

Public Symposium
Stanford Kyoto Trans-Asian Dialogue 2012

**Reforming Higher Education:
Meeting the Challenges of Global Competition in the Digital Information Age**

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5:00-6:45pm

Kyoto International Community House Event Hall
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<<Moderator>>

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<<Panelists>>

Mr. David Arnold

President, The Asia Foundation, USA

Dr. Gerhard Casper

President Emeritus, Stanford University, USA

Mr. Daisaku Kadokawa

Mayor, Kyoto City, Japan

Dr. Kang-Min Yu

Provost, Yonsei University, Republic of Korea

The symposium started with a greeting by Dr. Gi-Wook Shin, Director, Shorenstein APARC, FSI, Stanford University.

Gi-Wook Shin: I am Gi-Wook Shin. I am Director of the Shorenstein Asia-Pacific Research Center at Stanford University. This is my fourth visit to the City of Kyoto. On behalf of the Center, I'd like to welcome all of you to this public symposium.

As you know, every September, for last 4 years, we're meeting in the City to talk about major issues that are facing Asia and also United States. As you know, we talked about many issues, from energy and environment to demographic changes last year. This year, we are discussing about higher education. I think this is the main topic that we are discussing in Asia and United States, how to reform our higher education, especially university to be competitive in the global age.

Today and yesterday, we've been discussing about many issues regarding reform at universities in Asia and United States. Tonight, I am very happy to have a panel discussion on those issues.

Now, before turning to my colleague Professor Masa Aoki, I would like to thank many people, especially to the City of Kyoto and its mayor for your support and also for your participation this evening. We'll come back next year. We don't know yet what topic we will be discussing, but I'm sure that we'll find a very interesting and important topic for next year.

After our public symposium, there will be a reception. So I'd like to ask all of you to join us at the reception. Once again, welcome and thank you very much. Now, let me turn to Professor Masa Aoki who will be moderating this panel. Thank you. *Arigato gozaimashita.*

Masahiko Aoki: Director of the Walter H. Shorenstein Asia-Pacific Study Stanford University has just greeted you with a few words. This is the fourth forum that we are holding this year, and energy, environment, discussion about the possible integration of Asian countries, the aging of the population; these are some of the common issues that we have discussed in the past, inviting academics from Stanford University and other distinguished participants. This is the fourth session we are holding this year with a focus on higher education.

In the front two rows, the participants in this dialogue are also attending this public

symposium. So we might be able to entertain some comments later on from them as well, if time allows.

In Asia, and regarding the growth in Asia, of course the topic of education is very important and Japan, Taiwan, South Korea, Singapore, this is true for all of these countries as well as for China. In the past 10 years or so, the enrollment in universities has grown from 5 million to about 20 million, and there is great development seen in the higher education. But at the same time, when we look at the globalization of education, in general, we have students, researchers crossing boundaries, traveling to other parts of the world to study at different universities or carry out research in other countries. We also have the digitalization and the IT, information technology that is very helpful for these researchers and students to study more widely around the world.

At the same time, last year, we talked about the changes in demographics. Not only do we see the aging in Asia but also there are less and less children being born. Of course, for one, in terms of economics, the economists would look at the situation and call that the demographic transition. So as education becomes more and more important, the human capital is something that needs to be fostered. Investing in human capital as assets would generate a value, but at the same time, it would lead to greater costs in terms of monetary cost, as well as, time and effort that need to be spent. So with the economic growth and dwindling population, we are seeing issues and problems as a result of that. I think Asia might be witnessing that sort of a situation more clearly.

So we are expecting more problems that may arise when we think about higher education. There are things that may be particularly important in Asia, but we may also think about something that is more universal in Asia.

We also have invited Mayor Kadokawa of the City of Kyoto as a panelist, and of course, it is a great pleasure to welcome him on the panel. Before becoming the mayor of Kyoto City, he has spent many years as the superintendent of the Board of Education of Kyoto, and he is in his second-term as the mayor of Kyoto City. He has spent much of his career in the field of education.

Regarding this topic of higher education, of course, we are receiving support from the City of Kyoto, but at the same time, he could, I'm sure provide his contribution to us from the

standpoint as an education specialist.

Sitting next to him is Dr. Gerhard Casper. He is originally from Germany, but at the Chicago University, he has served as a dean, and also he was president of Stanford University from 1992 to 2000. He has given great efforts in his capacity as president at the Stanford University. He has been very influential, and he is also serving as the Senior Fellow at the Freeman Spogli Institute for International Studies at Stanford.

Mr. David Arnold is with the Asia Foundation which is giving great efforts to develop education in Asia, and he is the President of the Asia Foundation. He served as a President of the American University in Cairo before joining the Asia Foundation. So, in terms of globalization of education, I'm sure he will be able to add his contribution to this panel.

Finally, from South Korea, we have Dr. Kang-Min Yu, Provost of Yonsei University which is one of the well-known and famous private universities in South Korea. He took his doctoral degree in geology at the University of Kyoto, I understand, and the geothermal Research Facility in Kyushu is also one of his places of activity where he serves as a visiting researcher. South Korea, as you know, is making great strides in terms of development of higher education and university education to overtake Japan, and the speed is very rapid in that regard. So I'm sure we will be able to listen to his comments. First of all, I'd like to call upon Dr. Gerhard Casper to start off this panel. Please.

Gerhard Casper: Masa, Mr. Mayor, it is a pleasure to be in Kyoto, to be back in Kyoto. I was here for the first time in 1992 at the Stanford Japan Center, and I have enjoyed several visits since then. It was a pleasure we just spent 2 days at the Kyoto International Community House, a very good conference facility. So we are all very happy, if a little tired, from rather intense discussions.

A reference was made to the fact that we are always talking about reforming higher education these days to make universities more competitive in a global society. I would like to talk a little bit about how to make universities more competitive, and I want to start out by emphasizing that there are simply no secrets. Everything that I am going to say to you is not some secret knowledge that I have or that Stanford University possesses, but it is something that should be almost common sense to everybody, though it is clearly not.

These are the best of days for universities, and these are also the worst of days for universities. These are the best of days because everywhere around the world, from Kyoto to San Francisco, to Delhi, anywhere it is understood that we live in a knowledge-based society and that if you want to succeed in a knowledge-based society, if you want to create knowledge, if you want to be innovative, you need a university. So there are fewer disputes these days about the necessity for having universities. That is the best of days. I don't think at any time in the history of the world, in the East or in the West, have we seen such a consensus about the desirability of universities.

Now, these are also the worst of days for universities because many of those who should support universities, who need to support universities, in particular, politicians the world over, do not put their money where their mouth is, and so there is a real tension. People expect ever more from universities. They expect universities to be agents of change in a local community, in a national community, and economy worldwide, but once they have said that, they have basically, either they do not have the means to support those universities or they don't have the willingness to do so.

Now, obviously, if we need more research in order to create new knowledge, in order to be innovative, the obvious answer would be – when we look at what kind of universities we need for these purposes, the obvious answer would be, we need research universities. I would like to disagree with that proposition because the term research university suggests that the entire emphasis at the university is on research. It is carried out in laboratories, in libraries, and everywhere around the place, and of course the main researchers whom we retain for this purpose are faculty. So the research university is also very often the professorial university. I think that is simply the wrong way of thinking about universities. We need something much better than that. What I call this – what should be much better, I call that the research-intensive university. Now, there is still research in my concept, and there is still university, so why do I say research-intensive university. It sounds even worse than what I had said initially. No, the research-intensive university wants to convey the concept, wants to convey that research is one side of a university. It is done intensively to be sure, but learning and teaching are equally important, or put differently, teaching and learning and research and teaching are just two sides of the same coin. They have a

dialectical relationship to one another. There can be no research without teaching, and of course we understand, there can be no teaching without research. We want our students to be taught by people who are at the frontier of their field. That goes without saying and that is easy.

I have a much more radical concept to convey to you, and I try to convey that through the concept of the research-intensive university, and that is that the students are full participants in that effort, and that includes the first semester, a first year student who comes to university, encounters a professor on any given subject in a class and doesn't understand much of what is being said but has lots and lots of questions. I think what is important is that these questions are brought to the fore immediately, and that the research-intensive university offers its students opportunities, from the very beginning, to participate in the research effort. By participate I mean, have seminars from the very first year onward where students can ask what may be naïve questions, but naïve questions are very important. We, the sophisticated professors, we often believe we know the answers. But let me assure you, it has happened often to me in the classroom that a student raised a very naïve question, the more naïve the better, and I was puzzled. I suddenly realized that I did not really have the answer. It is this dialectical relationship between students and professors, students and faculty that makes for a good university. That makes for a competitive university. The more the life of the mind is active, the more intellectual a university is, the better.

In conclusion, I have only one thing to say. These days people worldwide, enter universities with a desire to get an education for a particular purpose, to get a job, to do something useful in life, to earn a living. These are all very, very legitimate goals, and those among you who are students should certainly not ignore those goals. But it is equally important that you become participants in this intensive search for knowledge so that you will be better at whatever you do and that you make contributions to society immediately, that is as you are at the university. I hope you will ask questions, challenge me on this later, but for the time being, I will yield back.

Masahiko Aoki: Thank you very much. Dr. Casper has served as president of Stanford University, and once every 4 days, he was talking with students and faculty to discuss what

the mission of the university was. He has always advocated the importance of research and teaching. That is why I think Stanford University has become one of the most competitive universities in the world. Now, I would like to ask Mr. David Arnold to speak.

David Arnold: Thank you very much. This is my first visit to Kyoto, and also my first time to participate in this Stanford Kyoto Dialogue. I think first of all, I want to thank the Mayor for the hospitality that has been extended to our delegation here, but also to remark that I think for this topic, the selection of Kyoto as a venue is most appropriate since it's well-known as a center of higher learning here in Japan, and it's a very international city. So I think it's very fitting and appropriate that we should be meeting here in Kyoto to discuss the challenges of higher education reform in a new global age.

Our sessions yesterday had two major themes that were kind of driving factors in terms of the reasons why reform is needed and why there is so much discussion around the particular form that those reforms should take. One is the phenomenon of increasing demand for higher education that has been referred to and that has particular manifestations here in Asia, and I'll share some numbers on that score with you in just a moment. Second is the phenomenon of globalization that obviously permeates many different aspects of life, the economy, the global communication and information age, the increasing global interdependence as we face common global issues and challenges and threats. But this environment of globalization has particular meaning and particular manifestations as far as higher education systems are concerned and is exerting increased pressure for higher education to become increasingly international.

These twin trends of increasing enrollments and globalization occurring simultaneously are placing extreme pressures on higher education institutions and are resulting in an increasing divide or differentiation between the so-called elite institutions that are able to participate in the global knowledge economy and be a part of the globalization of higher education. And what in some parts of our conversation have been referred to as mass institutions, those institutions that really are primarily instructional, that are not research-intensive universities as President Casper has described them, and that are increasingly left behind in this process of globalization.

Just to give you some sense of the enormity of the changes that have taken place in terms of Asian higher education, the growth that's taken place here in the East Asia and Pacific region over the last 30 years has resulted in about a 12-fold increase in the number of students in the higher education systems growing from about 4 million students in the 1970s to more than 47 million by the year 2007, and much of this growth, as you look at it country-by-country, has been driven by China where since the year 2000, student enrollments have been increasing by almost 19% annually. In fact, enrollments in East Asia now have surpassed the enrollments in higher education in North America and in Western Europe combined, and have grown from about 14% of global total enrollments in the 1970s to now more than 33%, more than a third of global enrollments are here in East Asia and the Pacific region.

In South Asia, the growth has been slightly less, but even there, the total number of higher education students has increased six-fold since the 1970s growing from about 8 million, I'm sorry, about 3 million in the 1970s to nearly 20 million today with India being the major driver accounting for about two-thirds of the total enrollments in South Asia.

I'm going to turn to, in a minute, I've alluded to what this kind of explosive growth and enrollments has meant for higher education institutions. Obviously, it's placed enormous strains on the physical plant, on the faculty resources, on library resources for many of the institutions that have been attempting to cope with this kind of growth. But it has also had a spillover effect in terms of international student mobility because we've seen as the demand for higher education has increased, students increasingly have looked beyond their own home country to pursue higher education. So what we've seen has been increases in the student mobility patterns both in terms of the growth in the number of Asian students studying in places like the US and in other western countries, but also increasing patterns of student mobility within Asia.

For example, Chinese universities last year hosted more than 240,000 international students. Japan hosted about 130,000 international students. I'm told that there were about 20,000 international students here in Kyoto. So it's a wonderful example of the increase in terms of academic mobility that we're seeing as part of the globalization phenomenon and reflecting the increasing demand for international higher education. It's noteworthy that other countries in the region are actively promoting their universities as destinations for students to

study abroad. Malaysia, Singapore, India, Thailand all are actively promoting inbound student mobility.

Meanwhile, Asian students account for nearly two-thirds of the total number of international students in the US with four out of the five top sending countries in the US coming from Asia, led by China, India, and Korea. It's important to note that the US is not the only destination. Of the 800,000 Chinese students who are studying globally, only about 20% are in the US, while only about 40% of the international Indian students are studying in the US. What we've seen across Asia has been a major boom in the demand for higher education, and this has led to what some have referred to as the massification of higher education.

I've alluded earlier to the impact that this growth has had on student enrollments and on the patterns of student mobility. As we think about globalization, specifically as it affects higher education, I think there are at least three aspects of globalization that are relevant for our purposes. One has been this phenomenon of increased academic mobility, not just amongst students but among faculty, researchers, scholars working, studying, teaching, doing research outside their home country. The second is what some have referred to as the globalization of knowledge, the increased access to information and knowledge that's available as a result of improved information and communication technology and access to the internet. So no longer is it necessary that every university have its own extensive research library if you have access to online journals, if you have availability of digital archives and so on and so forth. Third has been the growth in the number of trans-national institutional linkages and partnerships and arrangements, joint degree programs, collaborative research efforts, branch campuses of universities in other countries, and all of these are different aspects of the globalization phenomenon and the way in which it has affected and changed the nature of the academic enterprise and the challenges that are facing universities today.

Let me stop there. Thank you very much.

Masahiko Aoki: Thank you. Next, from Yonsei University, the provost of Yonsei University, I would like to now invite Professor Yu Kang-Min.

Yonsei University, but he did Ph.D. studies here in Kyoto, so he is very fluent in Japanese as

well as English and of course, Korean

Kang-Min Yu: Good afternoon ladies and gentlemen. Institutions, particularly private universities which make up roughly 85%, currently face a number of important and controversial policy changes. These have to do with complicated issues related to the autonomy and accountability of Korean universities, as well as decisions about resource allocation.

Among the many challenges for recent debates in the Korean context are particularly salient. These policies fall into one of four categories. First, policies supporting drastically-reduced university tuition. Second, policies regarding university governance. Third, policies regarding university admissions. And finally, policies prioritizing the funding of public universities rather than private universities. In this presentation, I will briefly describe each of these policies and discuss the challenges associated with each.

One of current policies under debate has to do with proposals to drastically reduce university tuition referred to in the Korean media as to half price the tuition debate. A number of factors, including government on the funding, on oversupply of private universities, and a shrinking school age population resulted in private universities hiking up tuition prices, and consequently, widespread public discontent. Future policies may result in downsizing the private sector significantly and emerging private universities, especially those located in the outside provinces. Perhaps, it would be more accurate to say that support for tuition reduction is a form of temporary populism. If such policies were to be implemented over the long term, they would end up negatively affecting the competitiveness of various universities. If we started to emphasize low cost education and welfare, universities may very well find themselves facing a more serious financial crisis, similar to the situation of the countries in southern Europe.

In Yonsei's case, the current undergraduate tuition rate is resulting in last 11 years. Rather than focus on a tuition figure, it seems more important to consider how much universities are really investing in students' education and how much they are providing educational opportunities to marginalized students. Yonsei University currently provides both tuition for 4 years and living cost for those students who cannot afford the university education. In

short, Yonsei's position on this is generally against the tuition reduction and to demand increased government funding to private universities. Policies regarding increased government regulation should be implemented after careful consideration of global standard. Another controversial policy challenge concerns matters of university governance. The Private School Law was revised by the Korean government in 2005 compelling schools to form more transparent boards by including outside directors and publicizing their proceedings. Most private universities, including Yonsei University, have been opposed to be revised the law on the ground that it stipulated irrational uniformity of appointments and also ignorance each school's history, vision, strategies and the different amount of human resources it can mobilize for effective governance. More autonomy and deregulation of universities have been discussed for years but many still question whether Korean universities have the capability to self-govern. Further revisions of the Private School Law are anticipated and subject to ongoing controversy.

Another policy that remains controversial has to do with university admissions procedures and implications for greater university autonomy. Although, abolished recently and with the support of most private universities, such as Yonsei, the so-called "Three-No's" Policy was established to ensure equality and fairness, as well as to diversify the criterion of evaluating and selecting students for admission.

The Three-No's were bans on university admissions, consist of, first, not allowing particular universities to administer entrance exams. Second, prohibiting the acceptance of private donations and exchange for admission to a university. Third, not allowing universities to admit students based on their high school rank. The recent abolition of the Three-No's policy has been widely covered by the media and remains controversial. But in any case, the best policies will be the ones that create positive environments where university can build the capacity to become more globally competitive.

Lastly, there are policies prioritizing the funding of public universities rather than private universities, even though the vast majority of higher education institutions in Korea are private, as high as 87%, only a mere 3% of private university expenditures come from government funding. Today, oversupply of private universities, strict government regulations over private higher education, coupled with pressures to halve students' tuition,

mentioned earlier, as well as strong public demand for quality education related to rising unemployment on university graduate have resulted in the lack of strategic diversification. Among higher education institutions whether to downsize the private sector or provide full funding to provincial private universities is a continuing debate that has yet to be resolved. Korean universities, especially in the private sector, are facing multiple conflicting demands whether and how current and new policies will meet these demands remain unclear. Yonsei University, as a leading private university in Korea, has tended to favor policies that promote university autonomy which believes it essential for Korean universities in general to become globally competitive. At the same time, Yonsei administrators remain aware of social responsibility that accompanies greater autonomy. The future of the private sector, including Yonsei University, remains uncertain because it will depend on how different interest groups are willing to work together to bring about positive policy changes. Thank you. *Arigato gozaimashita domo.*

Masahiko Aoki: Thank you very much. I am sorry I misled some of you by saying that he was going to speak in Japanese. Now, I would like to invite Mayor Kadokawa to speak.

Daisaku Kadokawa: Thank you. I am Daisaku Kadokawa, Mayor of Kyoto City.

I would like to thank everyone at Stanford for holding the Stanford Kyoto Trans-Asia Dialogue here in Kyoto for four consecutive years. I would like to welcome all of you who have visited Kyoto from different parts of the world and from various corners of Japan.

I have been listening attentively and with great interest to the comments made by other panelists, and I would like to give my own account and also publicize Kyoto on this occasion as well. I think that various efforts are being made to reform the education at the universities both by the universities of Kyoto and other parts of Japan, and by MEXT.

I would like to start off by talking about what Kyoto is doing.

Kyoto is a historic city. It is well-known for its tradition, culture and industry. The city has great landscape, which we have maintained by taking good care of the nature. It has remarkable characteristics, and 50 million visitors come to Kyoto every year. They praise Kyoto with such an expression “We are pleased to have Kyoto in Japan.” We are very proud

of our city. At the same time, we look towards the future and are trying to think about the role that Kyoto can possibly play. We would like to place importance on the city of Kyoto as the place for universities and as a place for students. Therefore, university education is set at the center of our policies as well.

I would like to talk about some of the things that we should reform in the future.

First of all, we think it's important to cross the boundary of universities. Fifteen years ago, we came up with something called University Consortium, and currently, there are 40 consortia around Japan, which all started from Kyoto. We have about 38 universities and junior colleges in Kyoto. 140,000 university students account for 10 % of the whole population of Kyoto. Therefore, we have set up a consortium consisting of 50 universities in Kyoto and its surrounding regions. National universities such as Kyoto University and Kyoto Institute of Technology, and Kyoto City University of Arts play important roles, too. However, the role of private universities in forming the activities of the consortium in Kyoto and other reformations is very vital. As mentioned by our Korean panelist, the same trend prevails in Korea.

One thing that I would point out about this consortium is that there are 560 classes that are made available for credit transfer. Students who are studying at Doshisha, or Stanford, can have the opportunity to study at Kyoto University likewise, students at Ritsumeikan will also have the opportunity to go to other universities to study there. Hanazono University is one Buddhist university and every year they hold a course on Zen Buddhism and Japanese culture. More than half of the 150 students who study in that course are international students. What is more interesting is that, most of the participants of this course are those who major in science, and they are able to make such a choice when they come to Kyoto.

Of course, studying at one of the universities of Kyoto in itself is wonderful for the international students, however, Kyoto provides the students opportunities to learn from Kyoto culture, its local power and 1000 year history. They can also receive lectures in English and French.

As we live in the age of globalization, it is true that we need to carry out reforms on the basis of globalization. Although there are various barriers, we would like to welcome more and

more international students.

Ten years ago, we only had 3000 international students. But this year, we have increased this to 6000. In the coming 4 years' time, we want to increase this to 10,000. In order to achieve this, the city and universities of Kyoto must work together to improve the environment for the international students.

This is not directly related to students alone, but we have set up something called a multilingual call center. So visitors to Kyoto, including foreign students and researchers consult them and get answers to their questions. The center is multilingual and is operate 24 hours a day.

The City of Kyoto is also working on a project in which the visitors can use Wi-Fi for three hours free of charge at subway stations and bus stops in Kyoto. In this way, we are making efforts to remove the barriers against international students and researchers in Kyoto.

The third point is that higher education needs to be connected to the local communities. If they are not in touch with local people and local industries, they will not have any platform to stand on. I learned this when I was secretary general of the Board of Education of Kyoto City. I noticed that some Japanese students who visit foreign countries, are not able to explain Japanese culture adequately to locals. I believe that they will be able to understand the importance of other culture if they learn their own culture first.

Another point is the collaboration between the public sector, the private sector and the academia. Let us look at Kyoto from a different angle. Kyoto is known as an industrial center as well. In other words, for over 1000 years, varieties of products are being manufactured in Kyoto. For example, what I am wearing today is one example.

Kiyomizu pottery and other traditional industries are still active in Kyoto.

There are also well-known hi-tech industries such as Kyocera, Omron, Shimadzu, and other noted global brands.

We also call Kyoto, 'the city of story telling'. Lady Murasaki wrote the Tales of Genji 1000 years ago, and Kamo no Chōmei, the famous essayist wrote Hōjōki, 800 years ago in Kyoto. Noh play, Kyogen and Kabuki which are designated as the World Intangible Cultural Heritage started from Kyoto. Other traditional arts, such as tea ceremony, flower arrangement and *kodo* or incense smelling ceremony have originated from Kyoto. Kyoto also nurtured

Japanese cuisine on which we are working to be registered as the world heritage.

The industry which represents the materialism, and tales and arts which represent spirituality, influenced each other and created the history of Kyoto. Such a history developed human talents and created masters of these traditions and artworks.

There are many historic cities in the world, but it is rare to find a city with more than one million population prospered more than one thousand years without interruption. In Kyoto, spirituality and materialism fuse perfectly and influence each other. The blend of such a favorable climate and the intelligence of the universities created innovation.

I think the hi-tech industries in Kyoto have their roots in six traditional industries, that is textile, dyeing, ceramics, the Buddhist utensils, Japanese sake, and printing. Let me give you some examples of such blend when printing industry combined with the university technology, it created touch panel. Dyeing industry produces semiconductor products. Nintendo's original business was producing playing cards. Kyocera started with producing ceramics.

Therefore, 1000 years of traditional culture and skills are used to create advanced industries in Kyoto with the collaboration of the universities.

Japanese industry, economy and politics face great problems today. Looking back into the Japanese history, Kyoto has always played important roles to overcome such difficulties by introducing new industries, and new ways of city life and city management.

I have learned from Dr. Aoki that Jerry Yang of Yahoo studied at Stanford Kyoto as an exchange student, and met various kinds of people here. His experience in Kyoto inspired him to open a new business. Many of those who studied at Stanford Kyoto are working actively in various fields. I think the role of Kyoto is to create a mechanism in which people gather from the world, learn from the history, tradition, spirituality and industry of Kyoto, and interact with many people. In order to achieve world peace, we hope Kyoto would be successful in playing this role.

As I learned from our Korean panelist, Kyoto is also facing severe financial difficulties like Korea. When I became the mayor of Kyoto city, we were facing vast deficit. At that time, we had 16,150 city employees. We reduced this number to 13,700 today to overcome the deficit. But in order to recover from recession, we need a growing industry. However, I think the

development of human resource is the biggest growing industry. Therefore, I believe that universities and other educational institutions are the best growing industry. I hope to collaborate with you to carry out this task. Thank you very much.

Masahiko Aoki: Thank you very much. Very insightful talk particularly about interaction between industry and university, academia, and also interaction between community and university. Stanford University is a rather young university in comparison to Kyoto, only 100 years, a little bit more than 100 years of history. But also Stanford has a very good experience regarding interaction with communities and also a good interaction with industry and so forth, so how Stanford is doing these, maybe Professor Casper can make some comment on this?

Gerhard Casper: Well, since the Mayor, Mr. Mayor, I listened to you very carefully and with great interest, and I think this fusion of material and cultural aspects in the world that you talked about is really particularly successful here. Now, it so happened that you mentioned my friend, Jerry Yang, who of course was at the Stanford Center and came back, and he is by the way, one of the Stanford supporters who are very early embraced by notion that we should bring the freshmen into the research process and into the learning environment. He was very helpful. So how did it work? How does Stanford and Silicon Valley work? Sometimes, people believe that Stanford University receives a lot of support from industry in the Valley, and does work for the Valley. That is simply not the case. But our major contribution to the transfer of intellectual capital is exactly people like Jerry Yang, to whom we are trying to give the best possible education and then they go out into the Valley and do their own thing, and somebody else will challenge them and do what they are doing, will try to do it better. But the point is, not a direct relationship between the university and the Valley, but an indirect relationship where intellectual property is being transferred by people rather than by patents. We do have patents too, but that's not the important thing. The important thing is what we transfer through people, and I think, for instance, for Kyoto, it would seem incredibly important that you keep as many of your young intellectuals in the city doing their work and innovation right here.

Masahiko Aoki: David, would you like to comment?

David Arnold: Well, I think, the comments that have been shared in our discussion have recognized very much that part of the reason that higher education is being looked to by national policy leaders is that people do see the connection between the contribution of higher education and economic progress, particularly in this global age. One aspect of that is certainly the human capital that universities generate and the contribution that the graduates of these institutions make to their own national development. We have a range of countries represented here at this conference that are at different stages of their development. In some cases, the challenge is really how do you respond to the needs of a rapidly-growing population and growing demands for education. And there the emphasis really is on the human resource development dimension of universities.

In other cases, the challenge is really how does the university contribute to the intellectual resources and capital. The kind of knowledge contribution, generation of new knowledge and innovation that will fuel further developments in terms of national progress. So I think without question, the inter-relationship between the role and function of universities both as teaching institutions and as research institutions is seen as having a critical link and connection to the economic development and economic growth of the countries that are represented here in this region. I think that it's very important for us, however, as leaders in the higher education arena, to cling very tenaciously to the concept of the university as more than just contributing to economic progress. These are institutions that have great cultural value and importance in the societies that they are a part of. They make a contribution in terms of educating well-rounded citizens that are knowledgeable about the world around them, that have an understanding of their culture and other cultures.

So it's not just the instrumental role that universities play in terms of contributing to local economies or to national economic progress, but really the value and importance that universities have as important societal institutions and part of the cultural milieu of the countries and of the region that we're a part of.

Masahiko Aoki: Thank you. Professor Yu, you have provided us with a very succinct summary of how the higher education in Korea is developing and role of private university in it and so forth. But you have also experienced in Japanese national university. Korea and Japan are also facing a rather similar problem of transforming the university system into a more globally-competitive system. There is quite a bit of interest in how the Korean education system is being reformed and why Korean students are more internationally active whereas the Japanese students are more rather inward-looking and so forth. Having seen both Japan and Korea very well, could you make a bit of comment on – could be, if a problem in Japan, what is the problem or what is the difference between your university and the Japanese university, or whether there are mutual kind of learning from each other, if you can make a little bit comment on this, I'll appreciate.

Kang-Min Yu: It is very difficult. I studied in Japan, and I went to the United States, and I went back to Korea, and now, I am serving as the provost of the university. But when we think about education, I just want to think over what are the situations in both Japan and Korea. Geographically speaking, Korea and Japan are very close, but the way of thinking in Korea is more of a continental way of thinking, and Japan is island. It is quite away from continent. So I am not quite sure whether this is right or not but I think that is the kind of situation.

In the education system, if you look at Korea, the government or the school, when they try to make a decision, they make the decision at a very early stage. But from my point of view, in Japan, it takes so much time for discussion, and it's very slow in decision making. So Korea has the advantage. It has speed, but it takes time in Japan to make decisions. But the result is good oftentimes. If we think about education, both countries are very similar, especially in Korea, the parents would use all their assets and they dare to make investment to their children. But in case of Japan, I am not quite sure whether there are such parents. So in a sense, Korean people are rather enthusiastic. I am not quite sure which one is better. Educational system is almost the same, but the interest level of the parents are different. But the Japanese people work very hard and cram school systems are very similar in both countries. But from my point of view, in Japan, the Japanese people do make so much

effort but they always try to be equal with everyone, and they don't want to cause any inconvenience to the others. But the Koreans, rather than being equal, they always want to stand out and move further compared to the other students. I think that is the difference between the two countries. I am not quite sure whether this example is good or bad. Korea and Japan are very close geographically, but the ways of thinking are quite different. Korea and the United States, when we compare the United States and Japan, people would think that because it is West and East, they are different. Because we come from that background, we believe that it's rather natural. But the Koreans and Japanese people would assume that they have very similar ideas. But that is completely wrong. They are different. The way of using the language is different. The way of thinking is different. So what is right in Korea is misunderstood in Japan. What is right in Japan is misunderstood in Korea. We have these issues.

Education, in education I think the language is very important. The education of the language is very important, and in order to do that, I think we need to understand each other; learning language is very effective.

I would like to say a few words about globalization. This place Kyoto is already making a progress in globalization. It has various cultural assets. There are more than we can count, and nature. In terms of nature, Kyoto is enjoying the best parts of nature, and this is the largest tourist sites, and it has very profound history. Earlier, according to what the Mayor spoke, there were so many things that he could boast about Kyoto, and he is very proud of Kyoto. With that, globalization, even by looking at this building, there are about 40,000 foreigners in Kyoto, and this is a city with only 1.5 million population, but there are 40,000 foreigners in Kyoto. I think globalization is already achieved.

Masahiko Aoki: In Asia, until let's say 10 years ago, assumption like that major universities, rather state, national university, although there is an exception like Yonsei University, but in Korea, Taiwan, Japan, and China, the national university has been dominating the education system. But in the last 10 years, there is quite a bit of change started to occur, particularly in Japan, national university has been so-called corporatized as independent institutions. In Korea, this kind of reform is also taking place and so forth. In China, although all the

universities are still state-owned, but autonomy of university is being enhanced. Also, government financing of university is being reduced so that university has to compete with each other by more private initiative. Also, even in US, like state university, like University of California and the University of Michigan, University of Minnesota and so forth, they are great component of American educational system. But here, again, the relationship between government and university governance has always been very important question.

In the last 2 days, there were lots of discussions about what kind of governance structure of university is better and more competitive, efficient, and also more responsive to the needs of the society and students and so forth. This was a quite interesting question, and it is probably quite valuable information to you. So if each of participant could make a little bit of brief comment or statement about this governance issue, that will be quite helpful. Could you start?

Gerhard Casper: I think it is incredibly interesting that universities, the world over, in particular public universities were usually tightly controlled by the state and by Ministries of Education, Ministry of Culture, whoever was responsible. But the state saw a direct relationship between its functions, its responsibilities, and its future, and the university and wanted to make sure that appointments at the university, the management of the university were those that the state chose for them. This is something that is completely and radically and fast-changing all over the world. In some very interesting way, I mean, you know there are lots of things wrong with the United States. Its higher education sector is perhaps the least wrong, and we have a very complex tertiary education system in which there are leading universities such as Stanford, which play a major role. But it is interesting that it is the governance structure of American universities that is now really being copied worldwide, that in many, many countries, the conclusion has been that we who are very autonomous, who are free to make decisions, that's even true for the public universities, are therefore, generally doing better because at a university, all the important decisions are from bottom-up that is from where the expertise is. I have just found it fascinating that the autonomy that universities are now obtaining, the corporatization for instance of national universities in Japan, and Masa said, indeed even in China, they are grappling while there is still a

Communist party functionary in the leadership of the university, nevertheless, they are understanding that the decisions should be made by others. It is a worldwide trend. I think it is a very welcome trend.

Now, beyond it, governance is something immensely complex in universities. I was telling at the conference this afternoon, the story that in 8 years as President of Stanford, I gave a speech. Now, I don't mean by speech something prepared which I read or so, but it included such speeches but many informal remarks. I would be somewhere and somebody said, oh, I call these the pop-up Gerhard remarks. President Casper, you certainly would want to say a few words. Then, I had to say a few words, and this was every – in 8 years, not allowing for vacation or for weekends, I spoke in one form or another every 4 days. I could have run for Mayor of Kyoto as much as I spoke. But that is part of governance because that way I could convey to the university community what I thought was important. The Mayor of Kyoto may have lots of power. The Mayor of Kyoto may be able to tell his bureaucrats what they should do. I did not have that power. I always had to persuade my people to follow my ideas and accept my ideas.

But it is really interesting that there is now a worldwide trend of this kind, and I think that is all for the better.

Masahiko Aoki: Thank you. Well, I'm not really good at coordinating the sessions, but we only have about 10 minutes left. This theme of education in each country and in each community, there are many panelists who are very active internationally. So if there are questions that you would like to ask at today's opportunity, I'm sure there are many. So we would like to entertain about two to three questions from the floor if you have any. We would like to ask the panelists to respond to such questions. Are there questions or comments from the floor? I hope you will be as succinct as possible because we don't have much time. Please, be brief. Anyone? Please be succinct.

Questioner 1 : In English, I would like to ask a question about the kind of cooperation, trans-national cooperation in higher education such as European higher education area established 10 years ago. In my opinion, it's kind of the protectionism of human resources

in the economic zone. But now we are facing the discussion in Japan is the TPP, the Trans-Pacific Partnership. I think in the human resources area, and higher education is very important to the cooperation economic partnership and cooperation university. Do you have some idea or opinion about the possible linkage between the economic partnership, transnational economic partnership and the cooperation of universities? Thank you very much.

Masahiko Aoki: Any other question?

Questioner 2 : Thank you very much. In this flyer, leaflet, there are many common issues, but in this trend of globalization, the issue is whether people will be able to get the job or not. I don't think we discussed this theme today in this symposium. Maybe, this was not discussed. But if you discussed on this topic, I wonder what kind of discussion you would have had?

Masahiko Aoki: Any other question?

Questioner 3: Thank you very much for your presentations. I have one question. Mayor of Kyoto, Mr. Kadokawa, you said, this is a city of students, and also the exchange students. You want to increase the number to 10,000 people. You also emphasized on the historical city. If you are to emphasize on the historical city against students and also to exchange students, I think there should be more incentives. For instance, at temples, to create a pass for the students, or to have some kind of a special pass with a cap of ¥10,000 that students can visit any temple for a year or so. This is my request. If you are to emphasize on the historical city, I hope more students and exchange students would go more into temples. If you have any comment, I would appreciate it.

Masahiko Aoki: Thank you very much. It's very interesting question. The first person who asked the question about TPP, were you planning to ask somebody to respond to this question? Then, Mr. Arnold, would you respond to that question?

David Arnold: The part of the discussion that we had around the whole movement and phenomenon of globalization touches on the fact that in effect today, there is increasingly a global marketplace for higher education, and the discussions around improving the competitiveness of individual institutions is in the context of the fact that there is this competition taking place for the best and the brightest students irrespective of which country they come from. You are seeing now national efforts to really promote higher education as a service export in effect. So as you start to think about higher education in those kinds of commodity terms, then the issue of at what point do various trade regimes begin to govern the activities and the pricing and all of that, that goes with higher education become relevant. So I think this is something that is at an early stage, I would say in terms of how higher education increases in terms of student mobility and the increasing efforts by various countries to capture a greater share of the international higher education market end up being treated under things like the TPP, or GATT, or other kinds of regimes. There may be some of our colleagues that are economists that can speak to this more specifically. But I think the spirit of your question is exactly right in the sense that in this increasingly competitive global marketplace, the question of what are the rules of the game and rules that ought to govern the activities of both individual institutions and of countries becomes I think an appropriate subject for discussion.

Gerhard Casper: If I may perhaps add something, I think you've raised a very interesting question and you've put it very well. I congratulate you on how well you've put the question on your English. You know there is a big paradox about universities and that is, they are national institutions, first of all. They still are. The Japanese universities are national institutions. The German universities are national institutions. The American universities are national in particular because they are financed nationally. Most of the resources – in the case of the Japanese university, I'm sure all the resources come from Japan. In the case of the United States, some of us have been very enterprising and trying to raise money elsewhere because we kind of say, or I said certainly, when I was president of Stanford. Stanford is an international utility, and indeed, among our graduate students, 40%, in some discipline 60% are foreign students. So we are a very international factor, but

without national support, Stanford would have to close its doors tomorrow. So that's the basic point from which you have to start.

Now, in the European case, about which I know quite a lot, something has happened of course that makes the situation somewhat different. They are two. Most universities are public universities, but within the European Union, now every citizen has its national citizenship, French, German, British, but additionally, it has a European citizenship. That has been translated into something really quite wonderful. European students, German students, let us say, are encouraged to go to France to do part of their studies there. Not all of it. This has been facilitated, I think, by the concept of a common citizenship within the European Union. And you really would like something like this, I think, in the East Asian or East Asian Pacific area, but you have to work very hard not only to make it acceptable that students can just at will come and study at the university of – Korean students let's say, could come and study at the University of Kyoto without any questions raised and without having to pay high fees for that. That has to be arranged. Then of course, there are highly technical issues about transferring credits, mutual recognition of degrees and so on. This can quickly become a bureaucratic nightmare. But it can be solved. It's one of those nightmares that can easily be solved if one works hard at it, and I think that is the trend of the future. I congratulate you on having understood that.

Masahiko Aoki: Mayor, you talked about the consortium within the city of Kyoto, and globally, it has the potential to grow.

The so-called employability and we certainly discuss this issue. Maybe, Professor Carnoy, would you like to make some comment about this issue of employability and higher education? He is professor of School of Education at Stanford University and an expert on education, economics of education.

Martin Carnoy: Thank you Masa. I also, as a participant in this wonderful seminar, have greatly enjoyed your city and feel its culture and its great history. I went to a lot of the temples, and I felt the prices are pretty high to get in. There was a study done, I mean, there was a lot of interest in the employability of university students, and of course we're very

concerned about the employability of university students because unemployed university students happened also to be articulate protestors if they're not happy. So there is a sort of an aura about having gone to the university that says, 'if I've gone to a university and I've completed a university, I should be highly employable'. So when students aren't getting jobs, we're very concerned. We've invested a lot of money in them and now if they don't find jobs, we feel that, that money has been badly spent. Of course, employers complain constantly that the students aren't trained properly to do the jobs, etcetera. So it's a very controversial issue. However, already beginning in the late 1960s, there were some very interesting studies, and I would urge you not to read those studies but basically, to listen to the message of those studies and that is that everywhere in the world that I know about, no matter what the employment problems of university students are, the employment problems of people with less education are even greater. So if there is an employment problem with university students, you can be sure that the employment problem with secondary students is even greater. That gives you an interesting message because when unemployment goes up, the demand for university education goes up, not down.

It's very interesting that at Stanford, our applicants, since the crisis of 2008, our applications for graduate school have gone up, not down. We have more students applying in times of difficulty even if it's quite difficult for graduates to get jobs now. So I think the usual rule is that when times are bad, the demand for university increases. That tells you the story. That doesn't mean that we shouldn't worry about the employability of university students. Of course, we should. But we should also worry, if you want to reduce demand for university education, if you worry there is too much demand, you have to do something about the employability of students with less education as well. So that's my comment. Again, thank you Mayor for your great hospitality here in Kyoto.

Masahiko Aoki: That reminds me of something else. After the financial crisis, the graduate students application has risen as was mentioned, and the Federal Reserve system made a survey recently, a household survey, what sort of financial assets and deficits or debts they had, and the liabilities of the household based on education cost were greater than the car loans or automotive loans for the first time. Of course, in United States, automobiles are the

basis of their culture, but at the same time, it was found out that they were spending more for education and was adding to the liabilities of the households. That was very interesting. So I'd like to ask Mayor Kadokawa to speak about the question of the temples.

Daisaku Kadokawa: There are more than 2000 shrines and temples in Kyoto. If you look at the website of these temples, you will find out that the priests and monks work earnestly.

In August, for instance, Kiyomizu Temple and many other temples hold morning classes where distinguished speakers were invited and they would serve you breakfast free of charge. The temples are religious facilities, so I think the doors are always open if you visit the temples at such religious facilities.

Some people think the entrance fees for the temples and shrines are expensive. I have discussed it with them if they can give discount for students.

Nijō Castle is located in front of my home. It used to have one million visitors. Thanks to the efforts of its staff, today it has one and half million visitors. Before becoming the mayor, I thought that Nijō Castle has a surplus because 1.5 million visitors bring about 700 million revenue annually. However, it needs one billion yen a year to manage the castle. We are planning to renovate the entire castle that will cost 10 billion yen. Thus, we realize that conserving cultural properties costs a lot.

Kiyomizu Temple, for instance, is planting Zelkova trees. Kiyomizu Temple was burned down 10 times in the past. The current building has been in place for 378 years. 378 years ago, there were no bulldozers and dump trucks. However, it took only four years to build the temple with 400 years old Zelkova trees.

This was achieved because there were many *Kannon* (Deity of Mercy) believers who donated money even selling their own houses. Today there will be much fewer people to make such donation. Under these circumstances, I wonder if 500 yen entrance fee is expensive or not.

I think half of the present temples may go bankrupt in 50 years, because they may not be able to earn enough money to maintain their temples.

I heard that the average offering money at a shrine is nine yen. When the priests are invited to read sutra at funerals, some receives only 3,000 yen for the service. Thus, they have difficulty in managing temples.

“Kyoto Student Festival” is held in October every year. During that period, all the international students are invited to Nijo Castle for free. I would like to expand this program to other places. I would like to ask your opinion about such programs.

The symposium closed with a brief closing address by Prof. Aoki.

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