students placed their characters on the background and moved them little by little and took pictures as they went.

TV Show Production

The third prototype activity is television program production (Talk show and fashion show). Students first chose the desired role from the cameraman, talk show program host, guest, and model (Fashion show). Then, each role got equipment. Those who chose to be cameraman got a handy camera and tripod. For talk show program host, three sets of question about their daily life were distributed for asking their guest. Guest and model were prepared for their costume. After the roles were assigned, students set up space for shooting. For the production stage, it took 30-45 minutes for students to finish shooting for each program (Figure 4.3).

Figure 4.3: TV Show production activity
4.1.3 Findings

Program

The three initial prototypes has proved to be successful in general. The Guess and See cultural quiz game could introduce students to foreign culture. The stop motion animation workshop allowed students to communicate their idea through visual which help to reduce the language barrier. In the workshop, a Mad Lib form helped students to finish their work on time as it guided students the direction of the story. “KOMA KOMA” application also perfectly suits the children of this age as it is easy to use. However, there are still some limitations since this application is currently available only on iOS devices (iPad and iPhone) and it cannot insert sound to the movie. For the television show production, it appeared that only girls want to join in the activity. There was argument during the production as many students want to be a cameraman.

Output

The media creation aspect of the project yielded rich, creative animation and videos. Six different stop motion animations about cultural story and two videos of talk show and fashion show were created, each ranges from 2-90 seconds. For Guess and See cultural quiz game, students drew over 30 pictures for the answer.

Participants

Many students were already exposed to some Japanese culture as there are many Japanese goods and food sold in California. They can talk about of Japan such as Sushi is Japanese food, Tokyo is a city in Japan. Students got familiar with the technology very fast. They enjoy using iPad for stop motion animation. Moreover, in the video production workshop, there are many students requested to be a cameraman.

Infrastructure

The classroom was too bright to project the presentation from the projector which made students could not see the question and answer in the Guess and See game clearly. In addition, playing a background music during activity can improve classroom atmosphere as it made activity more enjoyable.
Feedback

According to the observation during each activity, it seems that students highly enjoyed participating in each activity. The students remained engaged and excited about the activity for several hours, even asking to stay longer when their parents arrived to pick them up.

4.1.4 Improvement from Action 1 to 2

In order to improve the program, three initial activities were combined into a single two-hour program. The Guess and See cultural quiz game was used as an ice-breaking since it provided a good introduction to foreign culture. The main activity is the stop motion animation creation. Even though from the result of the field test, both stop motion animation and television program production both presented a successful result, the stop motion animation enables effective communication without language interference. Besides, it allows students to conduct a whole process of production by themselves without help from adults. Furthermore, the sharing activity was added in order to let students write “pen pal” letter to share their impression and feedback to their foreign peers (Figure 4.4).

Figure 4.4: Improvement from proposal 1 to 2
4.2 Action Cycle 2: Japan session

4.2.1 Overview

The second cycle of KomaKids program was held in Japan during the second half of joint program between Keio University Graduate school of Media Design and Learning Design and Technology Program, Stanford University. Two workshops were held at the Takinokawa after school program in Tokyo on March 20 and 24. Each workshop was two-hour long with three activities of Learning, Creating, and Sharing (Table 4.2).

<table>
<thead>
<tr>
<th>Program</th>
<th>Date</th>
<th>Duration</th>
<th>Participant</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal 2</td>
<td>March 20,2015</td>
<td>120 minutes</td>
<td>8</td>
<td>Takinokawa after school</td>
</tr>
<tr>
<td></td>
<td>March 24,2015</td>
<td>120 minutes</td>
<td>9</td>
<td>Tokyo Japan</td>
</tr>
</tbody>
</table>

4.2.2 Program

The program in this cycle consists of three activities: Learning, Creating, and Sharing (Figure 4.5). First, students learned about foreign culture through the Guess and See cultural quiz game for 30 minutes. Then, they were asked to reflect back on their culture and create a stop motion animation to present their story. This activity took 80 minutes in this activity. After that, they watched a video from the American workshop and also the stop motion animation from the American students. They wrote “pen pal” letters to share their impression of school life and stop motion animation in the last activity. A paper prototype of a cross-lingual communication tool was made to support communication between students who speak different languages. The tool was a phrase cards which were written in three languages. The students can chose the phrase they want and paste it to their letter.
4.2.3 Findings

Program

The second action cycle progressed similarly to the first one. By combining three activities into one set, the workshop became smoother. Students can learn about foreign culture and, at the same time, present their story and share their feeling through this activity. More explicit instruction of the animation production was included in the workshop to guide students. Also, a tablet stand designed for stop motion animation was implemented to stabilize the iPad and help students to work easier during the animation-making process (Figure 4.6).

Output

There were ten animations created, each ranges from two to ten seconds. All of the works were uploaded to the project website in order to share with American
students. Moreover, students wrote ten “pen pal” letters in the sharing session.

**Participant**

Even though students in Japan were slightly rowdy, they were motivated to join in the activity. Students in the age between ten to twelve (grade four to six) were more suit with the activity especially for the stop motion animation as they are well adept with physical skills and more mature in their thinking and reasoning.

**Infrastructure**

The classroom setting at the Takinokawa after school was easily adjustable since there were only small Japanese-style tables. There was no space to project the presentation which makes it was hard to conduct the activity that required the presentation such as the Guess and See cultural quiz game.

**Feedback**

Students remained highly engaged throughout the session. On the second day, there were some students who already participated in the first day asked to join in the activity again (Figure 4.7).

![Figure 4.7: Students engaging in the program](image)
4.2.4 Improvement from Action 2 to 3

The model of the second proposal worked well. By running three activities, the students were gradually introduced to foreign culture. In the action cycle three, the connect session was added to the proposal in order to give students more chance to present their cultural stories more. Besides, after four phases, a questionnaire was delivered to measure students’ change in global competence. The questionnaire was designed based on the Global Competence grade level indicator of the Partnership for 21st Century Learning (Figure 4.8).

![Figure 4.8: Improvement from proposal 2 to 3](image)

4.3 Action cycle 3: Japan and Thailand Session

4.3.1 Overview

The third proposal of KomaKids program were conducted at the fourth grade class of Koyo elementary school in Tokyo, Japan with 36 students. And at the fifth grade of Anubaan Watparinayok elementary school in Bangkok, Thailand with 25 students. Throughout the school semester, four phases of workshops were periodically conducted. It is expected that this activity help students feel gradually connect to each other rather than finish the activity in only one day (Table 4.3).
Table 4.3: Action cycle 3: Japan and Thailand Session

<table>
<thead>
<tr>
<th>Program</th>
<th>Date</th>
<th>Duration</th>
<th>Participant</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal 3</td>
<td>August 18, 2015</td>
<td>60 minutes</td>
<td>25</td>
<td>Thailand</td>
</tr>
<tr>
<td></td>
<td>August 18, 2015</td>
<td>60 minutes</td>
<td>25</td>
<td>Thailand</td>
</tr>
<tr>
<td></td>
<td>September 14/16, 2015</td>
<td>90 minutes</td>
<td>36</td>
<td>Japan</td>
</tr>
<tr>
<td></td>
<td>December 16/25, 2015</td>
<td>90 minutes</td>
<td>36</td>
<td>Japan</td>
</tr>
<tr>
<td></td>
<td>January 27, 2016</td>
<td>90 minutes</td>
<td>36</td>
<td>Japan</td>
</tr>
<tr>
<td></td>
<td>February 9, 2016</td>
<td>60 minutes</td>
<td>25</td>
<td>Thailand</td>
</tr>
<tr>
<td></td>
<td>February 16, 2016</td>
<td>45 minutes</td>
<td>41</td>
<td>Japan &amp; Thailand</td>
</tr>
</tbody>
</table>

4.3.2 Program

The Third proposal of KomaKids program consists of four phases: (1) Learning (2) Creating (3) Sharing (4) Connecting. This time the program was periodically conduct throughout the school semester between school in Thailand and Japan (Figure 4.9).

![Image showing the phases of the program: Learning, Cultural quiz game, Creating, Stop Motion Animation, Sharing, Penpal letter, Connecting, Real time connection.](image)
Learning

In the first phase “Learning”, the students were introduced to their partner school’s information and cultural content through a presentation and quiz game. Next, they learned how to produce an easy stop motion animation using iPads, and tried using it to create a sample work. The applications which were used are “KOMA KOMA” for stop motion animation creation and “iMovie” for video editing.

Creating

In this phase, the students created the stop motion animation to present their cultural story to their foreign friends. With helps from the school, students prepared a storyboard and created characters in advance. Thus, during the session, students had a full 90 minutes to produce the stop motion animation and sound recording. Students conduct the production in group, with every processes conducted by themselves. There are facilitator who will help them if they had any problem during the production. To prevent shaking while holding iPads in their hands, an iPad stand was prepared. After shooting, students added the sound into their story and edited by using iMovie application. Musical instruments from music class were used to produce some background music and sound effects. All of the works were then uploaded to the KomaKids project website which the students, teachers and parents could access to watch and comment on the videos after the session (Figure 4.10).

Figure 4.10: Students creating stop motion animation
Sharing

There were two activities in the next sharing phase. First, students accessed the project website to watch and comment on their friends’ works. They were encouraged to make the comments using Emoji since that allowed other students who spoke a different language to understand their expression (Figure 4.11).

In addition, for the second activity, students were asked to send pen pal letters to their foreign friends. To help them communicate with each other directly without help from adults to translate their letters, phrase cards written in three languages were provided for them to use. Using these, students could simply cut out the word they wanted to say and paste it into the letter. They could also add new words which would later be translated and added to the list or drew a picture (Figure 4.12).
Connecting

For connecting phases, students from two countries were connected for a real-time show and tell session. Show and tell is an activity that students brought things around them and made presentations about it to share their culture and daily life stories to their friends. Some of the example stories were: school lunch, traditional costumes, and traditional music. The facilitator on each side helped to translate the messages they presented to the other side (Figure 4.13).

Lastly, post session was held to take a survey and reflection from the participants. The students survey, teacher interview and parents’ reflection sheet were delivered to get feedback and to measure student’s change in global competence.
4.3.3 Findings

Program

The model of the third proposal successfully made students feel connected to foreign peers and learn from each other. As it was conducted periodically throughout the school semester, it was blended into the school curriculum. Besides, during each phases the teacher ran extra workshops by integrating the activities into the normal class. For example, during social class students spent time researching about Thailand and wrote a storyboard for stop motion animation in Japanese class. It can be considered as one of the factors which made the program successful.

The stop motion animation was an optimal balance between the craft work which students do in normal course of at the school and digital work which is a new skill for them. Communication tools such as stop motion animation and three-language phrase cards for writing letters can help lower the language barrier between students, and allow them to communicate freely.

Outputs

Students produced 27 different stop motion animations depicting daily life and cultural stories, ranging from 2 to 90 seconds (Figure 4.14). In sharing session, students exchanged letters twice with the total number of 134 letters created (Figure 4.15). For the real-time show and tell session, students presented seven cultural stories.

Figure 4.14: Students stop motion animation
Participants

In the first phase “Learning”, it was noticed that Japanese students still did not have much chance to expose to Thai culture. In the introductory quiz, there were only one out of five questions that were answered correctly. However, for Thai students, it seemed that they were familiar with Japanese culture as there are various Japanese elements such as food, cartoon, goods in Thailand. They could mention many Japanese products name. Many students visited Japan with their parents before.

In every session, the students were highly motivated by the activity throughout the whole session. They even asked to stay longer when the class period ended. From the observation, students aged between ten to twelve are perfectly fit with the activity as they are old enough to manage the task. Still, there were some groups of students which could not manage the time, and the facilitator had to help them to distribute the task among group members so they can finish on time.

Infrastructure

The infrastructure in Japanese and Thai school were similar. Every classroom had one big television with a projector and one notebook computer with internet connection. Nevertheless, they were rarely used. The school’s internet connection
speed was not enough to be used in the connecting session. Besides, the software in the notebook computer has not been updated for a long time and the network security did not allow user to download or update the program. Thus, portable WI-FI and facilitator’s personal computer were used in replacement of the school’s equipment.

**Feedback**

Student surveys and teacher interview were conducted in the action cycle three between Japanese elementary school and Thai elementary school. After four phases of the program, the post-session was held. The result are shown as follow:

**1. Student survey**

The survey was distributed to measure students’ change in global competence. It was designed based on the Teacher Guide to K-12 Global Education Grade Level Indicators of the partnership for 21st century learning. In this survey, the four points consisted of understanding, investigating, integrating and connecting were set as core skill points to measure students’ change in global competence of their age.

The student survey was carried out after the third cycle in Koyo elementary school. The survey had eight key questions and free space for children to write comment and feedback. All questionnaires were given in Japanese. The content of questionnaire can be found in Appendix A. The result of each question are reproduced below.

- **Number of respondent**: 36
- **Grade**: 4th grade
- **Place**: Koyo Elementary School
- **Number of question**: 8 questions
- **Date**: March, 15 2016

**Question 1**

The first question was, “What is your favorite activity in this program.” (Multiple answer allowed). 86% of the students answered that they liked stop motion animation creation the most. The second was to watch and comment on foreign
friends video 33%. Following with the real time show and tell session between Japan and Thailand for 31%. And “pen pal” letters session for 25% (Figure 4.16).

![Bar Chart: Student survey Q.1](image)

**Figure 4.16: Student survey Q.1**

When questioned about the reason behind, some answered

“It was very fun to create a stop motion animation together with my friends. I am glad that I can exchange with Thai student”

“Thai students’ video was very fun and I liked to comment on it”

“I can present my story and got new friends” “I am glad when got answer letter from Thai student”

**Question 2**

Next question was “Do you think that by using communication tools such as stop motion animation, phrase cards written in three language allow you to communicate with foreign students without help from teacher.” 23 students (63.9%) answered “Yes” while 7 students (19.4%) answered “Maybe” and 6 students (16.7%) answered “No” (Figure 4.17).
Question 3

In the third question “In the future, do you want to know more about Thailand” 72.2% said “Yes” (Figure 4.18).

Question 4

In the following question four, “In the future do you want to join in the workshop with other countries”, 75% of the students said, “Yes” (Figure 4.19).
Do you want to know more about Thailand in the future?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>72%</td>
</tr>
<tr>
<td>No</td>
<td>3%</td>
</tr>
<tr>
<td>Maybe</td>
<td>25%</td>
</tr>
</tbody>
</table>

Figure 4.18: Student survey Q.3

Do you want to join in this kind of activity with other countries?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>75%</td>
</tr>
<tr>
<td>No</td>
<td>0%</td>
</tr>
<tr>
<td>Maybe</td>
<td>25%</td>
</tr>
</tbody>
</table>

Figure 4.19: Student survey Q.4
Question 5
When asked Do you feel proud when you tell the story of your culture to foreign students in the fifth question, the feedback was extremely positive. All 36 students or 100% said “Yes” (Figure 4.20).

They gave comments that:

“I want to tell a nice thing about Japan to foreigner” “I want them to know more about Japan”

“I am so glad to tell foreigner about thing that only have in Japan”

![Figure 4.20: Student survey Q.5](image)

Question 6
The sixth question asked “Do you want to make foreign friends in the future” 32 students or 88.9% answered “Yes” only 3 students (8.3%) said “Maybe” and 1 student (3.4%) said “No” (Figure 4.21).

Question 7
The last question is “Do you think you though changed after joining the workshop”. 63.9% responded “Yes” 16.7% responded “Maybe” and 19.4% said “No” (Figure 4.22).
Figure 4.21: Student survey Q.6

Do you want to make foreign friends in the future?

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>89%</td>
</tr>
<tr>
<td>No</td>
<td>3%</td>
</tr>
<tr>
<td>Maybe</td>
<td>8%</td>
</tr>
</tbody>
</table>

Figure 4.22: Student survey Q.7

Do you think your perspective change after joining this workshop?

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>64%</td>
</tr>
<tr>
<td>No</td>
<td>19%</td>
</tr>
<tr>
<td>Maybe</td>
<td>17%</td>
</tr>
</tbody>
</table>
In the free comment, students gave comments about this program that:

“By exchanging cultural story, I feel connected to Thai people. It was very fun cross-cultural program. I want to join it again with other countries”

“When heard about Thailand from Thai peers, it make me want to go to Thailand”

“In the real time connection with Thai friends, even we speak different language, we can communicate and understand each other by gesture, expression and heart.”

“I realized many good things about Japan after exchange my stories with foreign peers. I realized that the girl who sent me the letter, even she is a foreigner she is a normal girl like me. I want to be friend with her. […]” (Figure 4.23).

Figure 4.23: Student impression
2. Teacher Interview

The interview was conducted after four phases of the program with the teacher from Japanese elementary school to get feedback of the program as well as to get result of the student observation during the program. The interview comprised seven questions as presented below:

- **Interviewee:** Ms. Tomomi Suzuki
- **Position:** 4th grade teacher, Koyo Elementary School
- **Number of question:** 8 questions
- **Date:** June 22, 2016

**Overall program**

The first question is regarding the time which the students spent with this program. From the interview, apart from the four phases which were conducted periodically throughout the semester, the teacher also integrated this program to other school subjects for example, the students spent time in Japanese class writing a storyboard for the stop motion animation or they went to the computer room to do research about Thailand in the social studies class. They spent in total 26 hours for this program in one semester (Figure 4.25).

![Figure 4.24: Time which students spent with the program in one semester](image)

When asked her opinion about the program, she mentioned that the program flow was designed very well. Starting from introducing about foreign countries, creating a stop motion animation about their culture then sharing their feeling through “pen pal” letters and eventually connecting real-time to share more stories can gradually make the students feel connected to each other.
Stop motion animation

The teacher mentioned that by encouraging them share their cultural stories through stop motion animation can stimulate students motivation very well. The students were very excited when they saw foreign peers’ works. They eagerly asked that “Will I create this?” or “How to create this?”

She added that this activity provided an excellent opportunity for students to use ICT in class. Also, the “KOMA KOMA” application is very easy to use that the students could quickly learn to use it.

Having three or four students in one group with one or two international students as facilitators in each group helped them work smoothly. The students could also talk and exchange ideas with the facilitators who came from many parts of the world and speak other languages rather than English. It can ignite the awareness of the diversity in this world in student.

“Pen pal” letters

When asked about the “pen pal” session, the teachers said that she was very impressed with the phrase cards written in three languages. She mentioned that many students tried to copy the Thai language from the card and tried pronounced the phrase. There were voices from students that “I want to write another letter” “I am very excited for the answer”.

Real-time show and tell

For the real-time show and tell session, the teacher said that it helps building student’s confidence to do a presentation in front of an audience. Moreover, since they had very limited of time to present their stories, they learned that it is important to be punctual.

Change of the children after the program

The next question is related to the change of the children after the program. The teacher said that thanks to this program, it provided an opportunity to understand about foreign country (Thailand) and also an opportunity to realize the important of their own culture. They realized their identity as Japanese people. It can prove from the reflection which student gave to her that:

“Thailand have ... which different from Japan”

“But they also have similar to us”
Besides, the teacher mentioned that students learned to work together in the group. They started working by themselves without waiting for a command from the teacher. They even used after school time to finish the work. It could be said that their communication, collaboration skills, and relationship improved.

**The way to continue the program next year**

The teacher gave an opinion that it might hard to conduct this program in the normal school curriculum because of a tight school schedule. To make it happen, it is necessary to plan a long-term program and conduct it as an education research in school. Besides, it is necessary for the school to have support from the university or outside organization to ran the research activity together in order to achieve the goal.

**3. Parents feedback**

In the second phase “Creating” there were some students’ parents came to the class to observe the activity. After the session, the teacher distributed a feedback form to the parents to write their opinion regarding this activity. From the feedback, it appeared that the parents were very positive to the program. They mentioned that the children’s works were very impressive. It was good to create an opportunity for the children to use ICT in the class room. They also added that it was very interesting to see the children’s work in a new form of media. They could feel the children motivation and effort through their works.

One of the parents said that her daughter told her that “This was the most interesting class ever” “my friends and I created this animation together.” At home, they accessed to the website to watch the stop motion animation together which leads to more conversation between parents and their children at home.
 ACTION 4.3 Action cycle 3: Japan and Thailand Session

Figure 4.25: Parent feedback

面白く観ました。こういうクレイアニメーション風の作品を、タブレット端末を使って作るのは楽しいだろうと思います。大人だと小難しく考えてしまいますが、子どもの柔軟な発想ならではの作品だと思います。

大人より子供の方が、タブレットを使うことへの違和感や抵抗もないって思いますし、タブレットなら場所を選ばずどこでも授業で使えるで思うので、興味深く感じました。

娘はとても楽しかったようです。友達と一緒に協力して作品を作ることができたと言っていました。
Chapter 5
Analysis and Discussion

As discussed in Chapter 1, the objective of this study is to foster global competence in elementary school through the use of media creation approach. The education program was developed to provide students an opportunity to connect and share their cultural stories through creative media works with students in foreign countries. It hopes to develop their understanding of foreign culture and ignite their curiosity about the world and diversity. From this objective, two research questions were raised:

1. Can media creation activities help cultivate students’ global competence of their age?

2. What are key elements to create a school program that can promote global competence in elementary school level?

In this chapter, the results from three action cycles are analyzed to answer the research questions. The discussion is broken down into two parts: (1) students’ change in global competence for question one; and, (2) Guideline for program replication for question two

5.1 Students’ Change in Global Competence

For the first question, the data from students’ survey, teacher interview, parents’ feedback and observation note gathered from the third cycle will be analyzed based on the evaluation criteria noted in Chapter 3 (Table 3.1,3.2).

According to the teacher interview, before joining the session, the student had few opportunities to expose to foreign culture and foreign peers in their age. It can also tell from the observation in the first session of “Learning” that, Japanese students rarely knew about Thailand as they could not guess the right answer
in the cultural quiz game. On the other hands, students in Thailand seemed to know about Japan very well since they were familiar with Japanese culture from daily life Japanese products and culture around them.

After joining the program, there were significant results which can proved the change in students’ global competence as discussed follow:

First, the development of the understanding of their own culture and respect for diversity in this society. As a result of the student survey and the feedback from the teacher, it indicated that student could identify how their culture shapes and what is the differences and similarities between their own culture and foreign culture. It matches with the first global competence learning spiral ‘Understanding’ in the Global Competence Grade-level indicators “Students can see how culture shapes individual and community perspectives and points of view” of the Partnership for 21st Century Learning (P-21) and the B.6 Topic “Understanding the similarities and differences between societies and cultures” in the Socio-Emotional development of the UNESCO Global Citizenship Education.

Second is Media literacy development. The use of digital technology to create animation provided an opportunity for students to gain media literacy. Besides, the sharing of these media online can fosters a better understanding of the new media as a multi-cultural environment connecting tools.

It can prove from the fruitful outputs of the stop motion animations, “pen pal” letters and stories presented in the real-time show and tell session.

The students also reflect back in the survey that they enjoyed the media creation activity. Futhemore, from the teacher interview and feedback from parents, it indicated that the media creation activity can stimulate students’ interest in learning about the foreign culture.

This improvement aligns with the UNESCO B.3 Cognitive development topic “Media literacy and social media skills (different forms of media, including social media)” and the ‘Investigating’ and ‘Connecting’ global competence learning spiral of the Global Competence Grade-level indicators “Students can demonstrate multiple literacy skills” “Students can present their research findings and projects to audiences using multiple technology tools and formats”.

Lastly is embracing the Creativity, Communication, Collaboration, and Critical Thinking skills (4C’s) in Integrating global competence learning spiral “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)” and B.9 Topic of the Behavioral domain of the UNESCO
“Engaging in projects and written work” and “Participating in decision-making at school.”

In this program, students collaborate with their team members on their projects. They also create contents to share with foreign language speakers. Through the creative media activity, it help cultivate their creativity and critical thinking.

Besides, by working with other classmates, it helps foster their communication skill as well as collaboration skill. According to the teacher interview, she mentioned that the students learn to start working without waiting for the instruction from the teacher. They helped and supported each other when facing a problem. The students also reflected back that they enjoyed working in a group and many said that their works succeed because of the collaboration with their team. This shows a success in promoting the communication and collaboration skills among them.

As a result, the data appears to suggest that the cross-cultural program through media creation can foster students’ global competence of this age.

5.2 Guideline for Program Replication

For the second question “What are key elements to create a school promote that can promote global competence in elementary school level?”, the important elements to run the program will be specifically addressed here in form of a model lesson plan. It is a summary result from the whole practices in the school for thirteen times between March 2015 and February 2016. Besides, the key elements that bring program to success is also described.

KomaKids Program Lesson Plan

Overview

In this program, its main aim is to develop the knowledge, skills, and dispositions necessary to navigate and succeed in today’s interconnected world, so-called ‘global competence’ in elementary school students by connecting with other students in different countries through media creation method. Students will reflect back on their culture and produce media works to demonstrate a story to foreign friends from their point of view. Meanwhile, they will learn about the foreign country through their foreign peers’ works. Besides, we hope to develop students’
Objectives

1. To encourage students to explore their own culture and make comparisons with other cultures.

2. To enhance student awareness of cultural diversity and global issues.

3. To develop student ICT literacy through the use of tablets in a media creation process.

4. To foster students’ communication skill, critical thinking, problem solving and creativity through media.

Materials

- Tablet computer (3-4 students per one tablet)
- Computer with internet access
- Stationaries for stop motion creation e.g. colored papers, colored pens, clays
- Pen pal letter template

Session 1: Learning “Cultural Quiz Game” (Suggested Time: 60 minutes)

- Explain that you are going to play a quiz game relating to foreign countries.
- Read out the question and answer choices.
- Student guess the answer.
- Review the answer and explain the more information related to the question.
Session 2: Creating “Stop motion animation” (Suggested Time: 150 minutes)

- Explain that students are going to be making stop motion animations to share with friends from another country. (Show sample animation here if desired).
- Show steps of making stop motion animation using iPad application: 1. coming up with the story 2. creating the background and characters 3. making the animation 4. Sound recording and video editing.
- Explain the functions of KOMA KOMA for iPad application (how to take a picture, delete a picture, save the film).
- Set up the equipment (Tablet stand, stop motion animation materials).
- In group, students work together to create stop motion animation (suggested number: 3-4 people per group)
- Suggested time for animation creations: writing storyboard (30 min), creating character and background (40 min), Shooting (40), Video editing (40).

Session 3: Sharing “pen pal letters” (Suggested Time: 90 minutes)

Part 1 Watch peers’ works (45 minutes)

- Explain that students are going to access to website to watch and comment on their foreign peers’ works.
- Show how to watch and comment on the video In group, student watch videos and add comments.

Part 2 Create “pen pal” letters (45 min)

- Explain that students are going to create a pen pal letter using letter template.
- Distribute letter template and explain how to use it.
- Students work individually to create a letter.
Session 4: Connecting “real-time show and tell” (60 min)

Part 1

• Explain that students are going to connect with peers abroad to present their cultural stories.

• Students choose topic they want to present.

• Students write story and prepare things from they home to join in the real-time show and tell.

Part 2

• Connect to foreign school through skype.

• Start with ice-breaking activity e.g. greeting in mother tongue language.

• Start a presentation. Students in two countries take turn to present and comment on each other stories.

Program assessments

• K-12 Global Competence Grade-Level Indicators (P-21 2014)

• Global Citizenship Education Topics and Learning objective (UNESCO 2015)

Other suggestions

ICT in Classroom

Even though there is a lot of demand from the government to implement ICT in the classroom, there still many concerns of how to implement it. To compromise that, this program tried to mix between offline and online hands-on works in order to gradually blend ICT into the classroom. For example, the stop motion animation which is an optimal balance between the craft work which students do in normal course at school, and digital work which is a new skill for them.
Integrated to Certain Subjects

The program can be integrated across a range of subjects. The activity in this program will play a role to connect the knowledge and skills in each school subject together. For example in the Japanese workshop, the teacher integrated this program within many regular school subjects for example social studies, Japanese language, and craft. The activity in this program can encourage students to do research, critique and collaborate with each other in class. It also promoted a cross-cultural communication and global understanding through the connection with the students from other countries.

Target Age Group

From the observation of the three action cycles seems to suggest that students age between ten to twelve years old (grade four to six) is more suitable for this program as they are mature enough to understand the objective of the program and can focus on work rather than those who are in younger age.

Communication Tools

A gap between language is a big obstacle in the cross-cultural program; on the other hands, it can create a curiosity among students about others countries. It is necessary to build confidence to students in order to help them to overcome the fears of communicating with foreigners. In order to reduce this issue, communication tools such as stop motion animation and phrase cards written in three languages were provided for students to use in this program. It allows students to communicate with more visual and sound which made them feel more comfortable and confident to communicate with foreigners.

Duration

The minimum required time for each session is 90 minutes (two class periods). However, it might need more time depending on the detail of the activity. In the activity, there was student who could not finish their work on time as they wanted to create a long story of the stop motion animation. In this case, it might need facilitators and teacher to help them with time management.
Facilitators

Facilitators play an important role in this program. The role of facilitators in the program is to moderate the activity. During the activity, they helped students when facing problem with the device or with time management. In regular school class, the teacher will play this role. It is very important for he/she to understand that they will not "Teach" or "Do" things instead of the students but encourage them to think and find the answer by themselves.

Infrastructure

Well-equipped classroom with a computer with internet connection, and a projector is required for this program especially in the real-time connecting session.
Chapter 6
Conclusion

6.1 Conclusion

The aim of this thesis is to illustrate KomaKids program’s ability to foster global competence in elementary school student. From this goal, two research questions are posed: (1) “Can this program help cultivate students global competence of their age?”. (2) “What is key elements to create a school program that can promote global competence in elementary school level?”.

The three cycles of action research were conducted to elucidate this two questions. In each action cycle, the cross-cultural program through media creation was designed and implemented at elementary schools in USA, Japan and Thailand from March 2015 to February 2016. Early ideas of the media creation activity in this program ranged from collaborative games to stop motion animation production. After extensive planning and experimenting, the program proposal was set into four phases: 1. Learning about other countries through cultural quiz game; 2. Creating stop motion animation to share cultural stories to foreign peers; 3. Sharing impression and opinion through “pen pal” letter; 4. Connecting real-time with foreign peers to present cultural stories.

During one research year, thirteen workshops had been held. From the result of the study, it can be said that KomaKids program offered a cross-cultural experience which cultivate students’ global competence.

In every session, the students remained engaged and excited. The media creation aspect of the project yielded rich, creative animations, “pen pal” letters, and show and tell presentations. Besides by using the communication tools such as stop motion animation, it boosted student confidence in communicating with foreigners with fewer language interference.

The students survey and teacher interview resulted in noticeable changes in students’ global competence of their age. The student explored the importance of their own culture and can make a comparison with other cultures. Besides, it
also brings awareness of cultural diversity and global issues.

There were positive feedback from parents. Many parents mentioned that it was excellent to create the global experience in school. Besides, the program is the optimal balance between the craft work and digital work which can liberate students creativity and enhance ICT literacy.

Based on all of these conclusions together, the cross-cultural program through media creation proved successful in cultivating global competence in elementary school students. The analysis of the results produced a set of guideline which schools and researchers can follow to replicate the process in the future.

### 6.2 Future Work

While KomaKids program has achieved its goal, there is still room for improvement. The possibilities are addressed here in two aspects: (1) platform development, and (2) program deployment.

First is to develop an online sharing platform for this program to connect classrooms around the world. Although, in this study the project website was published and used, it is needed to be developed more to meet the program objective.

The idea of sharing platform consists of two main components: the teacher dashboard and the student experience. The teacher part provides curriculum and matching system which teacher can find other class in foreign countries who interested in collaborating in the similar project. Then, they connect two classrooms and work together through this platform.

For the students’ part, students create works and upload them to the platform where they can also watch and comment on their foreign peers’ work. Besides, they can also communicate with their peers directly through digital “pen pal” messenger with the automatic translation system. Since privacy and security are always a concern with children online, all animations, messages and posts will only visible to students and teachers in the two classes. Furthermore, all posts and animation must be approved by the teacher before appearing online.

Second, with the online platform, the goal for the long run of this program is to find the way to deploy the program. By utilizing the program guideline into different countries, it will provide an opportunity to get more feedback from students and teacher who have different cultural backgrounds. It hopes to get a new insight which help develop the program. The program may adapt to other
grade levels such as secondary school and high school to expand this experience to every school student. Through the use of KomaKids curriculum, it hopes that global competence will be developed across ages, disciplines, and educational institutions to create a new generation of global citizenship for our world.
References


Lenhart, Amanda and Mary Madden (2005) “Teen content creators and con-
sumers.”

computers are creating the next job market: Princeton University Press.

Loveless, Avril M (2000) “Creativity, visual literacy and information and commu-
ications technology,” in Communications and Networking in Education:
Springer, pp. 51–58.


Maekawa, Marcos Sadao (2015) “Designing Global Education for Youth in
the Internet-based Society,” Ph.D. dissertation, Keio university Graduate
School of Media Design.

Mansilla, VB and A Jackson (2011) “Educating for global competence: Prepar-
ing our youth to engage the world. Council of Chief State School Officers
EdSteps Initiative & Asia Society Partnership for Global Learning.”

Mundy, Karen and Karen Elizabeth Mundy (2007) Charting global education in
Canada’s elementary schools: Provincial, district and school level perspec-
tives: OISEUT.

Competence Grade-Level Indicators.”

Results.”

Robinson, Ken and Lou Aronica (2016) Creative Schools: The grassroots revolu-


and Policy Guide.


Appendices

A Survey Result

Student Survey

The student survey was carried out after the third cycle in Koyo elementary school. All questionnaires were given in Japanese. The contents of each are reproduced below.

Number of respondent: 36
Grade: 4th grade
Place: Koyo Elementary School
Number of question: 8 questions
Date: March, 15 2016

Contents of Questionnaire (Japanese)

1. ウークショップの中で、一番楽しかったことは何ですか。
   ア. コマドリアニメを作ること
   イ. タイの友達の作品を見てコメントすること。
   ウ. 3つの言語日本語、タイ語、英語のキーワードカードで手紙を書くこと。
   エ. ビデオ通話スカイプで遠くの人と話すこと

それはなぜですか:
2. コマ撮りアニメや3つの言語のキーワードカードなどを使うと、先生や通訳の人がいなくても自分が伝えたいことが伝わると思いますか？

ア  はい
イ  いいえ
ウ  どちらでもない

3. 将来はもっとタイのことを知りたいですか？

ア  はい
イ  いいえ
ウ  どちらでもない

4. 将来、タイ以外の他の国の小学生とのワークショップに参加したいですか？

ア  はい
イ  いいえ
ウ  どちらでもない

5. 日本の文化を外国人に伝えてられてうれしいですか？

ア  はい
イ  いいえ
ウ  どちらでもない

それはなぜですか：

6. 外国の友達を作ってみたいと思いますか？

ア  はい
イ  いいえ
ウ  どちらでもない
APPENDICES

7.  このワークショップに参加する前と、その考えが変わったと思いますか？

ア  はい
イ  いいえ
ウ  どちらでもない

8.  このワークショップに参加して思ったことを何でも書いてください。

Contents of Questionnaire (English Translation)

1. What is your favorite activity in this program? (Multiple answers allowed)
   a. Stop motion animation
   b. Watch and comment on friends’ work
   c. “Pen pal” letters
   d. Real-time show and tell
   Reason:

2. Do you think you can communicate with peers in foreign country by using communication tools such as stop motion animation without help from teacher?
   a. Yes
   b. No
   c. Maybe

3. Do you want to know more about Thailand in the future?
   a. Yes
   b. No
   c. Maybe
4. Do you want to join in this kind of activity with other countries?
   a. Yes
   b. No
   c. Maybe

5. Do you feel proud to be able to tell story about your country to foreigner?
   a. Yes
   b. No
   c. Maybe
   Reason:

6. Do you want to make foreign friends in the future?
   a. Yes
   b. No
   c. Maybe

7. Do you think your perspective change after joining this workshop?
   a. Yes
   b. No
   c. Maybe

8. Please write your impression about this program
Q.1 理由：ワークショップの中に一番楽しかったことはなんですか
Q1.Reason: What is your favorite activity in this program?

・作ることが好きだから。
・私は作るのが大好きなのでとても楽しい学習だったからです。
・コマ撮りは自分たちで考えたストーリーがつくれるからです。
・お返しが来るからです。
・タブレットでアニメを撮るのが面白かったからです。
・外国人の人と交流うしたかったから。
・作るのが面白かったから。
・アニメを作るのが初めてで楽しかったから。
・発表できだし、新しい友達ができたらから。
・みんなで協力してできたから。
・自分たちでストーリーを考えて作ったのが楽しかったから。
・タイの人とどうやって話し合う機会がないので作品を見てコメントするにしました。
・タイの人たちの顔を見て、一緒に話してできるから。それにお互いの表情などを見て他の国の遠くの人たちと繋がれるから。
・作品などを作るのが好きだからです。
・作ったりするのが好きだからです。
・粘土や絵を描くのが楽しかったから。
・作ると面白いか。手紙が好きだから。
・みんなで作るのが楽しかったし、タイとの交流が深まったからです。
・コマ撮りアニメが楽しかったから。
・タイの作品が面白くてコメントするのが楽しかった。
・はじめてコマ撮りアニメを作ってアニメをまた作りたいと思ったから。
・遠くの人と話せるから。
・相手から返事がくるとうれしかったから。
・写真をいっぱいとるのが楽しいし、それがつながって動画になるのがおもしろい
・色んなことをタイの人にお聞かせたから。
・粘土が使えるから。後、インターネットで多くの人に見てもらえるから。
・コメントなどが楽しかったから。
・タイの人達が楽しくみられるし、私たちも楽しくとれたから。
・音を入れるのが面白かったから。
Q5 理由：日本の文化を外国人に伝えてうれしいですか。

Q5 Reason: Do you feel proud to be able to tell story about your country to foreigner?

・日本の文化を知ってもらったから。
・外国人に日本の文化が教えられてとても楽しいと思ったからです。
・タイの人に日本のこと（文化）を知ってもらってうれしいから。
・日本のことをよく知ってもらいたいから。
・もっと日本が有名になってほしいからです。
・外国人に日本の文化を知ってもらいたかったから。
・日本のことを知ってもらったから。
・外国人に知ってもらいたいからです。
・日本の文化を伝えると、日本にあそびにくるから。
・日本の文化の良さをより多くの人に伝えたたいから。
・みんなに知ってもらったから。
・文化的違うところを確かめられたから。
・日本のことを知ってもらいたいから。
・日本の文化を伝えることで色々な良さを知ってもらえるから。それに、文化を通じて交流できるから。
・日本の文化を外国人に伝えられたから。日本にもっとたくさんの観光客がきてくれると思うからです。
・日本がどんなところを知ってほしいから。
・色んな国に日本は素敵な国だと思ってほしいから。
・日本のことを知りたいかなと思うから。
・日本のことを色々と伝えられたからです。
・日本の文化を見せられたから。
・日本のいいところや文化を知ってもらったからです。
・文化的違いを知ってもらえたから。
・日本のいいところを外国の人へ広めたいから。
・日本のいいところを自慢で来たのでうれしかったです。
・日本をもっと知ってもらえたからです。
・知ってもらうとあくかもしれないし、日本が有名になるかもしれないから。
・日本の文化を外国の人に知ってほしいから。
・もっと日本のことを使ってほしいから。
・日本にはこういう文化があるということを伝えられたから。
・もっと日本のことを使ってもらいたいから。
・自分の住んでいる国のことをたえられたから。
・日本はすごいとたえられたから。
・日本にしかない文化伝えられて、うれしかったです。
・文化を伝えて外国とも交流しやすくしていきたいから。
・未来に向けて日本のいいところを伝えたいから。

Q.8 感想

Q.8 Impression

・タイの子供たちとスカイプするとき私はいなかったので残念だった。だけど、コマ撮りアニメやタイの子のアニメが見れてよかったです。ありがとうございます。
・私は作るのも好きでiPadで何かをするのも好きなので、とても楽しくて楽しい経験になりました。これからも色々な人と交流したいです。お父さんが色々なところに出張に行くので、タイのことがたくさん知ってよかったです。タイとの交流の時間がとても楽しかったです。タイの人たちと友達を作りたいなーと思いました。またやりたいです。ありがとうございます。
・最初はできるか心配だったけど、どんどんやっていくうちに慣れていてて楽しかになりました。音入れのときは失敗したけども楽しかったです。スカイプのときはすごく緊張して怖かったです。けど、タイの人たちがとても話ができて嬉しかったです。また、できたいなと思います。
・楽しかったです。そして、コマ撮りアニメやタイとの交流などもう一回やりたいです。そして、スカイプでとても人と話すのも楽しかったです。タイの作品を見てからコメントを送るというのもやって面白かったです。もう一回やりたいと思っているのでできるいいです。一回タイに少しでもタイに行ってみたいと思いました。
・タイの人とスカイプで話したり、アニメを作ったりするのが楽しかったです。タイの人たちのアニメもとても面白かっただ。
・外国人の人と交流して、少し外国人の人と日本人が少し結びついたので、とてもよかったです。さらに、楽しく交流したので、交流が深まったことも楽しかったです。また、他の国の人とも交流を深めて、もっと日本と結びつけていきたいです。
・私は声や音を入れるときは少し大変でした。スカイブで説明するときは少し緊張しました。
・僕はこのワークショップをやってタイ人の人に会ったりするので僕はわくわくしました。他にも明実
先生の教え子でセッションして教え子はタイのバンコクにいました。タイ人ともセッションして通信
はあんまり届かなかったけど、タイ人が演奏をしてくれてこちらからも校歌を歌いました。またセッ
ションをしたいと思いました。また手紙をタイ人に送りたいです。
・面白かった。後タイに手紙を書いてわたしのは初めて面白かった。
・タイの人と話したことで、タイがどのようなところか行ってみたい었습니다。
・タイの人のがんばってるところがとってもすごいなあとおもいました。
・色々な交流ができて楽しかった。コマ撮りアニメの動かし方をがんばった。スカイブでは少し緊張し
たけど楽しかった。
・以外と交流ができて楽しかったです。皆さまのおかげです。ありがとうございました！
・外国（タイ）に私は行ったことがあるけれど、たいとのことはよく知りませんでした。しかし、スカイ
ブでタイの文化を知れたし、日本の文化を伝えられたのでよかったです。コマ撮りアニメで自分の考
えがタイの小学生に伝わっていく感じがして、すごくと思いました。4回の交流でタイの小学生と色々
な面で通じあったと思いました。タイの小学生はもう友達だと思いました。もっともっと他の国の人
たちとも交流して友達を作りたいです。そして、日本の文化を伝え、良さを知ってもらいたいです。ま
た、この活動をやりたいです。
・もっと外国の人と話したいと思いました。また、ワークショップをやりたいです。また、コマ撮りア
ニメを作りたいです。
・楽しかったし、タイの小学生と話せてよかったです。
・外国の人と仲良くなれてよかったです。大人になったらってみたいなと思いました。手紙をもらえ
てよかったです。
・すごく楽しかったです。またやりたいです。
・楽しかった。タイとの交流やスカイブで日本の文化を紹介できてよかった。次タイ以外の国とスカイ
ブやコマドリアニメなどで交流を深めたいです。
・タイの人と日本の文化を紹介できてよかったです。
・楽しくてコマ撮りアニメやコメントを作るのが楽しかった。後、それに他の国とセッションしたい。
・アニメでタイの子と交流できてすごくと思いました。タイの子に日本の個と伝えられて、タイのこ
ともたくさん分かったことが楽しかったです。スカイブはタイの人がよくわからない言葉を話してい
てその言葉をコムさんが通訳してくれたのでとてもわかりやすくてきました。
・またみんなと交流をしたり、コマドリアニメを作ったりしたい
・外国の人に伝えたい日本のいいところを探すことで、初めて日本の良さ、文化の違いを知りました。外国人でも同じ女の子なんだなと思いました。できれば、手紙をくれた子と友達になりたいです。あと、タイでも電車（モノレール）や車、バスがあってみんな学校に通っているのにびっくりしました。「トム・ヤム・クン」味のポッキーとかッパえびせんをいつも食べてみたい。大人になったらタイで行って屋台の料理を食べたりモノレールに乗ったりしたいです。

・タイのこはんは正直まずいとおもってたけど、話をきいておいしそうだなと思いました。コマ撮りアニメでも日本の四季を気軽に伝えられたのでよかったです。タイとテレビ電話をして、タイの演奏がとてもきれいで、タイに行きたいと思いました。

・タイと交流できてよかった。コマドリアニメが楽しかったです。またタイとワークショップに参加したいです。

・楽しくて、よく考えられて粘土の技術が学べた。みんなにいってもらってとてもよかった。タイに行ったらトムヤムクンやバブリーを食べてもみたい。食べ物をいっぱい食べてもみたいと思った。

・タイの人が作ったビデオが見れてよかった。楽しかったし、面白かったです。そして、またやりたいです。

・今度はフランスの学校とやってみたい。澱野川第6小学校と統合してもまたやりたいです。195ヶ国とやりたい。1日に2作ずつつくって公開したい。

・コマ撮りアニメやタイとの交流がすごく楽しかった。またやりたい（コマ撮りアニメがやりたい）

・タイの交流スカイプで日本の文化を紹介できてもよかったです。タイのことをたくさん知りたいです。

・ワークショップを通して、タイのことをたくさん知られてよかった。他の国ともやってみたい。キーワードカードのお手紙の返事をもらってうれしかった。

・タイの人は言葉がうるうけど日本とあまり変わらないと思いました。タイ人と交流してタイ人と仲良くなれたと思います。タイ人に日本のことをもっと知らしてもらいたいです。

・このワークショップをやる前にちこが国の人、動画で表現することは難しいからやりたくないなと思うけど、色々とやっていった交流していくと、とっても楽しくなってきました。それに交流する日はとっても楽しみにしていました。それから、この交流してからタイに行ってみたいと思いました。

・最初は本当に面白いのかと思っていましたが、すごく面白かったので参加してよかったと思いました。外国とのセッションも面白かったです。

・ビデオ通話で、言葉はわからなくて伝わらないけれど、心が通じあってジェスチャー、表現で分かったので、楽しかったです。ワークショップをもっとやってみたいです。
アンケート

紅葉小学校国際交流ワークショップ

【今回のワークショップについて】

1. 今回のプログラムのために子どもたちが使ったおよその授業時間をおしえてください。

(1) コマ撮りアニメの作成

(a) 9月14日 1・2時限  タイの紹介・コマ撮りアニメ作成の練習
(b) 9月16日 1・2時限  コマ撮りアニメ作成 3・4時限（後半チーム）

◆ その他の準備なども授業で実施した場合は、以下にお書きください。

9月15日 2時限 ワークシートを班ごとに作成（タイトル・内容・キャラクター）
時間内にできなかった班は、宿題とした。

9月16日 コマ撮りアニメ作成を行った後、その活動についての感想を宿題とした。

(2) 音付きコマ撮りアニメの作成

(a) 12月16日 1・2時限  コマ撮りアニメ作成・録音 3・4時限（後半チーム）
(b) 12月25日 2時限  コマ撮りアニメ作成・録音（4チーム）

◆ その他の準備なども授業で実施した場合は、以下にお書きください。

12月1日 1時限 アニメ台本の書き方の学習 5時限 プロットを書く

12月2日 1・2時限 班ごとに、内容について話し合い、台本を書く。

12月3日 5時限 同上

12月7日 2時限 大川先生来校。班ごとに、タイトル・内容について、進捗状況を報告

12月10日 5時限 粘土などでキャラクターを製作

※ 上記時間以外に、アニメ台本・背景画・キャラクター製作、セリフ練習、効果音などについて

の相談・準備は、班ごとに放課後、自主的に行うこととした。
(3) タイに向けた手紙作成

(a) 1月27日 1・2時限 カードを使った手紙作成

5時限 続き

◆その他の準備などを授業で実施した場合は、以下にお書きください。

(4) タイの子どもたちとお話する

(a) 2月15日 5時限 遠隔ビデオ会議に慣れる

(b) 2月16日 5時限 タイの小学校とビデオ会議

6時限 タイ在住の日本人とビデオ会議（2月15日予定分）

◆その他の準備などを授業で実施した場合は、以下にお書きください。

2月8日 2時限 パソコン室で、タイについて調べ学習

2月12日 4時限 ビデオ会議の内容—担当を決める。

ビデオ会議で話す内容について、個人または班ごとに考え、練習。（週末の宿題）

2月15日 4時限 ビデオ会議の通しリハーサル

2月16日 2時限 個人で、ビデオ会議のプレゼン最終練習

(5) フォローアップセッション

(a) 3月15日 2時限 タイの子どもたちからの手紙を届ける

(b) _________ _________ タイの手紙にお返事を書く

◆その他の準備などを授業で実施した場合は、以下にお書きください。

2. 今回のワークショップの各活動について、よかったことや改善するべきことを教えてください。

(a) コマ掃除アニメ作成

・国際交流ワークショップの目的・活動内容・流れが明確に示されていたため、本活動の実施にあたり、担任
としては、他教科と関連付けながら、見通しをもって取り組むことができた。

・国際交流を通じて「コマ撮りアニメ」を通して行うという発想が素晴らしい。子ども文化のアニメに注目し、さらにICTを利用した作成活動。学校の教育課程に位置付ける上で、多様な視点から展開できるものである。

・9月14日、コマ撮りアニメ作成の「練習」を、特別に時間を割いて設定したのはよかった。今後も小学校の授業で、同様の活動を行う際には、「練習」は必要だと思われる。操作の練習をねらいとしたものであったが、それ以上に、「アニメ作成」への児童の関心を喚起するものとして、効果は大であった。

・最初に、アメリカやタイの子どもたちが作成したアニメを見たが、「こんなことを自分たちが作れるのだろうか」「どうやって作るのだろう」「タイの友達が、日本の言語を知っているなんて、びっくり」。こうした驚きと興奮、好奇心からスタートした活動であった。

・38人で10台のiPad。3〜4名での班編成は、中学年の場合、協同作業を行わせる上で、適当な集団規模である。作品発表の場も設定していたため、これ以上のチーム数では学級単位での授業は困難。

・コマ撮りアニメのアプリは、小学生にとっても、容易に操作できるものであった。

・コマ撮りアニメ作成にあたって、班ごとに、2〜3人ずつ留学生が入ってくださったため、iPad操作についての問題点を児童がすぐに解決でき、短時間で自分たちの想像以上の作品を作りあげることができた。大きな満足感を得ていた。

(b) カードによる手紙の交換

・初めの手紙作成であったが、メッセージカードの内容、メッセージボード、手紙作成方法が大変わかりやすく、児童は効率的に作業をすることができた。

・メッセージが、タイ語・日本語・英語の3か国語で表記してあったのがよかった。メッセージカードのタイ語を真似て、自筆で書いている者もいた。

・タイと日本の子どもが、ナンプリングされ、1対1で個々に手紙の交換ができたのはよかった。

・メッセージボードにタイの友達の顔写真が印刷されていたのがよかった。より親しみが湧いた。

・タイの友達から、返事がすぐに届けられ、喜びが大きかった。「また、手紙、書きたい」「返事、書きたい」
という児童の声が上がったのだから、これに対して、コムさんの計らいにより、フォローアップセッションが組まれた。感謝。

(c) 遠隔ビデオ通話での会話セッション

・事前に機材セッティングし、「遠隔ビデオ会議に慣れる」場の設定は必要であった。

・厳密なタイムテーブル。分刻みの予定表を児童に示したことで、その後、「時間変更に使う」ことを意識するようになった。

・アニメ→手紙→顔を合わせて会話。だんだんとコミュニケーションが深まっていった。

キムさんの同時通訳による「会話」は、タイの友達の息遣いまで伝わるような暖かさと親しみが感じられた。

・日本の文化をわかりやすく伝えるためにはどうすればいいか、その表現方法について、児童はそれぞれ工夫していた。（日常の紹介に関して、大川先生から事例を出してアドバイスいただいた。どのようなものが“日本的”なものかを考える上で、大変、参考になった。）

・ICT 教育の充実が文科省から打ち出されて久しいが、学校現場の実情としては、①ハード面が整備されている、②情報教育に関する研究推進校である、③情報分野に精通している教員が複数いる、学校以外で、ICT 教育に積極的に取り組んでいる学校は少ないと思われる。

・「遠隔ビデオ通話」は、北区立小学校のネット環境では、（情報セキュリティの点からも）実施することができない。今回は、専門的な研究・活動を行っている大学との連携があったからこそ、実現可能となったのである。

3. このワークショップを通して子どもたちにどのような変化があったと思いますか？

・本ワークショップの内容について→単発的なものでなく、継続的に展開的に組まれており、児童の興味が尽きることがなかった。

・ワークショップを行うにあたっての、グループ決め、内容、準部物、練習など、児童が自主的主体的に行動でき
るようになった。（教員からの指示待ちではなく、自発的に行行動できるようになった。）

・協働することを通して、他者理解が深まるとともに、友達のよいところを認め合ったり、励ましあったりする雰囲気が高まった。

・放課後も、塾や習い事の合間を見つけグループで集まったり、個人で準備を進めたりしていた。

・保護者の理解や協力も得られた。子どもたちの楽しそうな様子に、保護者が本活動に興味を示していた。

「夕食時、息子が『これまで授業のなかで、一番楽しかったよ』と嬉々として話していました」「6年生のお姉ちゃんに、羨ましがられています」「うれで、子どもを手伝って一緒にアニメ作成の準備をしました」など、保護者の声。

・多くの留学生の方々とも交流することができ、英語だけでなく、さまざまな言語・文化があることに気づくことができた。また、クラスにたくさんの方をお招きする機会が増え、誇らしい態度についても実践を通して学ぶことができた。

・「タイと日本は～なところが違う」「でも、～なところも、～なところも同じだね」こんな発言があった。

・これまで人前で発言することを苦手してきた児童が、大きな声で自分の考えを発表できるようになった。

（→3月の「二分の一成人式」では、体育館ステージでマイクを使わず、自分の夢や抱負を全員が堂々と述べることができた。）

・自国の歴史や伝統・文化について理解を深めようという意識をもつようになった。日本人としてのアイデンティティをもつようになった。

4. 5年生になった子どもたちと、タイの子どもたちとの交流を続けると良いと思いますか？ご意見をお聞かせください。

・交流を続けることは理想的であるが、現実問題としては難しい。新年度の学校組織・運営において、昨年度の「年間指導計画」外の活動を、継続していくのは容易ではない。
5. 学校で実施する“国際交流と ICT”の体験として、4〜6 年生それぞれの学年でどのような活動に重点を置くとよいと思いますか？ 重点をおくとよい学年にチェックしてください。

<table>
<thead>
<tr>
<th></th>
<th>4年生</th>
<th>5年生</th>
<th>6年生</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT を利用して海外の小学生に自国の文化を紹介するような創作活動</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>（コマ撮りアニメ、ビデオ、音楽等）</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>海外の小学生と意見交換（話し合い）をするような活動</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>もっと英語を使う国際交流活動</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
<tr>
<td>もっと ICT を使う国際交流活動</td>
<td>✔</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

その他自由にアイディアやご意見をお書きください。

学校に応じて、活動状況は大きく異なると思います。このようなワークショップを学校教育のなかで拡大してい
くには、例えば、①3年計画など長期的に、②校内研究の一環として、③系統的に学習が深まるように学校の教
育活動全体計画に明確に位置付ける、なども考慮しなければならないのではないかでしょうか。

【グローバル教育について】

1. これからのグローバル社会に生きる子どもたちが、小学校高学年の段階で身に付けておくべき能力や考え
方（グローバル能力）について、先生のお考えをおきかせください。
2. 学校では児童たちがそのような「グローバル能力」を身につけるためどのような活動を行っていますか？

3. その他のコメント

(感想)

子どものもつ発想力・行動力を涵養することが多々ありました。また、これまで、私の知らなかった子どもたちの能力や長所をたくさん知ることができました。

今回のワークショップの内容は、とても魅力的でした。慶應大学大川教授のワークショップを本校でお引き受けしませんか、と校長から打診された時点では、その内容について想像すらできませんでした。私にとっては未知の内容でしたが、「パソコンで絵をかくらしい。パソコンも大学側で準備して下さらそうだ」とのこと。「子どもたちが喜ぶだろうな。専門家から学べる楽しそう、子どもも大人も同じ」と二つ返事でお受けしました。

専門的研究機関である大学側のプログラムに沿って、大学側が主導で授業を行ったがゆえに、ユニークな活動・大きな成果があったと思います。どの活動をとっても、小学校の設備・教員だけでは取り組めるものではありませんでした。今回のワークショップでの取り組みは、グローバル教育、情報教育のあり方について考える上で、好機となりました。大学で研究したことを、地元や近隣の公立小学校をフィールドとして展開していく。そして、共同で評価・検証を行っていく。こうした連携は、子供たちはもとより、小学校教員の知的好奇心も大いに喚起するものだと思います。
Parents Feedback

・とてもどの作品も可愛らしい作品ばかりでした。細かい動作をよく表現していると思いました。どのようにして作っていたのか不思議に思いました。

・子供達の楽しそうな姿が目に浮かびました。授業で作ったものがお家で家族と共見ることができるのは会話も増えますし、とても嬉しいです。

・いろいろな物語の構成を考え、たくさんの小物を作られているものを使い、何枚かの写真から動画を考えながら撮影することで、たくさんの考えを刺激されているなと思いました。現在パソコンデジタル化によりボタン一つで何でも出来る時代に考え、小さな作業をすることで苦労を知り、子供たちの作品が出来上がったと思います。作成するにあたり子供たちは協力して作ったりと映像からも見ることもできました。道徳の一つとも言えるのかなと思います。現在デジタルを使用し孤独になる人もいますが、協力して何かを作りさらにパソコンで一つになる本もいいですが、こういう作業も大変良いものだと共感しました。このような面を学校と大川先生が作ってくださり大変感謝いたします。

・家に帰ってきた娘が興奮気味にサイトの紹介をしてくれました。自分たちで作りの作品がインターネット経由で見られることが嬉しかったようです。クラスメイトの作品についても楽し気に説明してくれました。まだ完成した状態ではありませんが、「コマ撮りアニメ」のそれぞれのストーリーが表れ作品が訴えたかったことも伝わり、より面白味も増やすことと思います。今後のサイトの充実に期待しております。

・いつもお世話になっております。この授業に取り組み、いろいろな興味を持ち始めました。アクセスして見させた方がいるほどと思いうが楽しみさせていただきました。子供の感覚が大人と違う発想や表現など価値ある限りです。もっと知識をつけ、面白く感じ取り組んでくれた嬉しい限りです。良い機会を与えてくれて感謝しております。

・面白く観ました。こういうクリエイション風の作品を、タブレット端末を使って作れるのは楽しいだろうと思います。大人だと小難しく考えてしまいますが、子供の柔軟な発想ならではの作品だと思います。大人より子供の方がタブレットを使うことへの違和感や抵抗もないと思いますし、タブレットなら場所を選ばずどこでも授業で使えると思うので興味深く感じました。娘はとても楽しかったようです。友達と一緒に協力して作品を作ることができたと言っています。

・短い時間の中各々ストーリーがあり、見ていて楽しかったです。粘土や紙で作ったキャラクターもよくできており、動きも飛んでいるところ、食べているところ。花火、スイカ、恐竜、お化けなどとてもよくできていました。

・子供たちの作品は教室や廊下の壁に貼られているのを見ることが多いですが、動きを付けることでまた違った生き生きとした作品に見えました。出来上がりの動きを想像、イメージすることも感性の刺激につながるのではないかと思いました。
〜国際理解のある人材を育成〜
紅葉小の児童がタイの小学校とテレビ電話で交流 =北区=

2月16日（火）、区立紅葉小学校（港野川3-7-2）は、子どもたちに異文化に対する興味や関心を持つために、2016年に総合的な学習の時間で実行された「タイと日本の友好的な交流」に続き、タイのバンコク市立アスラーンワットパーソニヨック小学校（Pattana School）とのテレビ電話で交流した。

これは、紅葉小学校が国際理解のある人材を育成するため、「国際的な学習の時間」内で実施したもの。同校の児童がこの目的のために、国際文化の授業で日本文化を学ぶと同時に、タイ文化を学んだ。

この一件として同校は、横浜国際大学大学院メディアデザイン研究科（大川原教授）の学生3名の協力のもと、タイのバンコク市立アスラーンワットパーソニヨック小学校の児童と交流し、日本の食文化や日本の茶道の魅力を紹介する動画を視聴させた。授業内で、キタイ小学校の児童は、テレビ電話で交流を始めた。

この日は、キタイ小学校と初のテレビ電話交流が開催された。キタイ小学校の児童5名がテレビ電話に出され、タイ語での「サッカーは、これが何ですか？」と聞くと、同校の児童31名が興味深く聞く。”

問い合わせ
紅葉小学校
03-3948-5268
住所：横浜市北区港野川2-7-2

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～国際理解のある人材を育成～

紅葉小の児童がタイの小学校とテレビ電話で交流しました！

2月16日（火）、区立紅葉小学校（ çekil川）の小学4年生児童31名が、タイのバンコク市立アメーバンワットパリナヨック小学校の6年生児童5名とテレビ電話で交流しました。

これは、紅葉小学校が国際理解のある人材を育成するため、「総合的な学習の時間」内で実施したもの。同校の児童達はこの日のために、慶應義塾大学大学院メディアデザイン研究所（大川憲子教授）の学生3名の協力のもと、タイの児童に向けて、日本文化を紹介するコマ撮りアニメの制作などを行ない、昨年9月から準備を進めることができました。

紅葉小学校の子どもたちは「冬のでも気温が30度近くになる」や「地震が全く起きないため、防災じきんを知らない」といった日本との違いに驚きの声を上げるなど、お互いの文化への理解を深める貴重な時間を過ごしていました。

See Translation
東京の小学校がタイの小学校とテレビ電話で交流

東京都北区の紅葉小学校の小学4年生31人が2月16日（火）、タイのバンコク市立アスパーンフットバリノック小学校の6年生5名とテレビ電話で交流した。

国際理解のある人材を育もうと、紅葉小学校が「総合的な学習の時間」で実施したもの。同校の児童はこの日のために昨年9月から準備を進めてきた。慶應義塾大学大学院メディアデザイン研究科（大川隆子教授）の学生3人の支援を受け、日本文化を紹介するコマ撮りアニメを制作してきた。

子どもたちは、タイの子どもからの「冬場でも気温が30度近くなる」や「地震が全く起きないため、防災ぎんを知らない」といった説明に驚きの声を上げるなど、互いの生活や文化に触れられる貴重な時間を過ごした。
18th UNESCO-APEID International Conference: In Pursuit of Quality Education: The Past, Present, and Future

Designing Innovative Global Education Approaches with ICT and New Media

Komkid Topoklang, Mana Yamamoto, Rinrada Khansuwan, Yuta Gotoh, Daisuke Yukita, Kohei Kosuge, Marcos Sadao Maekawa, Shintaro Matsufuji, Keiko Okawa
Keio University Graduate School of Media Design, Japan

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