

【Open Floor Discussions and Question and Answer with Speakers】

Kazuo Kuroda (Professor, Graduate School of Asia-Pacific Studies/Director, Center for the Study of International Cooperation in Education, Waseda University)

Prof. Angela Little and Dr. Kilemi Mwiria are also on the stage, but for the first 45 minutes we would like to take questions and comments for the panelists. As a moderator, I usually have two policies. First, when we get questions and comments from participants, it is of course fine if they are addressed to certain people, but anyone on the stage is welcome to answer to any questions. I would also like the participants on the floor to feel free to comment. Please don't feel that you can only ask questions. Many experts have gathered here. Please do not hesitate to share your opinions with us. We welcome your active inputs. Now the floor is open. If you have questions or comments, please raise your hands.

Question 1

Takako Suzuki (Kyushu University)

Thank you very much for your fascinating and productive presentations. My question is mainly addressed to the final speaker, Mr. Anshul Sonak. You said that educational needs and demands are changing as the world is changing in many ways, including digitalization, and that Intel is supporting education to meet the new needs that call for ICT and digital skills. In the morning session, Prof. Angela Little said in her presentation that access to ICT is significantly expanding among children in urban areas and that for this reason the disparity between urban and rural areas is widening. When I consider the two presentations, I wonder if education to address the recent needs may widen such disparities.

I'd like to ask another question regarding ICT. Kyushu University conducted a survey last month on e-learning and ICT as our university is also promoting ICT. Many of our students replied that they didn't prefer digitalization. I would like to ask you how much ICT is needed and what side effects there are, if any, as well as positive effects. Since you said ICT is not a "panacea," I wonder what you think of the negative effects.

Question 2

Atsushi Matachi (Japan International Cooperation Agency)

Thank you for your very interesting presentations. I have two questions; one is for Prof. Kuroda and the other is for Mr. Sonak. I'd like to make a request of Prof. Kuroda rather than ask a question. In your presentation, you said that regions will play bigger roles and that education is important in that sense, as well. I quite agree with you. JICA has had many opportunities to work in Asia and Africa. I have had opportunities to work particularly in Africa, where JICA is supporting regional organizations. Japanese government has schemes to provide grants-in-aid and make contributions to international organizations. JICA has also schemes to offer bilateral assistance to support individual countries. But Japanese government has few schemes to support regional organizations, so it is rather difficult for us to promote regional activities. There is a limit to what we can do. I think that Japan must explore how it can support regional initiatives. If you know from your experience how we can promote regional initiatives more easily or what direction Japan is moving in, please advise me.

I'd like to ask Mr. Sonak another question. You showed us a graph on "How the Demand for Skills has Changed" and said that cognitive skills and analytic skills will be more important and that these skills are the most difficult to teach at school. I agree. But then, can ICT strengthen these skills through interactive or people-to-people, children-to-children communication? I think teachers need to teach students these skills in classrooms by promoting mutual communications among students. This, however, is quite difficult because teachers must be highly capable. When I think about it, I wonder if it is really easier to use ICT. So, I have two conflicting ideas. I'd like to ask Mr. Sonak if ICT can be an alternative solution or if it will be used to complement human interaction factors. These are the two questions I'd like to ask. Thank you.

Question 3

Wataru Iwamoto (Ministry of Education, Culture, Sports, Science and Technology)

I'd like to ask Prof. Kuroda a question. You have clearly explained governance issues from the viewpoint of global and regional governance, but that doesn't negate the importance of national or local governance. Can 21st century skills be taught by school teachers alone? Shouldn't indigenous knowledge in our communities or in our local societies also be taught? When we consider education for sustainable development, there are many stakeholders involved in teaching in addition to teachers. Isn't it important for us to consider how we respond to the demands of national and local governance and of regional and global governance? This is a question rather than a comment.

I'd also like to comment on Dr. Mizuno's presentation. From her presentation about the case in Laos, I understand that pre-service teacher training and the issues concerning teachers are extremely important. The recent EFA Global Monitoring Report also discusses teachers' remuneration and how to get good teachers. In this situation, I think national governance concerning teachers' status within a country or society will be important. This is also a question rather than a comment. Thank you.

Question 4

Yokuo Murata (Kyoto Women's University)

This is a question to Dr. Mizuno. I was very interested in your presentation, in which you said that Japan's international cooperation with Laos should promote South-South assistance, and you said that Indonesia is one example. I have also studied South-South cooperation. I have visited Laos myself and have seen many cooperation activities with Thailand and Vietnam. Although the scale is small, Thailand has been providing a training program for primary and junior high school teachers in Laos, and JICA has been involved in the planning. In this program, teachers receive training for about three weeks, and it has been effective. This was a kind of triangular cooperation. I also learned that the private sector is providing training to senior high school teachers in Laos. Vietnam is also conducting various programs, including accepting students from Laos, providing scholarships, building student dormitories and building a medical college. JICA is working with the governments of Thailand and Laos, but it's not really successful. But in the cases of Laos and Vietnam, I hear the projects are very successful. When promoting international cooperation in education, I think we have to pay attention to differences in different levels, for example, differences in governments and in social systems as well as those between the public and private sectors. I would like to ask your opinion about this, or ask you if you have already considered these points in your activities. This is a comment rather than a question.

Kazuo Kuroda (Professor, Graduate School of Asia-Pacific Studies/ Director, Center for the Study of International Cooperation in Education, Waseda University)

Thank you. I would like to give the microphone back to the panelists. Mr. Anshul Sonak, could you first answer the questions?

Anshul Sonak (Regional Education Director (Asia Pacific), Intel Corporation)

The first question was about access to ICT, whether ICT has expanded the divide, if only rich people or those who belong to a particular class in the society get all the resources and skills and the poor don't. If the digital divide is being accelerated, what position can responsible companies like my company, Intel Corporation, take? I think that's a very good question. You need to think about this whole issue of ICT access from different perspectives, including what the cost of access is, what the financing models are, and how we can make it affordable for everyone, including those in rural areas so that they can use it in their daily lives. Industry has to work on it, but industry cannot solve all the problems for itself. Industry needs to work with government and academia. We must create models to make ICT affordable for everyone. And again, as with any technology, costs come down over time.

We also have to consider value, which is more critical. My post-graduate degree was in rural management. Why do I think that rural communities, which are struggling with fundamental issues, need to have ICT or digital skills? This is a question that definitely bothers all of us including policymakers. I think worldwide research shows that it's not a question of why ICT is needed but what and how ICT has improved. There are enough benefits of ICT, which have greatly improved processes and outcomes. Researchers can answer these questions, but from the application side, the civil society, academia, government and business have a responsibility to show practical examples of how ICT will change our lives. Let me share with you a story to answer this question. Just last week I was in the U.S., and I saw a 16-year old boy from Africa, whose hand had been blown off by a land mine in a conflict area. It is difficult in that part of Africa to get access to highly trained doctors. Even if he could have, his hand was gone, so what could he have done? So he accessed the Intel conference. He shared his story with Intel, and a local NGO in Africa got in touch with a 3D printer organization in New York. This organization saw how the hand was lost and how big his hand was and duplicated his hand including his fingers, palm and everything, using the 3D printer technology. Now he can eat with his hands and is leading a normal life. This is the value of technology.

It's not just a matter of basic access. We must consider what technology can do. This is what the government, policymakers, and civil society must consider. If they understand what potential technology can bring and how it can change their lives, they will start sharing such examples, which will soon be widely known. People will be surprised to know that the boy lost his hand but was able to get his hand back and that he can lead a normal life now. There are many other examples. I would like to say that ICT has great value and meaning. We all have an equal responsibility to answer this big question. The business and research communities and governments have important roles to play, but advocacy organizations and civil society have bigger roles to play. They should tell people what is possible and how it can be done. For people suffering in conflict areas, we can conduct a lot more collaboration with new technologies and new inventions using ICT. ICT in itself is only a tool, but how we use it can make a big difference in people's lives. If you don't know the value of ICT and its benefits, and if you don't know what ICT is used for, then it is meaningless. In Africa, for example, everyone has a mobile phone. They can communicate with the rest of the world. They have their aspirations in Africa. If I cannot show them good examples of how ICT is used, they will not be able to learn the value of ICT, which brings about transformation. It is our responsibility to show people the value of ICT. So this is my reply to the first question.

With regard to the second question, cognitive and analytic skills are very difficult to teach. No one doubts this. So teachers' empowerment is particularly needed in this area. Teachers in local communities must be trained and empowered to use ICT so that they can improve their teaching skills. My goal is to ensure that teachers know how to use technology and that technology contributes to improving teachers' teaching skills. Teachers are also role models for students. Robots cannot change students' behavior. Teachers can. So it is our responsibility to invest in teacher development so that they can be students' role models in using ICT. The pedagogy of problem-solving skills, creative thinking and project-based approaches may be new to teachers, but using new technologies can help them use new methods that are not didactic but student-centered, engaging all students. You can of course simulate real life in the classroom. This can be done in daily life. What students learn outside school can be fed back into the classroom. Then, they can use what they learn at school in real life. Children teach what they learn at school to their parents at home. Teachers can bring in what students hear from their families. Students are mutually motivated, learn from each other, take what they learn back to their families, and bring what they actually see into classrooms. Teachers must consider introducing this kind of teaching strategy.

The third point was about 21st century skills. Are these skills only for teachers? How about people in the community? I believe everyone must learn these skills. Business, government, academia and researchers must come together and establish, for example, a model of public-private partnership based on mutual trust to create learning communities, learning cities and learning villages. UNESCO has issued a declaration on building learning cities. It was primarily focused on how we create a community in which not only stakeholders in education, such as teachers, policymakers and educators but also the entire community are involved in promoting learning activities and implementing them. This is why ICT must be available to everyone. Thank you.

Keiko Mizuno (Senior Advisor (Education), JICA/Education Policy Advisor to Ministry of Education and Sports, LAO PDR)

Thank you for your comments and questions. Let me first answer the last question on South-South cooperation for Laos. Vietnam has the largest number of Lao students studying abroad. In that sense, there are active exchanges and South-South cooperation at the higher education level. In Laos, people speak Lao, which can be a barrier to promoting collaboration with other countries. But this barrier is comparatively low between Thailand and Laos. For teachers, teaching resources are mainly textbooks and teaching guides, particularly for primary school, and the resources up until then had been limited to those from Thailand due to language barrier.

Then, why Indonesia? While universal access to primary education has gradually been achieved, quality of basic education still remains to be a challenge. Japan's future international cooperation is required to facilitate horizontal cooperation across the countries as an exit strategy, in addition to conventional bilateral cooperation, in order to ensure the quality of basic education. I cannot go into detail here, but Indonesia is a country in which a comprehensive picture of different dimensions, including schools, institutions and policies, can be presented in a package. In its assistance in basic education, JICA has been providing advice for quality education inclusively for 13 years in Indonesia not only on exchanges among those at the classroom level and policymakers but also on what impact those involved in policies and institutions have in classrooms. We should share and utilize the example of Indonesia in a strategic manner to improve the quality of basic education in the region by promoting various exchanges through South-South cooperation.

With regard to teacher training in the national and local contexts, particularly in the local context, we focus on teachers because teachers are on the frontline in classrooms and they have direct contact with students and offer them learning experiences. As teachers have the closest contact with students, unless teachers change, the quality of education cannot be improved. In addition to the issues of teachers, we cannot improve the quality of education if textbooks are not always available and the content of the textbooks is inadequate, and if the teachers' training does not meet the needs of the local level in classrooms. When we consider these issues, we need a comprehensive approach in our cooperation to encompass teachers' training, lessons in classrooms and textbooks. All of these have to be improved to improve the quality of education. We'd like to make our cooperation more comprehensive, getting college teachers involved in school-level and cluster-level training to make teacher training more responsive to classroom needs. This is what we are planning to do in our cooperation in Laos.

Kazuo Kuroda (Professor, Graduate School of Asia-Pacific Studies/Director, Center for the Study of International Cooperation in Education, Waseda University)

Thank you. As Dr. Palacio does not have any comment now, let me make some comments. Mr. Matachi, Mr. Iwamoto, thank you for your questions. With regard to the question on regional cooperation, you have the impression that it is difficult for Japan to provide regional cooperation as JICA is a bilateral cooperation organization. Particularly when we consider loans, it is rather difficult, as in order to provide loans to regions, the regulations must be revised. But when it comes to technical cooperation, JICA has a lot of experience. For example, both the SMASSE, which targets all of Africa and in which Mr. Matachi was involved, and the COGES, a school management program that started in Niger, promote regional cooperation. There are also programs on regional governance. JICA has launched a working group on science and math education at the education ministers' forum under the ADEA. In this way, JICA has already implemented regional activities. Another pioneering activity is the UNESCO trust fund. Although the amount is rather modest, Japan has contributed to this fund over a long time, and the trust fund has made a significant contribution to creating frameworks in the Asia and Pacific regions. In this way, Japan is a leading country in regional educational cooperation. For example, I mentioned Japan's Education Cooperation Policy, which was announced in 2010. In this document, too, it said that Japan was committed to creating regional networks. Thus, JICA's question paper issued in 2010 also said JICA was committed to creating regional networks. The reality is that Japan's ODA is shrinking. When we consider how we can improve the impact of our ODA programs, of course infrastructure programs will continue to be necessary, but I believe

framework-building should be a priority for Japanese cooperation based on Japan's experience in educational cooperation. Of course many activities have been carried out in Latin America and Africa, but we have been paying particular attention to Asia because we are part of Asia. ASEAN is Southeast Asia, but ASEAN Plus Three cooperation is also becoming quite active. ASEAN has taken various actions for quality assurance in higher education, and China and South Korea participate in the third phase of these activities in the framework of ASEAN Plus Three even though Japan has some political tension with China and South Korea. So framework-building is an area in which Japan should continue to offer its experience and knowledge as well as funding.

With regard to local governance issues, I agree with Mr. Iwamoto. When we talk about non-cognitive skills, 21st century skills and ESD, I agree that local and school-level partnership is very important. Decentralization is another very clear trend that has been apparent for quite a long time. Of course the governance at the national level is still important. While regional and global governance is becoming a major issue, there is a growing trend to decentralize decision-making to local governments, and school-based management is becoming very important in developing countries. I think this trend is a byproduct of global governance. Private-public partnership (PPP) is also a byproduct of global governance. In this sense, the trend in governance in education will continue to advance, focusing on local governance and promoting further partnership with the private sector.

Kazuo Kuroda (Professor, Graduate School of Asia-Pacific Studies/Director, Center for the Study of International Cooperation in Education, Waseda University)

Now let's begin the second round of questions and answers. Please make comments and ask questions addressed to the four presenters. After that, I would like to invite comments and questions for all speakers including Prof. Little and Dr. Mwiria. Please do not hesitate to make comments or ask questions.

Question 5

Taro Miyakoshi

I have a question for Mr. Sonak. I was intrigued by your presentation. I would like to ask you a question on entrepreneurship. I think it is very difficult to foster entrepreneurship in the educational system today. What aptitudes or conditions do you think are needed to foster entrepreneurship? What can families, communities, the private sector and other actors as well as schools or formal education do?

Question 6

Kazu Oda (Study Group on Education Act)

I asked some questions in the morning. It is said that Japanese children have low self-esteem or self-affirmation. This may not be directly related to the topic of development education, but I think it is related to some extent. When we make an international comparison, Japanese children have very low self-esteem. How can we improve it? I don't know to whom I should address this question. I'd appreciate it if Prof. Kuroda or Dr. Mizuno or Japanese experts or experts from abroad or anyone could suggest what we can do to improve children's self-esteem. I believe it is important to acknowledge students in the classroom. Not only teachers but also parents must patiently make efforts. If I may offer my opinion, some Japanese politicians say that if we teach only the positive aspects of Japan's history, children will have higher self-esteem. I disagree. I believe we must properly teach our history, including the negative history of invasion. What is your view?

Question 7

Taiji Wake (Hirosaki University)

I would like to ask a question of Prof. Kuroda or Dr. Mizuno. Toward the end of the presentation, Prof. Kuroda said that Japan must actively participate in formulating the framework for global governance and that Japan's cooperation can play a role in

communicating local needs. Listening to Dr. Mizuno's presentation, in which she introduced an example of Indonesia and JICA's cooperation in Laos, I believe we can connect what the two speakers said. JICA's cooperation could contribute to the formulation of the framework. From my experience in Indonesia, I feel neither Japan's cooperation nor JICA's is clear, and feel that it is rather difficult to contribute to formulating frameworks with clear indicators. Do you have any good advice as to how Japan can contribute more in that field? Are there any key factors or good ideas to help Japan contribute more in that field?

Kazuo Kuroda (Professor, Graduate School of Asia-Pacific Studies/Director, Center for the Study of International Cooperation in Education, Waseda University)

Thank you. Are there any other questions? If not, I'd like to ask Mr. Sonak and Dr. Palacio one question. Dr. Mizuno and I have made proposals for Japanese educational cooperation in our presentations. As this is the theme of this forum as well as its goal, I would like to ask you to offer suggestions for Japan's educational cooperation. Mr. Sonak, could you answer first?

Anshul Sonak (Regional Education Director (Asia Pacific), Intel Corporation)

Yes. May I answer the first question first? That was a very good question. With regard to the question on entrepreneurship, there have been a lot of discussions, particularly on the necessary conditions to foster entrepreneurship. I'd like to give some successful examples of entrepreneurship and then the factors behind the success. I'd like to introduce a case study of Silicon Valley as I think this is the best example. I lived in Silicon Valley a long time ago. I recommend you go there and see it with your own eyes. When we look back at the history of Silicon Valley, 50 or 60 years ago, the faculties of two universities, Stanford and UC Berkeley, played important roles. They were actively involved in solving business issues. As a result, some great companies were born. My company, Intel, is one of them. HP, IBM, Yahoo, too, and I can go on and on. It is not too much to say that these companies were started by the faculties of these two universities, Berkeley and Stanford. Silicon Valley is located in the area stretching for 50 to 60 kilometers between San Francisco and Santa Clara. So what is the magic that enables this particular area to produce such great companies, which are changing the technology of the world? What have they done differently, from the standpoint of entrepreneurship? When you look at Silicon Valley, you can get good insight. There is a lot of literature on the subject, too.

What were the successful factors? Faculty members have interacted with businesses, not only at the theoretical level but also in solving business problems. What can government do to encourage this? University faculty members by nature are happy in their universities, teaching in the classroom, but we need to encourage them to speak out and interact with businesses so that they recognize the problems businesses face and come up with innovative solutions. Business people must trust faculty members, and faculty members must trust business people. So governance is important. Berkeley and Stanford built trust with business people 50 or 60 years ago, and now we see the result in Silicon Valley. It takes time for company ecosystems to grow. Berkeley and Stanford are conducting education to foster faculty entrepreneurship. How can we encourage faculty members to go out and address the real-life problems? We are government officials, researchers, and those involved in education. Do we encourage faculty members to understand organizational issues and to go out and help solve them? This is the first critical component of Education – Employability – Entrepreneurship framework

Secondly, with regard to intellectual property (IP), as a faculty member myself, I always value my IP, my knowledge and my creation. Some faculty members are not willing to share their knowledge because they are afraid that companies may use their knowledge and that their copyrights may be infringed. Now there is a lot of discussion on the value of IP. How can we promote joint collaborations between universities and business to develop industry? Joint collaboration does not mean 90 percent industry and 10 percent faculty, but 60 percent faculty and 40 percent industry. The best balance for IP is six to four. How do we really evaluate the right balance in the value of IP? This is the second critical component of the framework, and we must pay attention to this and encourage faculty to understand the value of having joint IP. Only then will the ecosystem start.

Every student, regardless of gender or the economic situation of the student's country, has great ideas. There is no doubt about it. Everyone has 20 billion cells in the brain, so everyone will have brilliant ideas. Now as faculty members or institutions, how can we help them put out their ideas? We need a good platform to teach innovative thinking, design thinking, creative thinking. For example, we can work with local institutions and government research laboratories to incubate ideas. Then ideas grow and help industry grow. Once ideas start emerging and mentorship is established, capital can be raised. In Singapore, incubation is not just for venture capitals. What if you are a faculty member looking for a small amount of funds, say \$100,000 or \$200,000, to make your idea into a concrete product? In my country, India, it is very difficult for a faculty member to ask for that much money. I'm sure many countries in Africa have the same problem. But countries like Singapore have really changed the situation. In Singapore, people invest a proper amount of money in good ideas. In the United States, venture capitals and the ecosystem are very vibrant. They take risks, thinking that even if nine out of ten ideas fail, one may succeed. This is the mentality of venture capitalists. From the government standpoint, this may be too risky. But still you need to have some kind of incubation process to turn ideas into products. "I will give you time and a small amount of capital, provide you incubation support and protect your IP, so produce some ideas. Do something new. Do something wonderful." It is important to give people opportunities in this way. Then students become confident and work with faculty members to bring their ideas into concrete products.

If you are teaching students in a doctoral course, you recognize that many of them have great ideas. You can challenge them to convert their academic projects into tangible business ideas. The role of mentors is important in helping students make their ideas into reality. In higher education, we need to develop such an environment. To me, this is the process we need to develop in higher education in order to foster entrepreneurship. When they are 30 or 40 years old, it will be more difficult. It's important to start this when they are 20 or 25, encouraged by faculty members. They finish high school at the age of 18, go on to higher education and learn many things. They go from undergraduate to graduate school, conduct research and come up with ideas. This age is really crucial for nurturing entrepreneurship. From an organization standpoint, we believe global competition, the process of incubating global ideas and mentorship are very important. Berkeley and Stanford are doing a lot of entrepreneurship education for their faculty members as faculty development workshops. When faculty members conduct entrepreneurship education, they can freely choose the content of their curriculum. If you want to develop entrepreneurship seriously, you need to develop this ecosystem. I think historically Japan has had a strong ecosystem based on electronic manufacturing. After 30 to 40 years, I think Japanese technology is at a point of transition. I think this is a very interesting trajectory and inflection point. How can we arouse interest among new students so that they will come up with new ideas ahead of companies out there? Japan has pretty much established most of the technologies and processes. But the world is changing. Your faculty members and students may have a far different understanding of what's changing. How can we encourage these students and faculty members to come up with good ideas? If they come up with good ideas, you can give them incubation support so that new organizations and enterprises can be started based on these ideas. It's OK to fail. What is important is that universities and governments encourage such activities. As long as something tangible emerges, it's OK to fail. Even if you commercialize your ideas and fail, it's no problem. Governments and universities must provide such an environment. I hope I have answered your question although it was a long answer. Was it useful? Thank you.

Next I'd like to answer Prof. Kuroda's question on what Japan can do to improve its educational cooperation. I think this question brings us back to the previous discussion on Japan's nationalism and where Japan stands now. I think it is interesting for students studying business to consider what opportunities and what careers they will have. The United States, South Korea and Singapore have taken different routes. Japan has taken a different route, too. Japan has some of the biggest companies in the world, such as Sharp, Sony and Panasonic, which have developed excellent IPs. When it comes to commercialization, they are developing ubiquitous technologies. If I were in the senior management of Panasonic or Sony, I would go to Hiroshima University and the University of Tokyo every day and try to find out what the students are studying, what they are thinking about, what these faculties are developing, what kind of research projects are being conducted, and what we can do to really help them. As far as I know, I don't think this is done very much. The good news is that Japan is so well respected. I am an Indian citizen, and

I live in Kuala Lumpur. In Southeast Asia and South Asia, people look up to Japan as a role model. I think improvement of the technology ecosystem definitely has played a critical role in Japan's gaining that position. Sometimes I read about such macro indicators as what percent of GDP is spent on education or on technology. I would pay serious attention to where Japan is among other countries, not from the standpoint of investment in education and in education technology but from the standpoint of human capital development. For example, let us look at the example of Hiroshima University, which is our good partner here. If Hiroshima University and Sony, Sharp, Panasonic come together and go to rural areas in Malaysia and India, it will be very difficult for local leadership to say no to collaborative partnership. What is important is not money but ideas and cooperation. Mutual trust is of course important. This is the core of the public-private partnership. At the elementary school level, we still face major issues such as access, equity, quality of education and learning outcomes in the world. I hope Japan will conduct more research into these issues. Somebody mentioned PISA (Programme for International Student Assessment). Assessment of students' achievement is very important. The new measurement introduced by PISA includes not just reading, math and science but how these skills are applied in real life. Is Japan contributing to building these new assessment platforms? Japan has all the strength in education and has produced wonderful achievements. Japan has abundant human resources who have good academic research background. How about providing Japanese potential to Laos, Vietnam, India, Malaysia and other countries? I myself would like to hear more about what Hiroshima University is doing and take back what I learn to my country. Thank you.

Keiko Mizuno (Senior Advisor (Education), JICA/Education Policy Advisor to Ministry of Education and Sports, LAO PDR)

Thank you for your comment. Let me talk about how we can enhance self-esteem. This is not an example from Japan, but more than ten years ago I was engaged in cooperation of promoting for girls' education in Guatemala. I was actually studying how to improve the environment for girls of minority groups to come to school. When they study at school, they are influenced by the viewpoints and attitude of female teachers. When I interviewed female teachers there, they themselves said that girls don't have to come to school and that girls have lower academic ability than boys. The finding of my research was that when teachers who should be role models don't trust potentials of girls or expect much for their futures, girls' self-confidence become lower. Before girls enter school, parents' attitudes at home are very important. After they enter school, teachers play very important roles. If textbooks show pictures in which girls are always playing marginalized roles, the students see them and, without realizing it, they come to believe that they have these roles. So it is very important to make sure that gender viewpoint is considered in teaching materials and that teachers give this careful consideration in order to promote gender equality. This is what I experienced in Guatemala. So I think in Japan, as you said, it is very important to have good dialogues and interaction between teachers and students.

The second comment was that Japan has a role in communicating local individual needs to provide feedback on its activities and achievements for the formulation of national policies and frameworks. I agree. In the case of Laos, from the formulation of the pilot project in a target area, we consider how to reflect the good outcomes of the project throughout the policy and system. For example, in the cooperation for educational management, we are analyzing problems at school involving the community and trying to reflect the solutions in the school's development plan to promote for school improvement. In this process, we tried to clearly explain the targets set by the Education Sector Plan to the community and the school and how it is important to achieve them. In our cooperation, we wanted everyone to think about what he or she could do to achieve these targets. We had good results at the local level, so we are trying to convey them to the national level to be introduced into the policy system so that the good results can be used widely and embedded in the country. In this way, we are trying to implement sector-level cooperation in which people at the local level understand the goals set by the national government so that everyone can work together to achieve them. People say the Japanese cooperation is difficult to understand. This might be due to the fact that when we see outcomes in the field and when people in the targeted field thank us for the positive changes, we tend to be satisfied with ourselves. We must do our best to convey effectively what is happening at the local level to policymakers at the national level to strengthen

institutional capacity development. In order to do that, indicators used at the national level should be clearly shown to local people in the pilot area, explaining the achievement and changes through their actions. Then national policy and systems should be planned and formulated in order to produce the same achievement. I believe we must conduct this kind of two-tier cooperation for the mid- to long terms. In various places people are recognizing the need to promote such views and activities. We would like to make further efforts so that needs and situation at the local level can be reflected effectively in the formulation of the national and global frameworks.

Fernando Palacio (Researcher, Center for Research in International Cooperation and Educational Development (CRICED), University of Tsukuba)

Thank you. I'd like to answer your question and add a few points, regarding for example, how self-esteem and efficacy in learning can be fostered among students, and how this is linked to the way teachers think and develop their careers when they are in contact with projects functioning on the bases of academic international cooperation, policies on internationalization of higher education and mobility of students, so I'll try to combine these ideas to answer the quest.

First, from the viewpoint of policies, one possible answer to how we can help students' develop and strengthen their self-esteem and learning experiences in this era of globalization relates to creating and consolidating strategies and mechanism that facilitate mobility, for instance through financial support and effective credit transfer.

I have been studying international mobility of students in Asia for the last three years. Students' ways of thinking change when they study in different countries and experience different cultural and academic settings. When students go abroad, the *obvious* becomes *relative*, manners, customs, ideas and the way they interact with other people change; and this happens both in their host countries as well as in their home countries when they return.

This is a simple example. I am from Argentina, and in Argentina we protect whales, they are cherished and valued as part of our natural treasures. So when I first came to Japan, I had a hard time in understanding why Japanese people did not respect the whales and killed them instead. The whole "*scientific purposes*" of whaling in my view was a mascaera for commercial benefits.

However while I was here, I was able to hear what Japanese people think about it and I tried to understand their opinions. I am still against whaling, however now I have a better understanding about it now. Clearly, this responds to the fact that I was exposed to Japanese culture and in touch with its history and traditions; by being an exchange student I came to understand a situation that now had two sides: the views of Argentina and those of Japan.

After I went back to Argentina, I was able to explain that it is not right to think Japanese people are cruel because they eat whales. This has been a part of Japanese culture, which is rooted in its history. Although still controversial, some people around me in Argentina too can understand the Japanese position better. By being exposed to others I got to understand myself better, I could see flaws of my ideas, then I could revise them, and improve them. This gave me a deeper and more mature critical way of thinking that is applicable to pretty much anything far beyond whaling.

Promoting international mobility of students is an effective strategy to have students exposed to otherness, which in turn promotes self-esteem and mutual understanding.

In my view, academic international cooperation in Japan is going well, both government and educational institutions are making important efforts in this field; however promoting the internationalization of education within Japan still remains a main challenge. It is clear for instance that Japan really needs to promote more out-bound mobility of its students and it also needs to boost strategies to internationalize at home.

As far as I can see, many foreign students come to Japan, but not many Japanese students are going to study abroad, especially in neighboring countries in Asia; and even if some Japanese universities offer great opportunities for international exposure at home, for the most part, Japanese students still remain in the safe waters of the Japanese culture and language. For example, I see many students from Laos, Cambodia or Myanmar studying at the University of Tsukuba. But when I visited universities in those countries, remarkably few, if any, Japanese students were there, even if for temporary exchanges. You do see

Japanese nationals working for JICA or other international cooperation agencies in these countries, but not students. In my view, if Japan aims at maintaining a key role in the region it needs to have a better balance between its in and out-bound students at the university level. Boosting international exposure of Japanese students will increase their understanding of ASEAN countries and how they relate to Japan.

From the policy point of view, I also believe that in order to improve international cooperation, we have to accept other people's knowledge *as it is* and accept it as *valid*. We all tend to believe that what we know and what we do is the best way of doing things, we all tend to take for granted that our ways are the best; however, by looking at what happens through international mobility of students, a clear example of this is that universities are generally very much concerned about *what* students should learn, and *how* they should do it when they go study in universities overseas. Professors in most universities typically care a lot about how much students *should learn*, and how much of what they learn is useful for their careers when they come back. (And this is what makes academic transfer and recognition such a thorny issue!).

In my view universities need to change traditional ways of thinking and egocentric academic approaches. Other people may think differently, may do things in different ways, may read different books and do different research, however that doesn't mean that their views and ways are not valid or legitimate. Understanding and accepting that different knowledge is valuable for that very reason: because it is different, is an enriching attitude that should be fostered. It is this kind of approach that should be promoted through international cooperation. One example is people's different viewpoints on whaling, which I explained.

Again, I think Japan is doing well in promoting international educational cooperation and in quality assurance. This has to do with promoting transparency and accessibility. I mean, in quality assurance, we make decisions on what is good or what is not good. We define standards. However, we need to have a flexible and inclusive approaches to these standards.

For quality assurance, we need not only internal quality mechanisms at the institutional level within universities and at the national level, but we also need mutual understanding at the international level. In other words, we need to have open and democratic dialogues when we discuss quality assurance, especially when we do it externally. And again, it is important to accept others' knowledge as valid and not say, "I know this and this is what it should be."

International cooperation in education helps us to understand this, and to be flexible and accepting. In the case of transferring credits for example, universities tend to be narrow-minded in what they accept as credits and what they do not, in terms of what students study and learn when in universities abroad. We need to have a more flexible approach at the country level, at the institution level and at the university level.

This clearly relates to international mobility of students too. Universities have only limited control over what their students are doing when they are studying abroad in temporary exchange programs. When students go abroad and come back, their credits are not always recognized as they are deemed "not good enough". This is penalizing the students. This happened to me when I came to Japan for the first time. I came and I studied for a year in Sophia University. I was a keen student, I took eight subjects very seriously. However when I went back to Argentina, my home university did not recognize any of the credits from these subjects because they were not in the curriculum of my home institution. This is something that universities and governments need to consider in order to make globalization possible from the human perspective and taking place in the educational field, at least at the higher education level. They should not just focus on how much expertise students have acquired but on what different things they have learned from students and professors in other places.

I would also like to touch upon the need to promote cultural intelligence among students. Promoting programs that help develop cultural intelligence is particularly important in international cooperation in higher education. But, what is cultural intelligence? As I explained in my presentation, cultural intelligence refers to accounting with the sensitivity to connect to other people in whatever fields and in regardless of the cultural environment the situation is imbedded in. When you work in a multicultural setting, you need to be aware that people who are in different circumstances may do things differently and think differently. I like the Japanese word *bimyo*, which means something like "*gray zone, undetermined.*" What you value may not be

valued by others. This has something to do with cultural intelligence. What you think is valuable may not be valuable at all to other people. Hence the need to consider your own standpoint always from a *bimyo* perspective.

The last thing I would like to refer to is promoting international cooperation. One of the things I think Japan is doing very well is providing venues just like this forum, and I am glad that I could be a part of it. I was working with my mobile phone and running electronic errands all day today, and unfortunately I was not able to really pay much attention to all the presentations; you may wonder what kept me so busy. As a matter of fact, in University of Tsukuba, we will hold a similar symposium on Friday and Saturday this week; and yes, I was busy contacting people in preparation for that. What I mean to say is that this kind of forum is not only a valid way of learning and exchanging ideas, but that these forums bring us together and allow us to be exposed, to confront, to discover new things from each other and about ourselves. In my view, this is what educational international cooperation is for.

International cooperation in general, but particularly in education is not so much about how much governments need to pay. Of course how much we invest is a key matter but, cooperation is more about creating spaces for synergy. I believe that in this kind of forum we have presentations to plant seeds, and we expect something good to come out from it. If you ask me one more thing about how to promote international cooperation in education, I'd say we should continue and promote these kinds of conferences and venues for mutual exchange and understanding. I look forward to the JEF 12. Thank you.

Kazuo Kuroda (Professor, Graduate School of Asia-Pacific Studies/Director, Center for the Study of International Cooperation in Education, Waseda University)

This is related to self-esteem, but I have been studying inclusive education recently. "Inclusive education" is an idea that came up in the World Conference on Special Needs Education organized by UNESCO in Salamanca in 1994. Before this conference, there had already been discussions on integrated education and mainstreaming of children with disabilities in regular classes. But in these cases, children with special needs had to adapt to the mainstream children. This was called "inclusive education," and there were misunderstandings, too. But the idea of inclusive education is that diversity must be positively accepted. With changes in society, education should accept diversity. I believe global governance can come in here. For example, the UN Convention on the Rights of Persons with Disabilities is one important convention which recognizes the importance of fostering an attitude of respecting diversity in the education system. This convention has had a major impact on countries in policymaking. The international community should work together to promote such diversity, and I believe such actions contribute to enhancing self-esteem.

I'd like to make some comments on Prof. Wake's question as well. JICA and Japanese educational cooperation have tried to convey their messages to the international community. As Dr. Mizuno mentioned, JICA has also tried to convey positive results in classrooms to be reflected in the discussions across the educational sector in the target countries. This kind of approach, which Japan is good at, should be further promoted. There was a question about which areas Japan is good in. Ambassador Teiichi Sato, former permanent delegate of Japan to UNESCO, made an interesting comment, so let me share it with you. There are many interesting discussions on 21st century skills. Many people talk about critical thinking, communication skills and problem-solving skills. Ambassador Sato said "harmony" could be added from the viewpoint of Asia and that Japan could propose such ideas. I thought this was a very interesting point. We could include Japanese or Asian skills in the 21st century skills. I think the ESD is one example. This concept proposed by Japan has been introduced to the international community. As for problem-solving skills, they have been measured with PISA among the OECD countries. As a matter of fact, students in East Asia scored high. So I think East Asian countries can share how they develop problem-solving skills with the international community. In 2015, the OECD is promoting collaborative problem solving skills. I think this is closely linked to peace. How can we measure it? The OECD is trying to measure skills which are not cognitive skills such as mathematics or literacy. Japanese or Asian values can contribute in that area. I think this is another way Japan can contribute to the international community. On the other hand, it is hard for Japan to tackle some indicators. Japan may not have been good in this area. I believe the ESD is a very important concept that Japan

proposed, but Japan hasn't successfully established indicators. This is one of the reasons the concept of the ESD has not been fully reflected in the discussion of the post-2015 development agenda. Whether it is good or not, Japan must make further efforts to identify useful indicators.

Kazuo Kuroda (Professor, Graduate School of Asia-Pacific Studies/Director, Center for the Study of International Cooperation in Education, Waseda University)

Prof. Little and Dr. Mwiria are here on the stage, but four of us have exhausted all the time allocated for this session. In the concluding discussions following this session, I'll hand the microphone to Ms. Sakurai. In the concluding session, we won't have time for Q & A. We are able to take about five more minutes now, so if you have any questions addressed to Prof. Little or Dr. Mwiria, including about their presentations in the morning, please raise your hands.

Question 8

Kenji Tanaka (JICA Bangladesh Office)

Thank you very much for your valuable discussion. I am involved in the education program in Bangladesh. I understand the theme of today's forum is what Japan can do to contribute to addressing the challenges of globalization concerning education in developing countries. So I'd like to ask the experts some questions. One of the tasks for Japan is to develop human resources who can fulfill their potential in this globalized world. I don't think Japan can contribute to developing countries in this area by conducting such cooperation projects as JICA has been promoting. Honestly, as a staff member of JICA myself, I don't know if Japan has expertise in that area. Japanese people also find it difficult to address the challenges of developing human resources in this age of globalization. I don't think Japan can give any technical assistance to developing countries in this area. I think Japan must consider how we can provide an environment in Japan so that Japanese people can develop their skills in this globalized age while making efforts to contribute to developing countries. In this sense, I think JICA must also consider changing the paradigm of their activities to play somewhat different roles from those it has been playing. Most of the projects JICA has been engaged in are technical cooperation projects. For example, in agriculture, JICA's projects are to teach how to plant rice, and how to improve the variety; and in addressing water issues, there are projects to dig wells. In these cases, within a relatively short period, such as three to five years, the projects can aim at producing some outcomes. But in the case of educational cooperation, there are activities to improve teachers' skills to teach in classrooms. This has to do with improving teachers' skills, philosophy and human power, which cannot be improved in a short time by conductive intensive training. So in my view, we must change the concept of JICA, which has been promoting projects within limited time spans. I said that "global human resources development" is also a challenge for Japan. If we are going to address this with a win-win approach, how about inviting more teachers from developing countries to Japan, not just to observe classrooms but to teach at schools as teachers? Then through such on-the-job experience, they will experience the good aspects of Japanese schools and take them back to their countries, and at the same time, Japanese students can learn about various different cultures and become more internationalized. This may be a big idea, but I think we have to think about such activities in the near future.

Question 9

Michel Lehana (First Counsellor, Embassy of Democratic Republic of the Congo)

Thank you. My question is for Prof. Little and also for Mr. Sonak. The title of Mr. Sonak's presentation was "Education for the Better World." I think a world vision is needed if we'd like to promote the assessment of the society and peace in the world. I'd like to ask what kind of relation you think there is between education and the world vision. Is education impacting the world vision or is world vision impacting education?

I'd like to ask another question. What do you think about the Program promoted by the World Bank to address the issues of poverty in African countries. Many Organizations are involved in this Program, but the results are not so impressive for many people. Do you think result is due to education of people or the World Bank vision? Thank you.

Angela W. Little (Professor Emerita, Institute of Education, University of London)

OK, very briefly. The idea of our colleague to invite skilled persons, particularly teachers from countries in Africa and Asia to come and work as co-teachers or partners in classrooms is excellent. I think that people do learn a lot from observing and participating and being active, much more than from being told what to do in a lecture or by experts. This would also give opportunities to Japanese children and young people to be in direct teaching-learning relationship with persons from other cultures. So this is also a very powerful experience for both sides. I like Mr. Tanaka's suggestion indeed. I recognize learning is a two-way process. I don't know a lot about what you described about the Japanese traditional way of international cooperation, but I imagine it is one-way transmission of skills and technologies. Certainly we should think about the philosophy of learning. We know that learning is a two-way process. Teachers also have to learn from students so that teachers can teach better. So I think your idea should be presented perhaps later in such an event as this and should be explored.

The second question was about the importance of peace as well as the impact of education on the world vision and the impact of the world vision on education. I am sure there is evidence showing that they impact each other. I think education is incredibly powerful in creating the future, but sometimes we overplay the impact of education, thinking that education can bring about big structural changes in the economy, international relations and conflict resolution. We have to think simultaneously about the world vision, the national vision and educational strategies in a comprehensive manner. But education is a very slow process. So when a country draws up a 10-year vision in the national development plan, the education strategies may have some impact 20 years later. It takes a long time before children graduate from school and enter the labor market after they start pre-school education. So unless you have a vision of what the world might look like in the middle of the 21st century or at the end of the 21st century, it is very difficult to connect the world vision with education. We are already in 2014. If we could imagine what the desired or preferred world would look like in 2050, then we could be thinking simultaneously about changing education strategies. It takes three years to get the education strategies into place, so the strategies we draw up today will target children who start education or pre-school in 2017 or in 2018. It will take at least 20 years for them to enter the labor market, and probably 30 years for them to become managers. Then it will already be 2044. What I want to say is that we have to have a long-term vision for education. From the viewpoint of educational philosophy, education is to help students learn how to learn and how to learn for an uncertain and unknown future. This is very powerful, but we don't know what the world is going to look like to the young children who have not been enrolled yet but will be affected by massive educational reform. This was a long answer to a nice short question.

Kilemi Mwiria, Former Assistant Minister of Education, Kenya

I would like to make a few comments. Prof. Little also talked about inviting teachers who are struggling to visit Japan so that they can learn from Japan. I would like to go further and say that Japanese teachers should also visit countries in Africa, Asia and Europe so that they can learn from these countries. I talked about an example this morning of giving young children in primary and secondary schools opportunities to visit other countries and homestay with local families. When young people from Africa go to Britain and America and are hosted by families and go to school in the neighborhood, they begin to interact with people in these countries. Even if you don't go, you can use the Internet to study the same materials. So children in primary and secondary schools can share the same materials on mathematics, languages, social sciences, physics, chemistry and so on. Then children in the U.S., Japan, Kenya, Nigeria, South Korea and other countries can be tested and compared. This will enrich children's experience.

The other question was whether education can influence the national vision or vice versa. As is clear from the example of the Asian Tigers discussed this morning, we want to begin with the national vision. Singapore and other countries came up with "2020 educational visions." Kenya has a vision and Taiwan has a vision. It is important that education supports these visions by, for example, conducting training to improve literacy and to train engineers. But this is not easy if the country is unstable, in conflicts or in war. Such unstable situations must be resolved first, and good leadership is necessary. If we have good visions and good leadership, we will find a way. In order to move on, we have to start with leaders' education and ask questions about how education can fit into the visions.

Anshul Sonak (Regional Education Director (Asia Pacific), Intel Corporation)

I think both speakers gave you insightful answers. I agree. I'd like to give you a somewhat personal answer from a different perspective.

The first question was how education impacts the world vision and how the world vision impacts education. I was reading UNESCO's Global Monitoring Report on the analysis of the poorest girls in the world. It was about how much time it will take for these girls to reach elementary education. Eighty-six years. I wondered what I myself could do. Can we wait that long for the vision of the government? I am not interested in such a vision. Whatever happens economically, politically and structurally, I think it's our collective responsibility. We need to invest in this issue and do whatever we can do at the individual level as well as at the community level. The engagement of the community is absolutely critical. We cannot wait 86 years for the poorest girls in Africa, India and other regions to get an elementary education. We must address this issue immediately. This is my answer to the first question. And I think education and the world vision affect each other. There is also a big debate on educational competitiveness and global competitiveness. Finland dropped from 4th place to 9th or 10th. With regard to global competitiveness, Finland was in 1st place for many years. Finland had Nokia as a shining example. Today Nokia is just one small part of Microsoft, but Nokia was driving Finland's education. We can talk a lot about educational competitiveness leading to global competitiveness and vice versa. There are research results showing that investing in education results in economic gain over the long run. This will exceed the tax benefit. Collective responsibility with a spirit of collaboration to take action for the benefit of the community, society and the world is important.

To the second question, I would like to give a more personal answer. I want to share an experience related to my daughter who is 3 and a half years old. She really likes Doraemon and spends an hour and a half every day watching Doraemon. I am sure many of you watched Doraemon when you were children. Until about four or five years ago, Doraemon was not well known, but today in any part of the world, kids of that age watch Doraemon. Doraemon has won children's hearts and is teaching them Japanese culture. My daughter has learned so many things about Japan and Japanese history. Do I have to worry? Or is that a good thing? When we think about our traditions, it may be something to worry about because my daughter is not learning Indian culture, but every day she is spending an hour and a half watching Doraemon and learning about Japanese culture. She probably knows much more about Japanese festivals than I ever will, by watching animation on TV. This is Japan's ecosystem. Japan promoted Doraemon all over the world in every language, so it succeeded. Let me get back to your question. We live in a very interesting diverse world. My daughter is acquiring new knowledge of Japan's culture, which I didn't intend. I must ensure that she learns about Indian culture as well. People of different generations must learn from each other. They have different ways of acquiring knowledge. If I had to learn about Japanese culture, I would probably spend hours reading books and novels and watching Japanese TV programs. But my daughter, who is 3 and a half years old, already knows so much about Japanese culture. Now this is a change, and change leads to different ways of thinking. This is my personal answer to the second question.

Kazuo Kuroda (Professor, Graduate School of Asia-Pacific Studies /Director, Center for the Study of International Cooperation in Education, Waseda University)

I'd like to thank all of you for your active participation in the question-and-answer session and for your comments. Thanks to your contribution, we had a very good session. Thank you.