

Shinnosuke OBI:

May I introduce Professor Okawa from Keio University. A Faculty of Environment and Information Sciences.

Keiko OKAWA:

Thank you very much for introducing me and thank you very much everyone to give me an opportunity to talk about our project called SOI Asia. On behalf of 10% of the participants of today's conference from Southeast Asia, I'd like to introduce our project. SOI Asia started in 2001, about 15 years ago. Our purpose is to do a sharing knowledge and experience over the internet among Asian universities and students using technology. That's the original idea. People in each university in the Asia got together and there is a new environment called internet and maybe our students and faculty members could get a lot of benefits from this new environment. Why don't we try to use it in higher education area? That's the original idea.

But remember, in 2001, the Internet itself was not that well implemented in some of the areas in Asia especially. Actually, in Asia the number of Internet users were increased 800% from 2001 to 2015. So only a limited number of people were using Internet. But we thought we could do something. In many countries in Asia the nationwide internet infrastructure was not ready yet at that time. So we decided to use the satellite network. But satellite network has a lot of issues because of the cost and also licensing. So it was not easy to implement a regular internet using satellite in Asia.

We decided to use another technology called UDLR, Uni-directional Link Routing, that allows each university to set up a very, very simple receiving-only satellite antenna, to utilize the satellite communication as a pass of the Internet. That gave us a lot of freedom with a cheaper cost and greater bandwidths to your campus in a very short term. Like in three months you could get about 10 Mbps more than the regular Internet connectivity. At that time some of the university even in Japan and also Asia, 10 Mbps was a great deal. .To utilize this technology we could share a lot of data and information.

This is the map of the partners. The project started from 2001 and 26 is the partner university numbers. Some of them are very active and some are not active yet anymore but we had relationship with other universities and 11 countries. And what is 6? Number 6 is the number of the time zones where our partners are. If we share the lectures and experiences

in real time, the time zone is very important factor. When we talk with European people or the people in the US, then it's going to be impossible to have a perfect time for the meeting as we all experience. But our benefit being in Asia is only six time zones. The farthest is Nepal, the difference is 3 hours and 15 minutes.

If we do the lecture in the afternoon, we could share everything with all of the partners. That's the benefit of SOI Asia. And the newest – by the way, the newest partner is NUTL, National University of Timor Leste. Timor Leste started their country just in 2002 and now we set up an antenna and they become a partner.

But let me go into a little bit more detail how we developed the environment and how we are doing activities on top of it. We have application program, application development, community building and operations training, and network. We'd like to share the experience on the internet. If you do not have an internet, let's create an internet. That's our policy.

This is the original environment that we used as satellite and some are very solid and some are a mesh type for receiving-only, just like a TV antenna. And our science technology and our IT technology got together and created this environment with very inexpensive implementation. That's the key point.

And the newest development in NUTL , National University of Timor Leste is also using this technology. Within the limited budget we could set up a very simple environment to share the lectures and stay interactive. We implemented with our students together with UNESCO project and went there and built an antenna and created the classroom and developed an environment for the classrooms there.

And now we are expanding a little bit our network towards the national R&E (Research and Education) Network. As you know there are very strong national R&E Networks already in Asia and in Japan, and they are connecting each other. National R&E Network will stimulate students and faculties in the university to do more than the regular commodity. We could utilize a lot more bits and a lot of knowledge. Just yesterday or two days before there was announcement from University of Illinois and we have a 100 giga bps between Japan and the United States. So more and more bits coming and going, so more and more knowledge will be shared.

And then also our strong relationship with the Europe called TEIN4 project is a funding from European community to stimulate our connectivity between Asia and the Europe. And strong infrastructure is under developed. So we started from a satellite, but now gradually moving into the fiber based. But still it's a conjunction.

Diversity is Asian keyword. So a very fast network. Sometimes very low bandwidth, but still we are connected. What we are doing on top of this environment is the educational programs.

Programs are provided by partner universities, not only Japanese universities, but also other universities in Asia of course and the program sometimes are regular courses, like every Tuesday second slots we are doing running a course together with some of the universities in Asia, connected real time.

Also, we have content partners, UNESCO, academic societies, and industries. So they have their own content to share with us or willing to share with other universities in Asia. We are collaborating together with our content partners.

About the Language used in the lectures, we mostly use English. But sometimes local languages are used. For example, Timor Leste the first course was delivered from Indonesian universities in Bahasa Indonesia.

We don't care about the language part. Yes, English is the most common language. And the programs are going to be participated by partner university students, but not only that. We are offering courses to the society around the universities. For example, we are offering a high school program, elementary school program, sometimes the professional level programs, and making the partner university being a core part of local community a core role servicing the society, around the university.

And acknowledgments are mainly certificates from the SOI Asia project and then sometimes, some courses are accredited in local universities. But we do not exchange credits. Each university evaluate the contents and sometimes decide to accredit, sometimes they do not. That's how we do.

And lectures are shared by classroom based or individual based and this is a kind of sample

course. Like HTML5 workshop. One teacher teaching from three countries around Asia and 391 students registered from ten universities. Five different ways of participation were provided by the project because a lot of diversity in the bandwidth depend on the university.

And out of about 400 participants, 86 submitted assignments at least once and then at the end only 30 students completed the program. So we can control the quality still in this environment with hands-on assignments and things like that. And then only two successfully submitted the applications. So the ratio is not high, but we could provide an opportunity to many students around the university students in Asia.

Another example is the snapshot from connectivity session in 2011. It was a session participated by 2,592 students in Asia and we got actually Guinness Record. But Guinness was not the purpose, but it was a very good demonstration of platform. The professor sitting in the center came from France and the economist came from New York and very bad time of the day, because it was maybe 2 a.m. But still we could connect in many places and students could enjoy the lectures and discussions at their regular environment, daily life. That's our key.

This is the students' events 2012. Students went out many, many places and distributed the streaming from many places. So we are sharing programs and developing also a platform like we would like to have a new learning environment. If you're going to share the lecture we could use Skype or Google Hangout and so on these days, but we really need to know more about students.

This is a new project WASABI. During the realtime classroom sessions we could get many, many data from the students such as movement of mouse and movement of keyboards and these things like that then the big data could create a more and more value for your learning environment, for teachers to teach better and learners to learn better. Also, we have our own MOOCs platform called SPICE. MOOC is MOOC but we call it SPICE, because not massive online education is not the best always. So this is more like a social learning platform. This is developed by our own university students in Asia and Japan for our own purposes.

We could share the courses online. Not only realtime at the classroom but also this kind of model. And we do the internships. Sometimes we get the extra budget to invite students to

Japan and other countries. In that case we do the internships and the fieldwork as well and community building.

Before I close my talk let me share some of the statement that the partner universities agreed on. The first statement was mission and role, it is very much I explained. It's about the educational platform and this was developed two years after we started the project and then about ten years ago we agreed again, "Yes, this platform works and it looks like very well so why don't we continue our program or development of this environment." It was agreed at Bandung Indonesia so we call it Bandung Declaration. Another statement in 2008 where Keio university was celebrating 150 years anniversary then partner university's rectors and presidents came to Japan and again we evaluated our environment and this is a very interesting statement that we come up. "We are creating a commons for research and education among partner universities. Each of us thrives for the future of our own nation by utilizing this commons and we contribute to the world by collaborating with similar initiatives."

The countries are in very, very different stage and situation. So we do not – we are not able to help from here to there directly. They do their best. So we help them to do. That's our concept. And now we are going to celebrate 15 years anniversary next year so we are now preparing for the next statement and evaluation. Thank you very much.

Male Speaker 1:

I am curious if you have some courses recorded.

Keiko OKAWA:

The courses are recorded.

Male Speaker 1:

All of them?

Keiko OKAWA:

Yes, all of them, because we have a lot of power outage in Asia and without recording we cannot serve the courses to every student.

Male Speaker 1:

And they are available for some outside...

Keiko OKAWA:

Yes, all the courses are basically available online. We really would like to share them with your community.

Male Speaker 1:

Okay, thank you.

Keiko OKAWA:

Thank you very much.

Male Speaker 2:

The question is that your courses are more classical or technical or what is the field of subject?

Keiko OKAWA:

We are having bi-annual meetings to come up with a curriculum plan. Curriculum or courses are developed based on each university's requirement. So these days the most courses are in IT related and also marine science related and environment and sustainability.

Our learning environment is global. So global issues fit very much into that environment, because discussions among students could create a new solution. Each university is doing their own education very well, but this kind of environment may provide a better opportunity for students to discuss the global issues. That's why we do IT network and sustainability and marine, those are the main areas that we are doing right now. Thank you very much for your questions.

Male Speaker 3:

One simple question. You mentioned UNESCO. What is the role of UNESCO in this, support or – they support in some extent? Could you explain?

Keiko OKAWA:

Thank you for your question. UNESCO is content partner. Content partner means they develop their own contents by themselves and we are collaborating to provide the platform

for sharing. That is a kind of win-win relationship. They would like to deliver, we would like to share. So we do not have much financial relationship these days, but sometimes they support our partner like Timor Leste case. But basically content provider and sharing platform is our relationship.

Male Speaker 3:

Great. Thank you.

Keiko OKAWA:

Thank you very much.