

World Information Society Summit
Youth and ICT for Development

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"Children's Creativity and Expression -- CANVAS"
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1. Workshops on P2P/Ubiquitous

- The multimedia festival was held in Okayama Prefecture in November, last year.
- Two workshops for children were held.

- This is the workshop to express themselves with a digital camera.
- Children who release a shutter for the first time explored and presented their expression method.
- Bold and beautiful works were produced.
One child is interested in the red of leaves and the blue of the sky.
Another child cuts off the feeling of a lively motion of a fountain
Another is taking pictures of F1 car decorated at the hall.

- These works were immediately printed out from PC and up loaded to the website with broadband immediately.
Think with an image and express with an image.
This workshop is to show their works to each other and to discover each other.
Peer to peer, that means the activity which viewed the time when everyone becomes a content producer.
- This workshop was held by a broadband service provider @Net Home.

- Another workshop was Cricket which allows you to make your own "insect."
- The Cricket is a matchbox sized computer developed at MIT.
Children program themselves to it, and put sponge, wooden tips, etc together to make their own robot.
These works are also on website.

- Square and stiff computer is now changing its figure into creatures.

- Computer tips are being embedded in clothes, cars, furniture, or toys as well as mobile terminals and they become Internet terminals.

In such a time of Ubiquitous computing, computer transforms from a screen to solid molding, and the figure itself serves as content.

- This workshop was held by a child center "CAMP"
"CAMP" is the first children's workshop center in Japan.
It opened in spring of 2001 in south of Kyoto.
- It is in cooperation with the MIT media lab.
Professors and researchers introduce their technology and know-how, and have workshops such as making robots, music, etc with Japanese children.
- CAMP is managed by a Japanese software company CSK.
- It is linked with other projects in the world with on-line.
LEGO, Intel and National Geographic have also cooperated.
We are also working with children museums in US, Mexico, Ireland, and Singapore together.
- These two workshops about P2P and Ubiquitous was organized by an NPO "CANVAS"
- It is a government-supporting movement to carry out nationwide development and international collaboration of enhancing children's creativity and expression.
- The purpose is to prepare the environment to induce broadband content.
CANVAS just started its activity in summer of 2002.

2. Background

- I belong also to the MIT media lab.
These activities are related with media lab very much. So I would like to refer to the lab.
- The MIT media lab is known for having led the digital technology.
- When the President Negroponte, Minsky of "AI", Papert of "learning" established it 20 years ago, it was known as an advocate of digital integration.
- Now the theme is represented by the word Bits and atoms.
- Business of actual atom space shifts to the space of virtual bits.

It was realized as the Internet.

- Now conversely the theme is pulling back virtual space to actual space.
So called "ubiquitous computing".
- One feature is that it's run independently financially supported by 150 sponsors in the world.
- They are making connections between Europe and Asia.
- Media lab Europe was built in Ireland and Media lab Asia is being established in India.
- And now they focus on three fields.
Technology, art, and children.
- Among these, the research section about children is scheduled to become independent?
It is named the "MIT Okawa center."
They will research on the relationship between children and ICT synthetically such as learning, expression, art, play, etc.
It is scheduled to open in 2004.
- They especially will prepare the environment where children and developing countries present their creativity with new technology.
It is based on the concept that children and developing countries receive the benefit of ICT most effectively.
A consortium for this is also started in collaboration with Harvard University, and is making Pilot Projects, such as industry, health, learning, with Costa Rica etc.
- These movements were started at Information Communication G7 in February, 1995.
- The U.S. Vice-President Al Gore and summits of each country gathered at the event in Brussels, Belgium.
I was also at the conference as a member of the MPT, Japan.
- President of CSK Corp, Mr. Isao Okawa also participated from Japan as a private sector representative and he spoke,
"Children build the information society. We should listen to their voice. "
- It won approval and junior summit was held in Tokyo in November of the same year.
Children of many countries gathered in Tokyo and discussed the future of digital

society.

- In 1998, MIT undertook the host and the second junior summit was held in Boston.
- 100 representatives who were chosen from 139-nations 3000 participants gathered at MIT.
- The establishment of Okawa center was announced at the event.
From that time I participate in MIT, and have coordinated projects about relationship between children and digital.

3. CAMP

- After joining MIT, I found that activity of children's learning, creativity and expression with ICT is demanded more strongly in Japan.
- Then I hit an idea to make a center in Japan. That's the CAMP.
- CAMP is developing workshops thinking deeply about balance
Between digital and analog, technology and art, virtual and real.
- Adults should provide technology and field, children should create content.
That's the basic idea.
- Let me introduce examples of workshops.
This is Cricket that I mentioned before.
Which is to create ubiquitous world.
- This is creating improvisation music.
Led by a Japanese famous trumpeter Mr. Toshinori Kondo, MIT professor Chris C.,
etc.
Children look for their favorite sound, make their own music instruments, and play.
- Claymation. Animation with clay. My favorite workshop.
An example of convergence of analog and digital.
Children make story, draw story pictures, create characters and backgrounds,
manipulate clay, shoot every scene, edit the video and record their voice.
They make posters and tickets, and call audiences and finally show the film to them.
Then, they present it to the world by broadband.
- This know-how was imported from Capitol Children Museum in Washington DC.

But Japanese children are very good at this maybe because they are always being trained by animation, comics, video games.

- This work is by children at CAMP.

The story is that a thief disguised in a lady TV caster, but he fell into a pool and his makeup was washed out and then arrested.

It is a typical Japanese popness to make that strange animation together taking 3 days.

I would like to hold a WS that children in the world share and exchange those video clips

And create other more animations by editing them.

- This is a robot racing game.

An international WS using telecommunication.

Children make robots using a computer kit named LEGO MINDSTORMS and let them race.

- We connected and played with Singapore Science Center with visual phone system.

- Their language was different but they managed to communicate each other without stress and enjoyed much.

I would like to expand this kind of activity in Asian countries where we don't need to consider about time difference.

- This is Digicamp. A WS to share, exchange, and talk about difference.

It's simple enough, taking photos and showing them each other on a website.

- Children in the world release a shutter under the same subject.

CAMP releases those photos to children in the world.

- The subject this time was "daily life".

They took what they saw every hour from getting up until going to bed in a day.

- Children in Boston, SF, Mexico City, London, Dublin, Denmark, India, Cambodia and Singapore took part in, and showed their unique culture focusing on their familiar scene such as play, school, food, etc.

- Why are you praying? What are you eating?

To understand and talk about each other's difference is important.

- Toy Symphony. Creating music yourself and all together.

This is a project at MIT Media Lab.

Which is developing technology to enable everyone to join music without any special training.

- Digital instruments you can play with grabbing, patting and kicking, are being developed.

- Sponsored by Japanese companies.

- The most remarkable is this software named Hyperscore.

With this tool, you can compose music by drawing lines and pictures on a website.

You can create from the basic level of sound and rhythm.

Children connected by network can compose together.

New way of creating music might emerge.

I hope children in the world can change the music expression.

- Digicamp, Toy Symphony, everything need online.

Once internet was called Information Highway.

It was a road for transporting content and idea that someone made.

- However, internet is changing from road to a park.

It is a place where people bring idea, share and exchange, and through that, produce new value.

- Network is becoming from a church where you listen to some establishments' noble words to a bazaar where you yourself open your shop.

We would love to prepare the place for children.

4. CANVAS

- An NPO called CANVAS was established in order to extend activities like CAMP in Japan and the world.

- Schools, local governments and companies in Japan consider to make children use ICT

more than ever.

- The spread of ICT to educational field is also progressing.
- Of course, there are various programs besides CAMP, such as museums and schools?
I thought it required to connect them as a network.
- This was a corresponding idea of the Japanese government.
- The government decided a national vision called the e-Japan strategy for promoting ICT.
- It is a policy with emphasis on establishing information network, improvement in information literacy, and promoting content creators.
- Improving every person's information producing was needed by promoting school and local activities.
- Making communication active with foreign country was also needed.
- CANVAS started several months ago financially supported by Foundation for Multimedia Communications that is an affiliated organization of the government.
- We will collaborate with the triangle of industry, academia and government.
- We cooperate with people who are carrying out workshops in various places such as museums, schools, and artists, designers, IT companies, governments.
- We also want to have connection with universities, companies, museums in the world.
Now, we are looking for cooperation partners.
- However, to the last , it is children who take the leading role.
- Although adults make the way for now,
It is expected that children manage by themselves in the future.
- We have children already make the design of the website of CANVAS.
Although it may look a childish design, I think it is important to trust children and give them such an opportunity.
- CANVAS supports development of workshops first.
- I already talked about examples of workshops at Okayama multimedia festival and CAMP.
- We are planning to have ideas from people, and carry out in various places.

- How about a workshop of "making a book"?

A museum in Ireland is carrying this out.

In the workshop, children draw, print and bind a book, and go out to sell it.

If the children of each country make a picture-book from the same theme and exchange on-line,

what will come up?

Why are the stories or tones different?

Children would talk about it.

- I want to develop Japanese original workshops as well.

- For example, making comics. Making a video game.

- Japanese tea or flower arrangement would be fine.

- Fashion as well.

- I want to do also making the Japanese standup comedy "Manzai" WS.

- I want the children in the world to see it.

- Isn't it very pleasant if the children of Asian countries begin to send the expression and communication based on original culture?

- It is also the mission of CANVAS to popularize and share such activity.

- For example, schools and local governments can participate in workshops, or see them via broadband.

- We want to make teaching materials of workshops and set them into school education program.

- Of course, it is also important to introduce or exchange projects of other countries.

We will try to produce a virtual community.

- The 3rd part of CANVAS is "research."

- In advancing activity of expression or communication, it is recognized as important to grasp the characteristic of information industry, culture, and society.

- A research project focusing on pop culture started there.

- Researchers, artists, people from entertainment industry, the government, etc. are arguing on-line.

- How are the advantages of Japan, such as comics, animations, and games, harnessed in the age of "peer to peer" or "ubiquitous computing"?

- How do children develop the new content on website and mobile?
- Of course, each country has such industrial and cultural feature.
Especially, you should observe the variety of the deep history and culture of Asian countries.
- Then, I want to make it develop into international joint research and an international comparative analysis.

5 Epilogue

- I was in NYC on September 11, 2001.
- It was the incident to make us recognize anew that there were various ideas and people in the world.
- There was the World Cup Soccer last year.
The final match was South America and Europe. The third was Turkey and the 4th was South Korea.
- It was the event that the world recognized it was plural.
And the hosts were South Korea and Japan.
- Asia took the role of host at the opening of the plural new century.
- In the global society connected with digital network, people understand each other more deeply.
Nevertheless, conflict will not disappear just because people understood each other.
New conflict might emerge because of understanding each other's difference.
- However, it is certain that a new expression and rich communication are produced.
- This is the time for the turning point from the analog millennium to the digital millennium.
It is necessary to produce new social rules and rights, and new expression styles.
- It is a young generation to build such a new society and to cultivate a new expression.
It is the generation who makes full use of a network by nature, expresses virtually, and lives digitally.

- We want to prepare the environment for it, and give the place and technology,
And convey to children.
- And I wish to trust children.