INTERNATIONAL SYMPOSIUM ON DOUBLE DEGREE STRATEGY
KEIO UNIVERSITY – MITA CAMPUS – TOKYO – JAPAN
MONDAY OCTOBER 19th 2015
PANEL DISCUSSION (15.00 – 17.00)

Persons Involved and Abbreviations Used

- **Master of Ceremonies: Professor Shinnosuke OBI (Chairman, Committee for International Affairs, Faculty of Science and Technology, Keio University, Japan) (SO)**
- **Facilitator: Mr. Paul CROWTHER (Secretary General, T.I.M.E. Association) (PC)**
- **Panellists:**
    - **Professor Hervé BIAUSSER (President, CentraleSupélec, France) (HB)**
    - **Professor Giancarlo SPINELLI (Rector's Delegate for International Networks, Politecnico di Milano, Italy) (GS)**
    - **Professor Toshiya UEKI (Executive Vice President for General Affairs, International Relations and Academic Affairs, Tohoku University, Japan) (TU)**
    - **Professor Tat-Chee WAN (Associate Professor, School of Computer Sciences, Universiti Sains Malaysia) (TCW)**
    - **Professor Kohei ITOH (Professor, Faculty of Science and Technology, Keio University, Japan (KI)**

Transcript of Proceedings (Transcript by Keio University, Edited by P. Crowther)

SO:

Ladies and Gentlemen, as you see in the brochure, the panel discussion will be facilitated by Mr. Paul Crowther, the General Secretary of T.I.M.E. I will give Paul the microphone to start.

PC:

Good afternoon everybody. It is a great pleasure and a great honour to be here today with an outstanding panel of experts from various countries, continents and institutions. The way we plan to run this session is to start from a fairly broad perspective on internationalisation, in other

words, why internationalise; how it occurs; what the benefits are; what the problems are, if any; and then, to move progressively towards engineering education, in particular; and towards the double degree as a tool or a medium for further internationalisation.

We have a very prestigious panel assembled here today. If I may say a couple of words about you, to introduce you to the audience. This is, of course, in the brochure, but still, it's useful to remind.

Professor Kohei ITOH is a Professor of Applied Physics at Keio University. He is also a graduate of this university and of the University of California in Berkeley where he took his Doctorate. His research focuses on the physics of quantum computing and sensing using state-of-the-art semiconductor nanotechnology. He has also served as an Executive Board Member of the Physical Society of Japan and currently is a member of the Science Council of Japan representing a large body of scientists in this country.

Professor Tat-Chee WAN received his BSEE and MSEE/CE degrees from the University of Miami in Florida, USA, and a Doctorate in Computer Science from University Universiti Sains Malaysia in Penang. He is an Associate Professor at the School of Computer Science in this university. He was formerly with Motorola Malaysia as a Senior R&D engineer in Software Development for two-way radios.

Professor Toshiya UEKI has been Executive Vice President of Tohoku University since 2008. Currently, his duties include Executive Vice President for General Affairs and International Relations, Director of the President's Office and Director of Tohoku University's China Office. He has been a Professor of International Law in the School of Law at Tohoku University since 1999 and served as a Dean of the School of Law from 2004 to 2008.

Professor Giancarlo SPINELLI is the Rector's Delegate for International Networks at Politecnico di Milano. He graduated in Nuclear Engineering and is currently a Professor of Rational Mechanics at Politecnico di Milano. He is also a past President of the European Association for International Education and holds, amongst others, an Honorary Professorship

from UNINORTE in Colombia and three Honorary Doctorates from the Lebanon, from Sweden and from France.

Professor Hervé BIAUSSER is President of CentraleSupélec, a major French engineering school. He graduated as an engineer from École Centrale Paris in 1973 and also holds a Bachelor's Degree in Economics. He has been since 2006 Vice President of the Board of École Centrale Beijing and since 2015, Vice President of the Board of Mahindra École Centrale, Hyderabad, India; and École Centrale Casablanca, Morocco.

So, we have a very high-quality and diversified panel. Now, to the agenda: What we plan to do is to address a certain number of topics in order and, after each topic, we will invite the audience to ask questions and to interact with the panel.

The first is a very general question – why do higher education institutions internationalise? We all assume it is good, but why, in fact, do we do it? Hervé, do you want to start?

HB:
Thank you, because you are giving me the opportunity to thank warmly Keio University for this nice day. I think we are saying that again, but really thank you and we appreciate and I think the debates are very rich and positive.

So the first question: Why do your institutions internationalise? Many things have been said since the beginning of this seminar, but there is an obvious reason for why we internationalise, so I will just add a few comments about that. The first comment is that I am often referring to it as a principle – what I call equivalence principle – an equivalence principle, which is very simple. It's that an education institution can't be different from what it teaches its students. Therefore, if we say to our students, "You must be leaders; you must be innovative," we must be leaders and we must be innovative because, if we don't do that, there is no coherent approach to education. And what we have been saying to our students for many years (and Giovanni Azzone explained that), is there's no engineering career without an international dimension, which is obvious. We must be international because our students will have an international career. We made a poll a

few years ago at CentraleSupélec and we discovered is that the mean value is that they will spend at least four or five years abroad. Therefore, it is fully international and most of them will go through a company which has another country than their home country as its home country. I had yesterday a dinner with some of the alumni of CentraleSupélec and most of them have worked or are working in a Japanese company – so it's real life. So, we have to face real life first. Second, since our achievements are in a world context, therefore, they require that our thinking is international. So although that seems to be obvious and it's a normal question for us - and I really like the way you presented that, Giovanni – it's a question of survival. Last, something which is, for me, extremely important; we had to internationalise also for our professors. Our professors are living in scientific communities, they are going to conferences and they have to go all over the world. In our case, we are proposing for our professors to spend months or years in China (Beijing), in India (Hyderabad) or in Morocco (Casablanca). This is very positive because they do see that there was a change. All countries are going to grow their economies and develop and, therefore, taking into consideration what I mentioned will be more and more mandatory for our professors. They will be obliged to think globally too. And, therefore, of course, to change their own structure.

PC:
Thank you very much, Hervé. Giancarlo?

GS:
Okay. Speaking in an audience like this one is a little bit like preaching to a choir because here everyone believes that internationalisation is extremely important. At the Politecnico di Milano you heard from our Rector what the main aim is: this passage from a possible vicious cycle to a virtuous cycle. And even if it is few years since we started implementing this policy in order to reach this vision, we already see the results. Obviously, sometimes tools can be seen as objectives – it is not the case. For example, English is seen as a tool. Other tools are very important and, in our strategy, they are very much cared for, like, for example, training the professors to teach in English. Being always coherent in the presentation in showing the students the commitment of the management of the university, the Rector himself comes to presentations of double degrees and he shows that all the institution is committed to this internationalisation,

believes in the internationalisation. So the program has a lot of credibility with the students, and students understand. Even if we require a lot of them, for example, in double degrees, they understand because they see that all of us are committed to that.

PC:

Thank you. Professor Ueki?

TU:

Yes. Thank you so much. I'm the first panellist to speak, other than European. And also, as Paul introduced me, I'm not a specialist about engineering education, so I'm a bit outside of this area. But, from this perspective, I think I would like to point out that the Japanese engineering education has been very close – has been very self-contained. Japanese Professors of engineering believe that they are doing very well education, but, recently, in this globalised context, I think the Japanese government realised that engineering or science education should be much more internationalised and I completely agree on this principle. When I attended T.I.M.E. General Assembly conferences – I attended in Valencia in 2008, in Milano in 2013 and also in Lille in 2014, I realised that the T.I.M.E. network is "Top Industrial Managers for Europe". So today's discussion I think education or curriculum could be much more global standard – some kind of unified system could be developed. But, on the other hand, just this afternoon discussion, Rector Azzone of Politecnico di Milano, mentioned about the "Alliance 4 Tech" in Europe: Milano, Paris, London and Berlin. So I wonder – and he also mentioned about the importance of international university with strong Italian roots. So in a more and more globalized and more and more unified educational system we need some kind of identity of Europe or Italy or France or Spain or Germany – what is their own-ness or their character of education in engineering and science. Probably they have their own-ness or their something, specialty. Not everything could be unified in all of Europe. Probably some teaching is different from Milano, Paris, Berlin and London. So I'd like to know outside of Europe what is the essence of Europe and also what is the essence of Italy, France or Spain or Germany. So, in this globalized tendency, for us, Japanese – for us, Asian people, I'd like to ask myself what is the most important characteristic of our own education in engineering or science. If we don't have anything, probably we should make the same goals held by MIT in the United States or somewhere else. But probably we could have

something, our own-ness, not only just a curriculum but also some essence of the education in this field. These are my three comments. Thank you very much.

PC:
Thank you. Professor Wan?

TCW:
I think, in the context of Malaysia, the internationalisation challenge is not so much in the private universities and private institutions because they are very much internationally focused maybe because they are intending to – the students intend to go overseas or we want to recruit overseas students to study in Malaysia and so on, but more in terms of the public institutions. For a long time, at least among the public institutions, there's been some resistance to internationalisation because Malaysian government policy has been that the education is to improve the quality of life of the local Malaysians. But because of the whole global ranking requirements or the qualifications in terms of ranking with internationalisation as a component, so our public universities are forced to internationalise. So, in that sense, the challenge has been to – for us, as a public university to do so. It has been successful through various degrees, but I think we are still very much new to this. So, I mean, in terms of the support from the administration, especially for foreigners who want to come to Malaysia, then, we have various challenges. So I think the first step for Universiti Sains Malaysia is that we are in a better position because we have international office exchange programs already, so internationalisation is not as challenging. I mean, so it is a learning process for us as well because, as we increase the number of students who want to study in Malaysia, we have to sort of figure out the – how do you understand the equivalent qualifications from the high school or from other colleges? That process is still very much on a country-by-country basis. We do not have a standardised measurement instrument to sort of calibrate the various students that come to Malaysia.

PC:
Thank you very much. Professor Itoh?

KI:

Okay. Thank you. When I ask Japanese students why they don't want to study abroad, especially science and technology students, very often I receive the answer saying that, "We can perform world-level research in Japan, anyway, so why should we go out?" It's true that the Japanese had won 15 Nobel prizes in the past 15 years, but that's really the result of putting a lot of effort, 25 years before, on science education and science research. After the birth of a weaker economy, meaning that after the Japanese economy went down, let's say, after 1990, the Japanese government started to put more money into science and technology at Japanese universities. As a result, we have been asked to perform both basic research and also the development and, of course, that actually put us under much more pressure to do everything. And, of course, facility-wise, everything improved. So it appears, first, in the eyes of students that we have better facilities now. But the truth is there are two things that we cannot teach or they cannot learn in Japan. One is the negotiation skills, to complete missions together. In Japan, we have the seniority system still so that the senior people still take care of younger generations and because of this nice and comfortable system, younger generations do not very often have to learn how to negotiate and that has been very challenging – I mean, for those who graduated from Japan, from Japanese universities – getting out in the real world and negotiate with other people are one of the – is one of the biggest challenges, people say. And so, that's something is hard to learn in Japan, negotiation skill to say no if you are asked to be the first speaker. The second thing that we cannot learn – is difficult to learn in Japan is the social awareness because here we learn everything in Japanese language and then, of course, the news we get is rather limited. You hear about immigrants coming from Syria and that kind of broadcasting is very limited in Japan. That's something that you just have to learn as a good citizen and those kind of things are only possible if you have friends all over the world and also know people all over the world and the only way to do this is to get out or make the university more internationalised at home.

PC:

Thank you very much indeed, and thanks to all the panellists. I think we've heard a number of reasons or a number of factors which are driving internationalisation. We've heard about the – what Hervé calls the equivalence principle which is basically that it's better to say, "Do what I do" than to say, "Do what I say". And so, if you teach them to do it, then, you should do it

yourself quite obviously. So there's the implicit contract with the students that you can't teach them to be internationally-minded unless you are international. There's also, driving internationalisation, I think, the job market, basically careers: graduates will get international careers and therefore should be prepared for them. Also, there is an expectation on the part of the academics they should be able to operate internationally which means not only research networks but also teaching international students, teaching abroad, etc. I would link that to what Giovanni Azzone was saying just now with his notion of survival, basically, we must be international. So, these factors are driving internationalisation. There is also probably an external factor as well. I think Professor Wan was saying that the tyranny of the rankings, so to speak, if the rankings say you must have internationalisation, then, you will have internationalisation. So, whether it is ranking systems:, international marketing, or whether it is legislative messages you are getting from your government or from some outside body, obviously, if people with influence in power and money are telling you to internationalise, you internationalise. So, it could be internal drive. It could be external drive, as well. Quite interesting also in the Japanese perspective is that this actually confirms what I've been told myself: that Japanese students often don't want to go abroad because it's very comfortable here. They are in a nice comfortable system that works well and they are looked after etc. So, it takes a bit of effort on the part of the institution to persuade them go abroad. That is that the social system does not encourage them to study abroad. Then, I think, as Professor Itoh mentioned, there is what I'd call social awareness, basically being a good citizen of the world, and if you don't get out and go somewhere else, you are a less good citizen, including in your own country. So, there's a variety of the reasons why internationalisation occurs. You could also mention survival as we heard just previously. We've got no choice. We must do it. What do you, the audience think of this? Any comments or questions? Yes……

Audience (Prof. BELCHER):
I'd like to take up Professor Itoh's mentioning the need, possibly for a paradigm which is relevant to Asia for internationalisation of higher education. And I think it's necessary to think about whether success has been obtained with depth in terms of students' ability, for example. The American tradition has driven some 5% of students of undergraduate level in the United States to have some kind of study abroad experience. That's been driven very much by a

humanities-based approach to higher education, looking at what education provides in terms of depth and its contribution to humanity and civilisation. The European Union's ERASMUS programme is subjective, so, rather more political but it has origins in Monet and Schuman's vision of Europe and humankind's role in that particular type of society. When we start discussing movement of students or internationalisation amongst engineers, we tend very often to hear very expedient arguments to do with the world is changing, globalisation, we must catch up. If we don't do it, others will. Our rankings will fall. These types of arguments. They are entirely relevant, I'm sure, to the environment we are working in. But when we think of Asia and underline motivation or things like student's ability and internationalisation, I think it does tend to become too expedient. And if we are looking for a paradigm, this will more suited to the circumstances of Asia in the long term. I think Professor Itoh's question is highly relevant because if we think about the region as it is working now and the major players, Japan, of course, China, Korea, these are countries that are not exactly getting on well together. There are countries where we see are very significant rise in nationalism in recent years, and higher education has duties, I think, in its deeper traditions to address some of those concerns. So, this is the leadership role of higher education. It's not an expedient view of higher education. But I figure it's very difficult to get that argument coming from an engineering environment.

PC:

Thank you very much. Would anybody on the panel like to comment on what's been said? Maybe from the Japanese perspective?

TU:

Yes, I agree with his comment, and probably, Professor Hara from Tokyo this afternoon mentioned about the Campus Asia Program. It's a combination of Japan, China and Korea trilateral collaboration for some kind of joint education program. We also have another system of Japan-Asian countries educational collaboration. So, this kind of thing could make, of course, education very national but on the other hand, we could make some kind of Asian collaboration. But I think he rightly asks what is Asian internationalisation's origin or purpose. It's a very fundamental question for us, I think. Thank you.

KI:

Basically, it's true that sometimes engineers are sort of narrow-minded and short-sighted. But at the same time, we have many things in common. The way we started our relationship with École Centrale is that École Centrale has this wonderful concept of educating generalists. And now, École Centrale has École Centrale China, India, and Morocco. Morocco is in Africa, and not really Asia but it might be the case, through this kind of association like T.I.M.E., that might work as a mediator to have more enhanced interaction among engineers in Asia. Maybe, Professor Biausser you have some comments on this?

HB:

A few comments. My comment is very simple. Educating engineers and more generally people in international education is the best investment for a peaceful world. We experience in many countries, there's a war. Anyway, we are happy to live in the countries where there's no war. It's extremely important. The best investment for peace is education and international education. I think that we are all convinced of that. Sometimes, politicians are forgetting that. But we don't forget that. It's very important. To comment on what Professor Itoh said, you're right. The French government is not making agreements with Morocco for Africa. It's truly important to be aware that the needs for educating people there are important. I would just suggest some comment of one of the professors. He is a very good specialist of creativity in (education?) and he said a very interesting thing. He said the expression "to think out of the box" is stupid. You are always thinking in a box. So, the problem is you have to choose for which box we are thinking. Therefore, educating our people to see there are other boxes sitting in the world is the best way to really understand and not to think about "the truth". And the last, I will comment. It is my friend, the Minister of Industry of Morocco. He says, I will repeat what he says. He says anytime I'm educating an engineer, it's clear he will probably work with Islamic people. So, that means peace, I'm working for peace and it's done by educating engineers.

PC:

Thank you very much. Any further comments? Have we addressed at least partly your concerns?

Audience (Prof. BELCHER):

Yes, indeed. I'd suggest also that, maybe it's not so much a question of the values which underlie what people are saying as the fairly straight and structured way in which it has been said, which is very engineering-related: just my personal take on it as a non-engineer, so to speak.

PC:

Any further questions from the audience on this first point - why internationalise? We can move on then perhaps to the second – the next concern is how does it occur? Now, I think what we heard during the presentations earlier today and what we've heard so far from the panel do suggest that internationalisation must to a certain degree be a top-down process. In other words, it's driven first by forces which are internal and external and secondly by a strong determination on the part of the leadership or the institution to make that institution international. You can't wait until people decide to do it for themselves. It has to be a political decision and it has to be managed as well.

HB:

Experience is showing the different steps in internationalising education. In my opinion, there are three steps. The first step is to start international activities. The second step is to change the institution so we are really open to international situations: internationally exchange with an international view. And the last one is to be really international.

What is interesting is to say that it was always starting from education. Most of the time, it's starting from education. The demand is starting from education and therefore I think they're going to be starting to develop from education. It's probably the right way for that. And what was extremely interesting as we saw in a presentation from this afternoon is that we saw that, in Asia, for instance, there is a great will of the country to cooperate but they are very many obstacles, with byelaws, local regulations, et cetera, et cetera, et cetera.

So my view is that through, let's say simplifying this maybe it would be interesting to have global thinking in such a way as to simplify this kind of local requirement going to what you, Giovanni, you called free moving, something like free moving, maybe it's a dream now but I

think it would be easier if governments tried to simplify these requirements. The reason why is that we saw that nearly all the countries want to exchange on an international scale. Therefore, the situation of exchange will grow exponentially. Sometimes we would have to simplify that.

PC:

Thank you.

GS:

We focused mainly, from the beginning we focused on graduate level, not excluding the undergraduate but the focus was on that, for many years even more specifically on Masters. But then we realized the importance also of the PhD. PhDs are extremely important if you think to a long-term policy. For example, developing double or joint PhDs in the long run will result in adding professors at your university that pertain also to your university policy and feel extremely linked to everyone. They become the future champions of this cooperation, of this internationalisation.

Also, the reason why we focus on the master and PhD level stems from what was shown on the slide you saw by Professor Azzone, so it's reasonable to focus on the PhD level. We have to take into account not only the student but also the professor, so the internationalisation of our teaching staff is extremely important: both internationalising the professors that are on our staff and also attracting new professors from abroad, foreign professors, very important. It's expensive. The École Polytechnique devoted quite an important part of its budget just to increase the number of foreign professors to come for a short period.

We already had very many, but professors that can come and interact with the local culture and also change it. But the idea of a top down or bottom up: certainly at the master and undergraduate level is very often a top-down suggestion or coming from the bottom. But when the agreements and so on are being discussed at the leadership level, it's a little bit different when we speak about PhDs. At the PhD level, it must be the research team that proposes cooperation. Otherwise, if imposed from the top, it doesn't work.

And let me also recall something that Professor Biausser knows very well, that some years ago we had a seminar, a T.I.M.E. Seminar in Lausanne on PhDs, on cooperation at the PhD level. You could find also the wonderful report on that with some key points. Just to mention one, we saw that at the PhD level joint degrees if possible would be even better because at the end of the day it is the quality of research that counts at that level. So there must be different strategies for different levels but always encompassed in an overall institutional strategy.

PC:
Thank you. Professor Ueki.

TU:
Yes. I think in Japanese universities, each provider has their own international collaboration partner overseas and usually for Doctoral or PhD level they exchange their students overseas on a laboratory basis, not for the programme like a double degree or joint degree programme. That's a traditional type of international exchange in Japan in the field of engineering and science I think.

But on the other hand, joint degree or double degree programmes are very effective in order to change the ordinary professor's mind because often the University President or Rector decides we should be internationalised and International Exchange Offices decide we should collaborate for international exchange. But it is very essential that the ordinary professors should change their attitude to internationalisation.

So I think this kind of double degree or joint degree program would encourage their mind gradually. It is essentially needed for them to be much more internationalised. So probably it might depend on the university in Japan but in my opinion I think for PhD level, probably it is easy to exchange internationally but Master and Bachelor courses, we should encourage them to go abroad and we provide this double degree program. We support this kind of thing and if you go abroad, there is a good experience waiting. So we should encourage them much harder.

This is my comment. Thank you.

PC:

Thank you very much. So it's push rather than pull. Professor Wan.

TCW:

I think for Malaysia most of the internationalisation effort has been at the faculty as well as the post-graduate level because of the push for research collaboration with foreign partners. I think there's quite a few programs whether from European or Japanese or even Australian and Asia where there is this funding for short-term attachment by academics and in the host institution, in the other partner institution.

So at that level I think internationalisation is occurring whereas at the undergraduate level I think at least for the moment we do have a study abroad for one or two semesters kind of arrangement with various partners. So we do try and encourage our students to participate in such activities, but it is not – I mean in terms of the total population, there's only a small fraction of students who study abroad, mainly due to financial circumstances as well as the fact that many of them will go for international exchange. We'll have to extend their studies for at least one semester, if not longer.

For many students, that is a major consideration for exchange arrangements.

KI:

When it comes to our own University 15 years ago, the Faculty of Science and Technology back then gathered younger professors like Professor Obi and myself and then asked what we would think about teaching graduate courses into English. We said that would be great. So we worked together to prepare English-based graduate courses such as Professor Obi presented in this morning's session.

Actually, these were the basis for a double degree but again when Professor Obi proposed we should have a double degree program with École Centrale Paris, everyone including myself thought he was joking because we would be sending Japanese students who could not speak nor write French to a French engineering school and thinking that they would actually succeed, but

he was right. After trying (of course being young is one of the things) it's been proven that being young, you can actually take it on and actually go over all the obstacles. But it was really bottom up in that case because then led by a Professor, we all felt responsible to make this program successful so that when we actually had applications from French students we made sure to distribute students so as not to concentrate on certain groups, but also we tried to distribute them to professors that we wanted to influence. So those kinds of efforts, step-by-step efforts, actually paid off greatly. So in that sense, in general, bottom up works well but of course we need an understanding from the management as well.

The other thing is that one of the biggest news in Japan in the past month is the Japanese rugby team winning three games in the first round (of the World Cup). Out of 30 Japanese players, 10 were non-Japanese. The head coach is from Australia, the forward scrum was trained by a French coach and the captain was from New Zealand. I was so impressed by the system that actually rugby adopted this rule that you can select a national team member as long as this person plays in this country for more than three years and has never been selected in other countries' national team.

I think that's a rule, that new rule changes the whole thing as Professor Biausser said. I think if the companies see that, we need to perform well in the new kind of rule game and then I think everything would change drastically.

PC:

Thank you. So that's some kind of a transfer of technology where you're using the experience of other countries to develop your understanding. Is the next World Cup not in Japan, or the one after that? Anyway, I bet you'll probably be in the final by that time then so it's quite possible. So, it may be top down, it may be bottom up, but what we heard from more or less everybody was that there has been a focus on Master and PhD students as opposed to undergraduates. If we're talking about paradigms, I don't know if it's explicit or implicit, but anyway everybody seems to believe that Master students seemed, as we heard from the presentations before, Master students seemed more able to assimilate the benefits of study abroad.

It looks very much like we have a kind of agreed paradigm of "we should focus for various reasons on the students themselves, and also for institutional reasons". We should focus on graduate and post-graduate students. That automatically implies more scientifically specialised as well because they've got through the common core part of their program. So I suppose it's less of a broad approach than you were mentioning. That's true. I don't know if you see the point I'm trying to make there but I think we have an implicit paradigm which we all apply.

Well, would anybody like to comment on that? I think there have been some interesting things said so please. Yes, there's a question over here.

Audience (Prof. OKAWA):
Thank you very much. A very interesting discussion. One question, does the university have an upper limit on the incoming foreign students? Actually, in my graduate school, 40% of the students are foreign students and very much internationalised so to say. I know there is a very silly – not silly but strange discussion in Japan like when the Ministry of Education spends money for getting foreign students, then spending tax to educate, not Japanese students, so they are spending money, tax money, for foreign students only.

I know that for the global society it's important. But in order to get some consensus on that, maybe we need a little bit to redesign our philosophy or educational roles and things like that. There was a news from United States like an upper limit on foreign students or Asians. There was a very difficult discussion in Japan but maybe Europe has a different situation because of the EU's stronger connection and collaboration and also ASEAN countries. There's going to be an ASEAN economic community starting this year I guess.

So I really would like to hear from your institutions, how do you balance that kind of strategy or philosophy and the new role of the university?

PC:
Thank you. May we start with the Japanese perspective?

TU:

Okay. Unfortunately, in Tohoku University, the ratio of foreign students is not as high as in the Keio Graduate School. So we are not discussing these issues at this stage. We are discussing how to increase the ratio of foreign students to 30% or something like that. When we apply for the Top Global University project, we must promise to the government for 2035 or something the objective of the ratio of foreign students and so on. So we are trying to recruit. At this stage, not yet level so we should remain at the first stage. That's my comment. Thank you.

PC:

Professor Itoh, anything to add?

KI:

She's from the same university as me so I guess….

PC:

And therefore, it may be a bit difficult to make a comment. Okay.

KI:

It should be an internal discussion.

PC:

Okay. I understand this will take place offstage after the meeting. Right. Anybody else got a comment on that? Yes, Professor Wan.

TCW:

Okay. Malaysia, I think in the public institutions there is starting to be a – at least at USM we do have different fee structures for local versus foreign students. In most of the programs, there is not an issue that we need to set a quota, but of course for certain specialised areas like medicine, there are not enough places even for local students and that's where the distinction or regulation will become necessary.

For the other fields, more general, we do not have a specific quota at this point although we do tend to find that local students are not so interested in post-graduate study. So a lot of post-graduate students are actually overseas students. I don't know if it's a trend elsewhere but that's the general thing that we do find is that our local students would rather go out and earn their pay in a job rather than further their studies.

In our case, we have to distinguish between what we call international students and exchange students. For exchange students, the experience is almost three decades long and we learned from our mistakes. At the beginning, we had many more students outgoing then incoming and when we put in place systems to balance now, it's perfectly balanced. As to internationalisation in the sense of attracting students who stay with us for all the programme, these students have become our students, not exchange students. We developed it very much in the last, let's say, 10 years and it works. As you heard, we are at about 30% but structures had to be put in place, structures and guidelines from the Academic Senate to proceed.

HB:

In our case, we're a public institution that's why we have no limit. It's an order from the government and the reason why is simple, because it depends on the mission which is given to the institution by the government. In our case, our mission is to be internationally visible and to be on the stage of international education at the best level. Therefore, it's a clear advantage to have an engineering degree where roughly speaking, let's say, there are 25% or 30% of foreign students. At the Masters and PhD level, it's more than 40%.

In my opinion, if I could do that, from a financial point of view, I would probably decide to increase because I think it's not what we give to our foreign students but what our foreign students give to us. It is enormous, what they are giving to us. Therefore, I don't think that at 30% or 40%, we can increase more. I think it's not an equilibrium point. It's the point where we are and if now we are educating the people, we are educating the locals in China, in India, it's more than 50%. It's my view. It's my view. I think it's good.

And then is coming the problem which is very important that, let's say, to have a strong cultural

basis but, by the way, to adapt it to the reality of the country where: we are we have to be modest on that. We have to consider that we can't teach exactly the same thing in a culture well established for centuries: we have to respect that. But by the way, I think they are giving a lot to us and if I could decide immediately to increase, then we'd probably do it.

PC:

Thank you very much. If I may, I'd just like to add – did you want to say something.

Audience (Prof. AZZONE):

Yes.

PC:

So we'll take Giovanni first then. Is there a microphone? A question here.

Audience (Prof. AZZONE):

Just a comment on the question of the taxpayers. In our graduates, in our foreign graduates, 50% work as a first job, initially, for an Italian company. So I think that Chinese and Indian taxpayers should claim that they paid for 17 years of education and then in just two years we have a highly trained, skilled engineer working for Italian companies. Again it's the best investment in the long term to educate people wherever they are, and from whichever country they are. For me it's the best investment in the long term, for peace, for the economy, etcetera.

PC:

Yes I'd just like to add something to what Giovanni Azzone said, you say you have got a large proportion of international students, I think this proves one of the points of the Double Degree system, which is that if you're going to have international students you might as well have them stay as long as possible. Possibly, they become your own students and then if they're Master students, become your own doctoral students, if they're doctoral students, maybe become your own faculty members, etcetera. It's a very well-paying investment, there's a good return on investment. Any further questions there on…? Yes there's a question over there.

Audience (Male Speaker):

Just I'm going to comment on different students, due to the Top Global University Programme in Japan students are more pressurized due to the globalisation and globalisation effects, especially to improve their English skills, and to understand English well. Second is attending the several exchange programs, for example my question is how Europeans are dealing with such a situation.

PC:

Can we answer that? No I'm thinking maybe if… Was the question on European education in particular?

Audience (Male Speaker):

Yes, particularly in recent days what I have observed in the case especially for the Global Japan Programme, now recently is the Top Global University Programme; students are more pressurised about the globalisation in Japanese universities. So in that context what…my question is, so if English is very important and almost all the universities start insisting: "Oh, you must reach, like, scores of 560, 660, 700, and also you must increase your English levels, you have to go abroad, you have to go do something like that. This is an extra burden for the regular classes, in that context, how do Europeans deal with it?

PC:

Professor Ueki.

TU:

So I should explain how to…according to the Top Global University Project how to organise or proceed with our project. Well first of all a top university would like to recruit excellent foreign professors to increase English-taught courses and also to encourage overseas…sending our students abroad and receiving excellent foreign students. So first we recruit the international staff, international professors, especially in targeted countries like Asian countries, you know, China for our university, Russia or some other universities in North America, so each top global university has focused in some area in which that university has a long tradition for collaboration or recruiting the students and sending students. In our university at the moment we focused on

the…of course Asian countries and also European countries and Russia, but I think other top global universities, some universities focus on India or other universities focus on Latin American countries, so it depends on the decision of each university. I'd like to hear from Keio University about this strategy.

KI:

Keio University is a private university, so we have a slightly different mission, in the sense that Tohoku University, Tokyo, Kyoto etcetera, all these national universities are driven by the policy of the Japanese government. And we did actually apply to the Top Global University Program and we at Keio have been selected. But at the same time promising numbers is sometimes very…you have to be very careful in promising numbers, numbers of how many students we will be receiving from abroad, number of faculty members we will be receiving in let's say by 2020, because not only the number is important, but also what's more important is the quality. And that's something that we've been trying very hard with the Double Degree Program with…starting from T.U. Munich and so on. We tried to be as careful as possible in selecting good students going abroad from Keio. We have been trying to be as responsible as possible and we also receive very good students from Double Degree partners, as a result of their careful selection. So I think it's…at the end our goal is to get a better reputation rather than trying to mark the numbers that we listed in the table in our application, so first you know we promise something, so we have to strive for such a goal, but I think reputation is much more important than actual numbers.

PC:

Have we addressed your question?

Audience (Male Speaker):

I know about the Japanese universities how they're dealing with internationalisation and globalisation; I just want to listen from the other side, that's why I asked this question.

PC:

So from the European side. Well gentlemen do you have anything to…?

GS:

We do have priorities in each part of the world, and we are careful in sending our best students, requiring the partners to do the same and so we have a periodic review on the outcomes of the received students and of the sent students. So periodically we reshape our partnerships and what happens very often is that the university is looking for the number of partners, numbers. Now we are reducing and focusing on the results.

HB:

For us it's the same, it's important also to take into consideration the situation of education…the kind of education that is delivered by our partner. The worst situation is when…and it happened in the past and I'm not very happy with that… in cases where we've got an excellent student, who was excellent in his country, in the system of his country, but unfortunately we didn't precisely understand what the student was doing in their country and then we send them back sometimes. It doesn't work so well for him, and it's a pity for the student who is excellent in his country to be disappointed, not to be happy because we didn't really anticipate that the system is different, and you mentioned that now we have to adapt to that. And it's a long process obviously to adapt to each student's origin. I must say that it costs a lot of money and you have lost a lot of time to do the processes. We do prefer to be really sure that the curriculum of the candidate will be able to adapt to him and therefore it's in my opinion it's really limited, it was said by Professor Itoh or Professor Ueki that it is a quality limit, but it is also to be respectful with the student. We are selecting only very good students in their country, and it's our responsibility that these students should be in a position where they will be successful, and that is a long process, difficult, careful process. In the case of banking they say it's better only to do good deals and to miss a good deal than to do a bad deal, and it's exactly that's why we are responsible for those students. And the reason why we continue to select and to be careful with that, it's not because we are discriminating but that we must put the students in a situation where they will be successful. We have bad experience with that and I must say that I'm not happy with that.

PC:

Thank you Hervé. Any further questions from the audience on that particular point, no? Sorry I didn't see that, yes there may be two questions actually.

Audience (Ms. Claudia SCHULZ):

Thank you, actually my question follows on really nicely from what most of the panellists just said… Can you now hear me? Okay, my question follows on really nicely from what the panellists just mentioned. I think it's quite easy for all of us to talk about what is so great about international studies, but I think it's difficult as a student to make the decision for the reasons that you mentioned, okay it's going to make my studies longer, it's going to cost me money. So as a student when we are weighing up the decision we need guidance, obviously from our institutions. The University of Queensland, my home institution, recently started a study on global employability. And the aim of this study is to explain and to facilitate to students what it is exactly that internationalisation brings them, and translating it so that they understand, because now with life experience we understand, but these students who are making the choice aren't equipped with the knowledge to understand. And so this is one initiative, but its…I mean it's a tough project to push it through the institution, so my question to all of you is what are you doing or what are your institutions doing to facilitate the process for the students, to ensure the success that you just mentioned?

PC:

It's open. Yes…..

TCW:

So we are at the very first or second day after upon entering college, we have this guidance week and Chair of International Affairs explains to everyone how important it is for you and for a student to go abroad. And of course it's impossible to explain everything in such … let's say in 20 minutes or whatever the time given in such first or second day of entering college, but at the same time what we do is that we repeatedly mention to students so that they have time to think about this and when they have time to think about this they always come up with questions and we always have this International Affairs Office and so on, so that they can go to the Office and

they can address their questions, we prepare video and so on to explain what the Double Degree does, what you know another programme does, and so on. So…but what is important is that it's better to deliver the importance of the international mind-set as early as possible so they could really have time to think about this and they have places to go when they have questions. So you know when they reach the time to apply for a Double Degree for example you know some of them…many of them have a clear set of ideas of what they would do, also we have the accumulation of reports by previous Double Degree students on their experience kept at the International Centre, so they can also look through…read through their experiences, so that they have better ideas.

PC:
Thank you Professor Wan. Professor Ueki……….

TU:
Okay the example I can think of is under the same program…project as mentioned by Professor Kieko Okawa that there's this field work program which is a short-term attachment that is conducted in various locations whether in Japan or in South East Asian partner countries where they have to provide a summary report, I mean they do a short video or some other presentation they participated in: not just the members of the field work, but also its open to the students. So we believe that this is one of the opportunities on which the students who are not part of this project or program, we can inculcate interest in them to say, okay, well if you're part of this, you get to do certain interesting things that are not part of the curriculum, and you get to travel and experience life in a different culture and so on. So I believe that's one of the ways in which the students themselves can be the ambassadors of these internationalisation programmes, which would be more useful because other students would trust their testimonies or what they say more than they would trust our perspective, at face value at least.

PC:
Thank you Professor Ueki.

Audience (Ms. C. SCHULZ):

Sorry, can I make my question a little more specific for the rest of the panellists? I think displaying the options and testimonials is absolutely wonderful and that helped me when I went overseas. Do any of your institutions have frameworks or tools in place to accompany the students when they are going through this experience, in order to enable them to interpret what they are experiencing? That's what the UQ Projects focuses on when we talk about global employability's so what is it that I am learning, why is it relevant, how is it going to help me later, how am I going to convince my future employers that what I'm doing right now is useful? Is that something that any of your institutions do, and if yes how and if no, why is that not relevant?

PC:

Giancarlo, maybe you could say a couple of words.

Male Speaker:

Yes, so it's a very difficult question, but in Japanese universities we celebrate entrance at the beginning of the year, and every student attends these courses on the institution's procedures, and our School of Engineering, our Faculty of Engineering offers every fresh student international guidance to encourage this kind of things and also especially in the field of engineering and science it is easier compared with other academic fields. I think it is rather a little easier to encourage them to go abroad. We are encouraging every student to go abroad for the summer vacation, a short course for example, three weeks in Europe or United States, or Australia, this is a first step for them to realise what the real outside world could be. And so they realise by themselves what is a fruitful result for them. So in future we would to encourage every student to apply for the short term spring school or summer school, to go abroad, but at the moment I think in the Faculty of Engineering 20 or 30% students go abroad for the summer vacation, spring vacation, this is a first step towards a Double Degree or much more concise, much more detailed procedures for the graduate courses. So we are gradually stepping up, encouraging a gradual step up, it is now the mission for us at the moment, thank you.

Male Speaker:

We think that information and transparency is the key to avoiding a bad experience. So first of

all we decoupled information on Double Degree from information on exchanges, shorter exchanges just to give you an example, we already had a general presentation last week for Double Degrees, now it's the period for a Double Degree, next…end of this week and next week we will do…have a third presentation divided into regions of the world, because the problems are different. And in this presentation we invite alumni, I say alumni in an improper sense because they are students who already came back, that are close to graduation but are very fresh of these experiences. And they can give first-hand information and they are very credible, more than us. So we present, we say what are the rules and then they answer to a lot of questions. Then the process of selection, we have a process of selection for Double Degrees that will take place before Christmas. When everything is concluded we will pass to a similar process for shorter exchanges. So as a conclusion we invest a lot of time, but…and I forgot to say that then we have this, what we call the Student Desk on each of our campuses. We have a desk devoted to information, and for example the information for Double Degrees is separate. We have the expert on Double Degrees, the expert on shorter exchanges in order to…we hope but we are reasonably certain that students go knowing what they will find, knowing almost all that they need to know to make a responsible decision.

Male Speaker:

I completely share with what has been said by the other panellists, so there are many, many systems in order to give the students information. And first I would like to say that the people were a major factor in circulating for instance that news during the term. There's a very effective network in each institution of people working day after day in order to answer your question. And now the…I think the amount of available information is increasing from the companies, etcetera, from the school. As an example you can discuss that with them after the job. And for example we tried something like a website which we call Training Advisor in the name of Trip Advisor where all the students for example are exchanging their experiences freely and doing this on a social network with the students is also very effective, since they understand better what they can do. Now I will tell you my personal position.

Our duty is to help the students to enrol and not to go a place where they will be not successful or where we believe that they will be unhappy. But when the students are asking us "What is the

best experience for me from the international point of view" it is not just the training. It is 50-50, it also depends on them. And therefore we can give information to help you to formulate a choice and considering the younger generation you have again to understand that in your life, so we may do only projects where we'll have chosen the people.

Most of the cases are 50-50. Now we will think but not decide what you will think or don't say when you were a student so you have to accept that part of the curriculum will not be so easy, because as I mentioned before, we progress mostly by disagreeable experiences and difficulties. Therefore it's a good cross-sharing mostly. So I think now we can really avoid a bad situation for our students and as I mentioned before, to explain to students that it is a problem and not a good solution for you. But we can't say "This is the best experience for you": it is not possible. We have to give information, but as I said, it is students who did that so you have to play it like an adult.

PC:
Well thanks to everybody for the comments on that, we hopefully addressed at least partly your question. There was I believe one more question from the floor. Somebody raised their hand, no? Okay, alright then in that case we move on to the…I don't know how we're doing for time, I don't have a watch….. We're okay? Good!

I have a question I guess it's not exactly what I had planned but it occurs having listened to some of the presentations and also the discussions so far. We heard from Giovanni Azzone earlier the concept of the role of the university in the community or the local ecosystem if you like. Now if you assume (and personally I would believe that very much) that a good university is a university with no walls, in other words where students are free to come and go and where the world doesn't stop when you get to the door, which is living in harmony with its environment locally, nationally etcetera., what's the challenge if you are heavily insisting or emphasising internationalisation? How does that impact on your role locally, because after all it can be an intercultural experience just walking out of the door, and intercultural does not always mean international.

I'll give a very simple example which I have experienced myself, if you're in an engineering school on one side of the road, on the other side of the road there is a business school and somebody crosses the road that is an intercultural experience. And if they then work together in a team that's even more of an intercultural experience etcetera, so…or just simply getting students to engage with people in the community who are less lucky than they are. I can think of example of students that I have known who did part time teaching in local schools to help students in difficulty, who taught prisoners, So there is a whole dimension to education in engaging with the local community, and I was just wondering how you balance this, or what's the trade-off between this desire to be a good citizen and the desire to be internationally active visible and credible? Any comments from the panel? Is it one or the other or can it be one and the other?

TU:

Well very difficult and very philosophical question I think. No I'll try to answer or I just comment. Recently the Japanese government asked all the national universities to choose among three types of university. At the moment I think in Japan 86 national universities. So each university should choose among these three categories; first one is a global competitive university, second one locally competitive university and third one is in some specific area, concentrated university. So every President of the national Japanese university or university member should choose their own objective. Six years ago, the Japanese government asked every national university for these kind of things, but at that time we could choose among six choices, not three.

So it was okay we if competed to global standards and if we also contributed to the local people. We also concentrated on some specific areas and it was okay, six years ago. But now we must choose one thing. So it's a very tough decision, but many Top Global University Projects adopted universities chose the first choice. So in that regard we should concentrate on global competitiveness rather than being competitive with local people. So it is either unfortunate for university something for the public existence, so…but for national universities at this time, the government encourages each university to choose a direction. So we cannot do everything. We should concentrate on some direction, so in Japan national universities at this time must choose a direction. This is my comment, a very short comment. Thank you.

PC:

Thank you very much. Professor Wan.

TCW:

In Universiti Sains Malaysia we actually had a change in the focus under the previous vice chancellor to have a…or rather to transform education for a sustainable tomorrow, there's kind of the catch phrase, so under this administration we created an office for community relations. So previously it's been focused on academics, on research and these two main areas. But we created a new Office for other Community Relations where we encourage voluntarism and engagement with the community whether it is the business or the local community as well as the less well-off. So that the students are exposed to what are the needs around them and so on. So I think if anything there is our response to this issue. Thank you.

PC:

Thank you very much for the comments. Okay, alright well are there any more questions? Yes, we have a question here.

Audience (Mr. Brendon LUTWYCHE):

Alright thanks. Brendon Lutwyche from the University of Queensland in Australia. Just to further touch on that comment Paul. I think that one of the interesting things that we are doing at UQ in terms of social responsibility is working with NGOs and building some of these activities into our curriculum. We have a very strong chapter of Engineers without Borders. It's a student-led association at UQ, and we work with them in a large first-year, I guess, design project in engineering to offer a project that has a social responsibility aspect to it, and they work collaboratively with a number of Australian universities. So last year the project was actually to build a sustainable toilet system for an orphanage outside of Chennai. So a number of Australian University students in their first year had this as a project for an introductory project. The best team from those universities was then chosen to go and implement that abroad. But I think, you know, in terms of internationalisation it's also both ways. So you can send your students abroad, but also getting students into the classroom can help those other students from your own country who don't necessarily go abroad or have an experience or sometimes you get that benefit from

them being in the country.

TU:

Thank you very much. Actually my point was that especially in fairly elite institutions which are training a high category of future engineers, etcetera, etcetera it can be quite important to avoid the assumption that in some way we have a truth which others don't have. It was very interesting a couple of weeks ago I read on the internet that there was a debating competition between a team from Harvard University and a team of local prisoners and the prisoners won. So we shouldn't assume that we are always superior. Thank you.

HB:

Maybe I can give a short comment about that. I like really what you have said Professor Ueki that some universities are supposed to be globally competitive, that other research universities are the ones will be locally contributing and the other one will have to concentrate on a specific area. I do…I think it's a reality. But by the way, if you're supposed to be an elite institution that needs to be globally competitive especially with a really good education and research activities, nevertheless you can't forget where you are from, and you can't forget the local aspect, it's a classical "Think globally, act locally": it's very classical. Now, since the focus is the depending. The focus is…let's say the way you're projecting it, but by the way you…and the reason why for me that even if you are in a small company which has a business all over the world you will be in a city with other people living there etcetera, etcetera, etcetera. So, what he mentioned is very important. And it's obvious: I don't dare to say that again, but the more international you are, the more you will be established, well established in your roots. Sociologists are saying that institutions never forget where they are from their roots. And therefore we have to be very aware of our roots and by the way the more we are aware of your roots, the more we will be capable of being international. So therefore I think it's a question of the most important mission we have, but we can't forget that we are somewhere in the city with people etcetera, etcetera, etcetera.

PC:

Thank you Hervé. Giancarlo.

GS:

Yes. I totally agree with that and as Giovanni Azzone has said, when a University decides to be an international university with strong local roots, this means it depends very much where you are. If the local community, let's speak of a region, is looking outside and wants to be international, there is no contradiction between the two things. So for example on the one side, we launched a social action. So all the series of actions to enhance the social responsibility of our students to serve the local community, the society in which they live, and on the other side, just to enhance the competitiveness of the ecosystem I would suggest we need to give competencies and skills, soft skills and as soft skills are almost self-evident, but going abroad you get it, like for example - very important - international team working. And nowadays teamwork is fundamental and you get almost just by going abroad, by having international experience. As to the hard competencies, well in that case we recommend we highly, highly recommend that our students take advantage more of the differences than of the similarities. In that way they will bring…well we'll bring back to the local community competencies, which is extremely important.

PC:

Thank you Giancarlo, if they are any further comments or questions from the floor on that particular point, we can take one more maybe. No? Okay in that case I suggest we move on to another topic which we'd like to address as people who are all I think involved in international cooperation and exchange and in the case of the T.I.M.E. Association of course, in-depth cooperation and exchange. I'd like to ask the panel how they see the relationship between a collaborative approach and becoming more competitive. In other words, how cooperation makes you a better institution and a more competitive institution because we are all collaborators and competitors, it's really "*coopetition*" as they say. Anybody like to pick up on that one?

KI:

So far it's more the faculty members of the Keio who have benefited most from…by joining this Double Degree system because we've been learning about how things are operating in a tight network and so on. And of course, students have been participating in this program and they are the ones who did all the work. But they just, you know, the first double degree student has just…now has just graduated about three years ago and they are still, you know, in the front line,

trying to be at the front line and they all said that the double degree…participants…the Double Degree Program was very challenging and that the fact they obtained double degree going through such challenging tasks gave them huge confidence. But at the same time you know, it takes about 20 years after they graduate to really see how the real impact of the double degree is. I think you know, when they to, let's say, aged 40 and 50. And if they look back on our programme saying that this was really the crucial step in their everyday life then…and their career and so on, then we will be very happy.

PC:

Yes but you're not saying that the institution has to wait 20 years to see the benefit in terms of competitiveness, you know, I think those…

KI:

We feel that we are doing the right thing but at the same time we know that we are doing the right thing, but at the same time, you know, it's difficult to really…I think they will do well and then they will come back and say so…and we have the responsibility to enhance the double degree program in 20 years so that their kids can actually join the double degree recruitment program at Keio, when it comes to creating…

PC:

..a dynasty of double degree graduates. Okay, anybody else like to comment? Professor Ueki?

TU:

Yes as was the research I think competitors could be collaborators, as shown in many international papers as a result of international research collaboration. So I think as for citation and research activities, we should be…we could be a competitor on one hand but on the other hand we are a collaborator. And as for education, I think when I visited Milano two years ago and visited Politecnico di Milano. I know…I knew Milano literally I think, but actually visiting there is another thing. And probably this time, on this occasion, many delegates could visit Sendai and Tohoku University, also Keio University in Tokyo, and seeing is believing. So it is a most essential part of this kind of interaction to actually visit here ourselves: that's a very

important first step for further collaboration. Thank you.

PC:

Gentlemen?

GS:

Certainly there is competition and cooperation, but we have different levels of cooperation and strong cooperation can be implemented only among partners who are strong enough not to fear the other one. And then you see the cooperation as a win-win situation. So you have to have different kinds of cooperation within different groups like concentric circles and at the core, only partners you totally trust and with whom you feel more or less on the same ground. And I would like to comment also on what Professor Itoh said about the 20 years, yes, that's one thing that I always say that in this kind of cooperation, just to rely only…let's say on the market, that the feedback from the market that would penalise "wrong" actions, well it's quite dangerous because the time constant is very long. So, we need to have a clear local policy, to have clear objectives and time to reach them.

HB:

Sure, first comment, I completely agree with Professor Ueki, competitiveness, the role of collaboration is already a reality for research, it's obvious, it's very obvious now. And for education, I think another one which is important for competitiveness in the institution is that, in engineering especially, we are in a very agreeable situation. The number of kinds of jobs our graduates can have and the number of scientific domains continues to increase exponentially and therefore I think even a very, very large institution can't cover the whole spectrum. I think it's really impossible, and even if you're a very large university, it's impossible. So therefore thinking to the future, the best we can do is for some domains to establish cooperation with partner institutions which would probably do that better than you. Because the investment you will have to make to do it at your best level is too high. And therefore it's exactly the same situation in companies. I do believe that in some areas, Keio and Tohoku Universities will be better than what we can do at our best. And probably vice versa, and therefore we have to cooperate and if we're doing that from an international perspective…. you can do that on a

national basis, but if we can do that in an international basis, then we're having all the advantages of international cooperation. So I think in the future there will be more and more of this kind of situation. And that's what you see with an incredible number of networks which are developing all over the world. In fact it's not to develop structure, it's more a matter of the sustainment of higher education and we can't cover the whole spectrum.

PC:

Thank you Hervé, Professor Wan do you have a comment from your perspective?

TCW:

Sure, I think the issue of competitiveness also has to tell me if…think of it whether it's competitive locally or globally. I mean at least locally within - you know - the whole country, having an international collaboration partner I think has a certain prestige associated with it. And so it does have a certain draw by itself. But I think even globally, this collaboration does brace the - you know - the profile of each individual institution so that…I mean individually it may not be so I mean standing out because of rankings or whatever, be in the top ten or whatever, but collaboratively as a group or at least a partner or in some kind of consortium. There is a means to have better exposure internationally as well. So I think I saw Asia as an example where many of the regional institutions are getting prominence and recognition from other partners because, through the South Asia project, they have been exposed to other organizations and events like this seminar here today. It's a collaboration from that aspect, right. So I believe that even internationally, the competitiveness is achieved through the collaboration, of having a group that work with each other and the individual members are able to benefit from that.

PC:

Thank you very much. Another word which has not been mentioned but is probably implicit is benchmarking in fact, you work with other people, you see what they are doing, and you learn from them and so, basically therefore you improve. You know that's an obvious benefit of internationalisation. Okay, questions or comments on that particular topic, yes - two questions. Where's the microphone, is the microphone still circulating, could you…I saw him first. Okay ladies first, ladies first.

Audience (Ms. Satoko FUKAHORI):

Thank you very much my name is Satoko Fukahori. I work for the National Institute of Educational Policy Research and I have a question, about benchmarking and also I think Professor Itoh mentioned before that this Double Degree Program brought about transformation among faculty members. Could you be a little bit more specific about what kind of transformation that you really mean, what kind of difference, did Double Degree Programs bring about for Keio University as a whole and for other institutions in practical terms. Was it about how people teach or was it about how degree programs are designed, or can you be a little bit more substantive about what kind of transformation you really mean?

KI:

Thank you very much for this question. So, we recommend incoming Double Degree students to join different, specific research groups. And when we do this, we first interview students, on what kind of studies they're interested in, what kind of research they're interested in. But at the same time we try to think about which professors may be influenced most by receiving such capable students (from Europe in our case). And so we…then we talk to professors before having the student join their group. We explain to them carefully about the program and everything. And by doing so, professors become prepared to receive such students, and then once you have Double Degree students they're not only capable in - you know - performing research, but also they bring the social awareness that I was talking about. So that certainly this particular group has become much more internationalised and competitive than when they did not have any overseas students. And then most of the cases, the Double Degree students become very successful so that professors, faculty members become very happy. And they also learn from such students about, not only about research, but also the social awareness of the professors increases, I think. So, I guess the key is that we go to different universities…so then we bring in partners to make interviews with each candidate. And then we think about where to put this candidate and we try to be as careful as possible so that as a whole we can actually increase the supporters of the Double Degree Program.

Audience (Ms. S. FUKAHORI):

All right, is it correct if I understand that this is a cultural transformation or is there a systemic

transformation…?

<u>KI:</u>

It is cultural. The system is already there, so we need to increase the number of those who support this program and as we do this...so we've being doing a lot of tricks because when Professor Obi first designed this he didn't go to interview students alone, candidates alone but he actually took other Keio faculty members, he brings different faculty members every year to France and such a sort of step by step effort changes faculty members' mind-set towards internationalisation and so on and so on.

<u>Audience (Ms. S. FUKAHORI):</u>
Thank you very much.

<u>KI:</u>
It's more...the system is already is already there but more the cultural thing.

<u>Audience (Ms. S. FUKAHORI):</u>
Thank you very much.

<u>PC:</u>
Thank you; Are there any further comments from the panel on that question? There is another question as well from, is it Brendon? Yes over the other side, sorry. Thank you.

<u>SO:</u>
Before the microphone reaches him I'd like to add "and we are always very welcome and well treated by all the Double Degree partners when we visit them so that was...that of course is the biggest set of reasons why all the Keio faculty members who visited France, Sweden, Spain, Germany, they all become big supporters of the Double Degree Program.

<u>PC:</u>
The social dimension.

Audience (Mr. B. LUTWYCHE):

That's an excellent example I think and it's a cultural thing for us as well, so I'm going to steal that from Professor Obi and bring some of our faculty along as well. My comment is actually back to the competition, I don't think it's a word we actually use in this context, it's more like Professor Spinelli said it's a win-win situation and I think Australians love to travel but a lot of us are doing it after we graduate so there's that mind-set, that cultural change that needs to happen in Australia of getting us to think about a mobility option while we are at university. Of those who do take that they are often looking for the safe option, so Australia in many ways is more in tune with Japan perhaps in this regard you know we are an island nation, we speak one language. Luckily for us it's the lingua franca, if my French colleagues will forgive me for saying that.

But they are taking the safe option so they are going to our main exchange partner for instance at the university of British Columbia in Canada which doesn't have that much difference to the University of Queensland they're both good universities, they've got snow we've got Gold Coast but it's a very familiar option. So I think we have a lot to learn from this group and from hearing about other people and other ways of doing things. Our French colleagues have 20 years of experience in Double Degrees for us it's quite new so there's a lot of learning that's going on and I think everybody wins in that situation. 2,000-plus academic staff at UQ were born overseas, 47% of our publications have an international co-author so it's collaborative and we are all winning.

PC:

Thanks Brendon. Incidentally it's 25, it's more than 20 years of experience. Okay, any further questions or comments?

I think we can possibly move on to the next topic we wanted to address which concerns engineering education. Quite a lot of the things that have been said so far about internalization are fairly generic in fact and could concern most disciplinary areas, most subject areas, most professional curricula, et cetera. There are a lots of generic issues in internationalisation. What is specific if anything about engineering education: other specificities which we need to address as

people who are training engineers? Or maybe that's a non-question. Professor Wan.

TCW:

Well at least from a Malaysian perspective engineering education actually is under the control of not just the education ministry but also the professional bodies. So we do need to satisfy their requirements as well, so that the national professional bodies probably have to be involved and convinced of the benefits of this kind of activity.

PC:

Would you say the national professional bodies are pushing you to internationalize more?

TCW:

I'm not from the engineering faculty so I cannot speak with authority on this. I think there is a push for that but it's more from external factors rather than internal factors. So it's more because of the various agreements under the United Nations that are pushing this kind of arrangement because of trade liberalisation, services liberalisation that this kind of thing is happening, this push is going on but at least from the internal perspective there's probably some resistance as well.

PC:

That was initially my question. I was just wondering for example you have an engineer's association like many countries do and if so, how many members of that are non-Malaysian?

TCW:

As far as I know I'm not aware of it.

PC:

No, because that could be a factor in fact against internationalisation…

TCW:

Yes.

PC:

"Preserve the status quo" sort of thing.

TCW:

Yes, but I think the new trade agreements will allow for interchanging and so I think there are some changes on the way, but I'm not familiar with them.

PC:

Thanks; Other comments? Professor Ueki?

TU:

A very short comment on engineering I think it is very commonplace compared to the other fields. I think for example a French engineer, an American engineer and a Japanese engineer - of course they have some differences, but they also have things in common. But for example in my field, laws American law schools, French law schools and Japanese ones are quite different. American lawyers, Japanese lawyers and French lawyers are more different rather than engineers. So I think in the essence of the education curriculum or the philosophy behind education and the result and treatment in the field of engineering it is easier than in other fields to make a common background. This is my personal view.

HB:

I think we have to face many challenges including the one you mentioned in fact: probably it's easier for cooperation in engineering. For me the most important challenges we had are probably subjects on which we have to discuss more, mostly social issues, which means that ethics tend to be a more and more important question for engineers. The question is very simple: How to have a more satisfying, more human society when it is more and more technological? And therefore this is leading to two other issues: our educational approach will be more and more important and the social responsibility of our graduates will be greater and greater. Our juniors are more and more socially responsible but also actors in the progress and development of society. It seems to me that sharing opinions, sharing views with people from the other countries should reinforce the way we are seeing this problem at...even at the scale of our own countries it's very

good to reinforce our opinion about that and to share a common view. Most of the problem with the 21st century is its enormous technological dimension and therefore it's important that as an institution we should influence the evolution of society. Another point which is for me extremely important is that, while reading all about so-called disruptions in American society and digital progress, we have to see what it means for our genuine education. It's important that... I don't believe personally that you can get a degree, an engineering degree, only by reading books and always having E-learning. I do believe it's impossible, because what is fascinating in all disciplines is that people are playing a key role. I also think that we have to share at any institution, we also have to share views about that so for me these are very, very important points. But it is the future of elite institutions of our kind and education in general and what is vital is that you will share an ethical, an essential responsibility and I think this is a very important programme for the future of our institutions.

PC:
Thanks very much Hervé. You wanted to say something? No?

Male Speaker:
If with innovation, which is accelerating so fast and the, the quick obsolescence of knowledge, what is important independently of the tools for learning is to learn. To learn, learn learning and in that respect, being able to cooperate with people that are different is fundamental. And the best way is going into very different cultures; it would not be so interesting to go to a country which is very similar: the culture shock teaches you to learn from others, to consider other points of view and that's necessary with the constant acceleration of change.

PC:
Thank you very much. I've just been advised that we are almost at the end of our time slot and we should attempt to be as rigorous as our Japanese friends are on keeping time.

Okay, so I would like be able to sum out in fact it's difficult to sum up what we've said this afternoon because it's extremely complex and touches on all kinds of different points. I don't know if this is being recorded or not but it would be nice to, to have some kind of a record of

what's been going on. Then we can share with the participants so that there is a possibility of a follow-up.

SO:

On the website.

PC:

Sorry?

SO:

On the website.

PC:

Yes and concerning the website, as Professor Obi has pointed out, we have just finished redeveloping our website and we need some content, and one part of the content could be sharing this Symposium with our members.

So I think the last thing I can say is well, personally I consider it a great privilege to have been on stage for two hours with such a high-quality panel. So thank you very, very much indeed for the quality and diversity of your contributions and I think we can maybe just applaud the panellists.

SO:

Thank you Paul for a very consistent facilitation of the panel.

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