

German Research and  
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German Research and Innovation Forum Tokyo | Conference Proceedings

# **German-Japanese Symposium on the Role of Universities in the Age of Globalisation Between Workforce Development and Personality Development**

**8 October 2014 | Tokyo, Japan**

DWIH Tokyo Conference Proceedings



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## GREETINGS

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With a view to coping with the challenges of globalisation, universities in Germany and Japan have undertaken in-depth reforms in the past decade and are still in an ongoing process of development and change.

The German-Japanese Symposium co-organised by the German Research and Innovation Forum Tokyo (DWIH Tokyo), the German Rectors' Conference and The University of Tokyo on 8 October 2014 provided a platform for a high-level exchange among Japanese and German university representatives on the current state of higher education in both countries.

The Japanese and German experts discussed what the universities' perceptions of their role in education and research were and what society, industry, and politics expected from universities, now and in the future. They also exchanged their views on what kind of knowledge, competences, personality development and "Bildung" the graduates of today required. In conclusion, they highlighted the significance of university education and research for the development of science and therefore for the sustainable development of societies in Japan and Germany.

We are pleased to present to you the Symposium's proceedings which, we hope, will contribute to making its outcomes known to the wider academic community and the general public.

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### **Key Challenges for Japanese Universities in the Age of Globalisation**

Masashi Haneda

When the systems of higher education in Germany and in Japan are compared, two big differences become apparent. The first is that there is a large number of private universities in Japan, and that these private universities play an important role as institutions of higher education. The second is that in Japan the state has not only established universities (national universities) but also specifies and manages the standards of all the universities, the national and the private universities, as one body.

In order to be able to talk about how Japanese universities as a whole are coping with globalisation, it is necessary to fully comprehend the status of private universities as well as that of the national universities and incorporate it in the discussion. However, in the following, only the conditions of comprehensive research national universities are addressed in the main part, purely because of the lack of the author's knowledge regarding private universities. The author requests your understanding on this issue.

#### **University Governance and Funding**

More than ten years have passed since Japanese national universities were incorporated in April 2004. It is time to assess the achievement, the merit and demerit of this, one of the most important reforms of the Japanese higher education system after the establishment of the University of Tokyo as the first "national university" in 1877.

Before the incorporation, national universities were just regarded as a department at the Ministry of Education, Culture, Sports, Science and Technology (MEXT). The incorporation envisaged giving universities more autonomy in terms of their management and organisation of research and education, to allow them to play a significant part in this rapidly globalising world. Ten years after the incorporation, it is undoubtedly true that Japanese universities have more freedom now in how they operate. In principle, how the funding provided by the government for operating expenses is spent is left up to each individual university. There is also no longer any need to request permission from MEXT to reorganise the university's internal organisational structure. However, having said all that, even after incorporation the national universities still continue to be guided in a large number of areas by MEXT. For example, national universities must undergo scrutiny by MEXT not only in education and research, but in their cooperation with society as well as in all areas of university management. This applies even down to the wording used, such as in compliance, by specifying precise targets established in a mid-term plan once every six years, which must be approved by the Education Minister.

MEXT issued a notification last summer which requires universities to reform their “governance” to meet the recent revision of legislation concerning national universities and school education. This reform is based on the idea of “university’s social responsibility” and (especially national) universities are expected to meet the requirements of Japanese citizens. Although MEXT explains that this reform does not change the nature of academic autonomy, it clearly requires universities to set up a top-down style governance system. The notification “clarified” the role of the faculty’s meeting at each college/graduate school, which essentially leads to empowering the Presidents. The presidents of most of the national universities are elected from among the faculty body of the university. This may well be the reason why the interests of the faculties tend to get reflected in the university management. However, it must be pointed out that this may also be the reason why the presidents have difficulties in carrying out drastic structural reforms.

A stable condition is necessary for Japanese national universities to be successful in the reform, but, in fact, they have been facing a lot of difficulties over a decade after the incorporation. Among them, two appear to be most important and worth mentioning: the fall in the number of young people in the population and the severe budget cuts by the government. In Japan, 18-year-old students who have just graduated from high school make up the most significant part of undergraduate intake. Therefore, the decline in the youth population leads to fewer student enrolments and, inevitably, a drop in the number of excellent students. National universities, which, generally speaking, have a good reputation for their research and education, find it extremely difficult to maintain the academic level of their students. In this regard, there is no difference between national universities and private universities. As for the funding, usually 40 to 80 per cent (depending on to the size and type of universities) of the income of national universities comes from the government in the form of an “operational expense fund”. The fund has a lot of benefits for universities because they can use it according to their own plans and intention. However the total amount of the fund has been decreasing year by year and it is becoming difficult for universities even to secure the amount for expenditure on the personnel they have already employed. It is true that besides the operational expense fund, there is also a variety of research funds that researchers can apply for. However, there are some problems. Firstly, since most research funds are offered publicly, researchers have to spend an immense amount of time and effort on obtaining funding for their own research, which is not the case with the “operational expense fund”. Obviously, this reduces the time which researchers can devote to educating their students and deepening their research. Secondly, the industrial sector offers some funding in some particular areas of research such as medical science and engineering which are expected to have a “practical” outcome, although Japanese national universities generally focus strongly on basic research.

One of the biggest problems in Japanese national universities is the shortfall in funding for the indirect costs of research. With the decrease of the operational expense fund, Japanese national universities are struggling with the situation. Under these circumstances, researchers are making sustained efforts to obtain outside funding. Also, at the university level, top research universities in Japan including influential private universities such as Waseda and Keio have established a consortium of “Research Universities 11 (RU11)” which has published policy papers and has conducted some symposia on these issues since 2009.

### **Globalisation**

In facing up to the globalisation that has rapidly been advancing since the 1990s, Japanese comprehensive research universities have been forced to drastically modify their *raison d'être* and structure. Traditionally, these universities provided the best research environment for Japanese researchers while providing Japanese students with the education that they would require when they enter society, by setting up education and research to meet such demands. In other words, it could easily be said that they were universities of the Japanese people, by the Japanese people, for the Japanese people. However, as the areas of leading-edge research have become more and more competitive internationally, it has become highly important for research-type universities to secure high-class researchers, whether domestic or international. Furthermore, by coming into contact with a variety of different opinions and thoughts, the awareness that education and research can meet the demands of the current world is growing, and also that “diversity” has become a very important keyword.

The momentum towards globalisation can be used as a driving force of university reform. At the same time, the reform is needed because of globalisation. Japanese universities are still regarded as “the source of national strength” by the government according to statements by the MEXT. Higher education today is heavily supported by governmental funds, which consist of tax money, directly or indirectly. Without the support of tax payers, higher education cannot be sustained. In this respect, MEXT’s repeated statements are understandable. However, universities are rapidly becoming globalised and they do not necessarily support the state directly, even though they do contribute to the whole world. In this globalising world, we have to consider a new model of university for the “post nation-state era.”

A university that exists solely for Japan and the Japanese people has become outmoded, and society now demands a new *raison d'être* for a university worthy of belonging in the current world, and an education and research structure to match. The question now is what form a university that goes beyond the boundaries of one nation and contributes

to a global human society should take. In considering a new structure, two points must be looked at carefully. One is how and in what way education using English should be integrated at undergraduate and graduate levels, and two, what kind of students should be attracted from overseas.

Diversity should be one of the key features of universities in the contemporary globalised world. On the other hand, the English language is regarded as a standard academic tool for communication. How can we overcome this apparently contradictory condition? This is an important question universities outside of the English-speaking world have to answer. We need to create a new type of campus where research and education not only achieve a high standard of quality on a globalised scale but also secure the value of diversity. This is tremendously important in comprehensive research universities like the University of Tokyo. For universities located outside of the English-speaking world, it is necessary to find a balance between the “global” and the “local”. In fact, the advantage of universities in the non-English-speaking world is their location. For Japanese universities, it is absolutely necessary to increase the research and teaching in English, but, at the same time, we should not forget that their strengths are in their education and research in the Japanese language, especially in Humanities and Social Sciences. Ironically, it would be difficult to realise this element, which ensures diversity in the academic world, in universities in the English-speaking world.

The balance between “global” and “local” would be translated into the balance between the world and each nation-state, which means the contribution to the whole world with the emphasis on diversity would empower the nation-state where the university is located. Transnational intellect and liberal arts are born from a transnational environment. As universities outside English-speaking countries, Japanese and German universities are able to share this brand-new idea.

### **The University of Tokyo’s Challenge**

Based on this idea, the University of Tokyo [UTokyo] has started a new project called “Constructing a Global Campus Model at UTokyo”. The project is supported by the Top Global University Project by MEXT. With this project, UTokyo aims to construct a model campus as a top-level comprehensive research university outside of the English-speaking world over the next ten years, to be completed by 2025. This is to be achieved through various new initiatives including the establishment of “University Globalisation Administrators” who have advanced abilities in the field of international education, advancing staff development, enhancing international exposure for UTokyo students, and in dealing with a greater number of international students.



One major initiative in the Project is to establish “Strategic Partnerships” with prominent overseas partner universities. UTokyo has established a lot of relationships with various universities abroad through academic agreements, mainly on the initiative of individual faculties, graduate schools and research institutes. However, such relationships do not always become university-wide, regardless of the fact that the relationships are often very active in each field. In this initiative, UTokyo is seeking to establish a special partnership which covers the whole university and which is flexible, creative, and close, based on the strengths of each side. Developing an educational programme that only becomes possible through the cooperation of the faculties of universities from both nations, running a university-wide joint summer school, and new joint research that involves merging several academic fields have been raised as examples for specific plans.

In addition, in the University of Tokyo, we have started the UTokyo Global Leadership Education Program (GLP). This program is designed to equip talented UTokyo students with the global competences and skills necessary to act effectively as creative, knowledgeable and responsible players and as “change-makers” on the global stage. Building upon the strengths of UTokyo’s undergraduates in scholastic ability and specialised knowledge, the main aims of GLP are: to expand students’ communicative and academic language skills in English as well as in their other foreign language/s; deepen contextual understanding of a wide range of regional and global issues; enhance students’ intercultural awareness and competences; foster creative imagination, innovative thinking, practical and teamwork skills in tackling “real-world” problems, through issue-based interactive workshops and independent research projects.

Universities outside of the English-speaking world should focus on diversity in language in their education, because, even though globalisation is important in higher education, globalisation is not unilateralisation. From this viewpoint, cooperation between Japanese and German universities is very meaningful.

A brief introduction to the organisation of the University of Tokyo only was given on this occasion, but each university selected for MEXT’s “Top Global University” project has its own unique, individual programmes through which it is trying to create a new university in this globalised age. This is a large-scale reform that rethinks the *raison d’être* of universities from the roots up, and thus cannot be expected to produce results overnight. However, universities must perpetually change in step with the changes in society, and now is not the time to be standing still. A definite show of willingness in steadily advancing the reform, as well as strong support from both the government and society are needed.

**Key Challenges for German Universities in the Age of Globalisation**

Dieter Lenzen

**University Governance and Autonomy**

Germany is a federal state. This means that responsibility for education, including higher education, lies entirely with the sixteen *Länder* (federal states). Backed not only by individual *Land* laws on higher education but also by the federal constitution, academic freedom and institutional autonomy are guaranteed throughout the entire higher education system. However, due to the federal structure, the actual degree of independence of the universities from the state takes different forms across the country.

The constitutional principle relating to academic freedom guarantees the German higher education institutions' autonomy and their right to self-government. For the same reasons, the rights of the university staff and other university groups must also be taken into account when universities take decisions under their own jurisdiction. Based on these principles, the universities regulate their constitution, their degree programmes and examination processes and requirements themselves.

Over the past thirty years, the relationship between the state and universities has been recalibrated in a way which is often called "from government to governance". Since the end of the 1990s instruments and governance models previously only known from the world of business, such as target agreements, performance-based funding allocation or cost-performance analyses, have found their way into the higher education governance at the state level, at the same time enhancing the professionalism of university management at the institutional level. In many *Länder*, university boards responsible for the overall monitoring of the university's development have been installed.

In the course of these developments, universities in all the German federal states have been granted greater autonomy, e. g. in making staff and budget decisions as well as in managing their own buildings and collaborating with commercial enterprises. Recently, however, a roll-back can be observed in some of the German *Länder* in relation to granting autonomy for higher education. The German Rectors' Conference (HRK) has expressed its clear opposition to this. The HRK strongly advocates that only when universities are allowed to manage their affairs largely independently, will they be in a position to set the priorities that are academically most relevant and effective.

**University Funding**

While basic funding for universities in Germany has stagnated – or rather decreased, when price inflation is taken into consideration – over the past decades, various fixed-

term “pacts for science” have made a considerable contribution towards the financing of university research in recent years. With the help of these special programmes on a federal and state level, it has been possible to increase grants for the sciences and better reflect the growing importance of education and research for society than hitherto. Nonetheless, to meet their responsibilities with regard to research and society, universities need reasonable and reliable basic financing that will allow them to plan with certainty for the longer term and guarantee them the flexibility they need in order to make themselves competitive. Achieving this requires also the creation of the necessary legal and financial conditions. Up until recently, Article 91b of the Basic Law for the Federal Republic of Germany permitted the federal and state governments to cooperate in funding research projects and research at universities only in cases of national importance. Not only the universities themselves, but all the major players in the German research system had long been calling for a change of the Basic Law to eradicate underfinancing of the universities at a structural level. In December 2014, political parties on the federal and state level finally reached a consensus. The Basic Law was changed to the effect that the federal government is now allowed to support the federal states in the funding of universities. The German Rectors’ Conference had long been calling for this amendment to the Basic Law since it will allow the Federal Government to share directly in the basic financing of the universities in the long term. This change is of enormous importance to the sustainability of the university system.

### **Teaching and Learning**

Although there are similarities with the demographic development in Japan, there are more students in Germany than ever before. This greater proportion of people in education is due firstly to higher numbers attending a Gymnasium (i. e. at grammar school level) and school leavers with the Abitur (A-level-equivalent final school qualification) deciding to embark on a degree course. Secondly, there is also an increasing number of first-year students without the traditional higher education entrance qualification and, finally, there are more international students. Whereas in 2007 just under two million students were enrolled at German universities, there are now 2.7 million. The federal government, the federal states and the universities have jointly endeavoured to offer this large number of students sufficient university places and acceptable conditions under which to study. Through the Higher Education Pact, the federal government and the federal states will have spent just under € 40 billion by 2023. The universities have responded to the increase in student numbers with many projects with which to improve the conditions for studying over the next few years.

What is more, despite the enormous rise in student numbers, the German universities have successfully pressed ahead with the reform of their study programmes in the framework of the European Bologna Process starting from 1999. As one of 47 countries participating in the Bologna Process, Germany has successfully implemented the two-tier structure of Bachelor's and Master's degrees. By winter semester 2013/2014, 87 per cent (approx. 14,500) of all German study programmes led to a Bachelor's or a Master's degree. The universities have made good use of the opportunity and the changes associated with the introduction of a two-tier degree system to modernise their degree programmes.

It has become apparent, however, that the reform was being tackled in very different ways depending on the state, the university and the subject and that there is still a considerable need for adjustment in many areas. While the general direction of the path adopted with the Bologna Process remains appropriate and must therefore continue to be followed, it is now up to the universities to take further steps to improve the courses offered, but also up to the political stakeholders at the Federal and State level to provide universities with sufficient funding in order to enable the universities to implement the changes in a successful and sustainable manner. In this context, the general educational mandate of the universities has very much come into the focus of recent discussion. Apart from subject-specific knowledge, students need to acquire intellectual independence, and develop individual judgement and critical thinking.

The HRK has recently adopted a road map that can guide universities in the further implementation of the Bologna reforms – in dialogue with all stakeholders involved, most importantly the students themselves.

### Research

As part of the still ongoing process of reform, the German universities have developed institutional profiles, particularly with a view to defining their key research areas. This has had a particularly advantageous effect on research and the promotion of young talent, as the increasing international visibility of defined key research areas contributes to further enhancing the quality of research achievements: The universities have become more competitive in raising funds and also in their ability to attract top-flight specialists. For German universities, it has also been highly important to develop successful profiling in collaboration with non-university research institutions and in cooperation with foreign partners, e. g. in the form of strategic partnerships and global university networks.

One of the outstanding initiatives in this context is the Excellence Initiative of the federal government and the **Länder**: since 2006 44 universities have been establishing and developing clusters of research excellence, and a smaller number of universities have

received substantial funding for implementing an overall concept for their institution. Moreover, in recent years, the transfer of scientific results in the context of strategic partnerships between universities and business and the establishment of regional research clusters with input from the universities, non-university research institutions and from companies in which research is undertaken have gained considerable importance. Despite these positive trends it has to be noted, however, that the unhealthy relationship between inadequate basic financing for university research and the increasing competitive provision of third-party funding for the universities is problematic for the sustainable development of the research landscape. The constantly growing volume of fixed-term project funding is leading to a heavier administrative burden for researchers. Furthermore, it can be assumed that the funding formats currently used are not adequate for the requirements of all academic disciplines and that there is greater pressure on the Humanities and Social Sciences to justify themselves, which does not reflect their significance for our society and for the economy.

### **Internationalisation and Globalisation**

As part of their international strategy, the HRK has advanced the theory that the university of the future is a transnational one. The strategy is based on the conviction that a university capable of going forward into the future must see itself in every conceivable element of its activity as a formative part of the emerging global university system and must act accordingly. The successful and sustainable development of a university depends therefore increasingly on its comprehensive internationalisation – starting with teaching and learning, through research and services to its administration.

Against this background, the internationalisation of research, teaching and learning has been given higher priority on the agenda of German universities over recent years. The success of this prioritisation can be inferred from the current situation: the German universities maintain 30,000 partnerships with universities worldwide. Most universities have developed or are currently in the process of formulating an institutional internationalisation strategy. Also political support for internationalisation is high, especially at the federal level.

Germany has become a “global player” in transnational education. It is the fourth most popular host country for internationally mobile students worldwide (fourth only to the US, the UK and Australia, thus the No. 1 non-English speaking country). The number of international students rose to roughly 300,000 in 2013/14 (11.5 per cent of all students). The top 5 countries sending students are China, the Russian Federation, India, Austria and Bulgaria. Furthermore, roughly 25,000 students study in German higher

12 education projects abroad. At the same time, the number of mobile German students rose to 138,500 in 2012. The top 7 destinations are Austria, the Netherlands, Switzerland, Great Britain, the United States France and China.

To secure and continue to build on this success, there must be professional management at every level in a university – including at its head. In the view of the HRK, internationalisation should be defined as a strategic task for the university leadership. At the same time there is no one perfect solution: in the same way as universities differ in their profile and their mission, their internationalisation strategy must also be custom-tailored and embedded in its mission statement. In order to support German universities in developing a strategic and focused approach to international issues and to further enhance the internationalization of the German higher education and research system as a whole, the German Rectors' Conference introduced the Audit "Internationalisation of Universities" in 2009.

**Indication of University's New Paradigm:**

**From Cases of Programmes for Global and Innovative Talents**

Hideyuki Horii

Firstly, activities of i.school are introduced as an example of programmes for global and innovative talents to discuss the new university paradigm. I.school is an educational programme to develop the ability to create innovative ideas for products, services, business models and social systems. The i.school's educational programme is composed of workshops for 20-30 participants. Students from all sectors of the University of Tokyo can apply. Neither credits nor degrees are given. Participants' only purpose is self-improvement. Therefore, very motivated students take part.

UTokyo Innovation Summer Program, TISP, has been held as an extension of i.school activities. TISP is an intensive, two-week summer school conducted entirely in English. In 2013, 25 foreign undergraduate students selected from among 840 applicants came from 17 top universities in ten countries in Asia, the US and the EU. They were joined by thirty keen UTokyo students.

One of the i.school workshops was held at IIT Hyderabad. I.school students and people from Japanese companies, about 25 participants in total, visited IITH. I.school conducted one-day workshops at IIT Delhi, Aalto University in Finland, Uniminuto University in Columbia and the Royal College of Art in the UK. All these experiences proved that i.school workshops are the best way to deepen mutual understanding among those with different cultural backgrounds and to foster global human resources.

Secondly, the implication of i.school activities is discussed. I.school activities are understood as an indication of the new university paradigm. Universities are facing the second paradigm shift. In the first paradigm shift, which occurred in the early 19th century at Berlin University, research and education were combined. In the second paradigm shift, value-creation is combined with research and education. Motivated students study hard for value-creation, such as the creation of new products or services, or the resolution of societal issues. A balance will be kept between programmes oriented towards value creation and research-oriented programmes in line with the demand from society and students.

## **The Core Mission of the University of the 21st Century: Dynamics of Convergence in the Higher Education System Worldwide**

Dieter Lenzen

Against the background of the university's dual mission of generating new knowledge for humankind and educating and training responsible and interculturally sensitive global citizens, we have the responsibility of shaping universities as places of research, teaching and learning in the 21st century. Thus, a university must – in all dimensions of its work and business – perceive itself as a creative part of a global higher education system.

In reaction to the ongoing globalisation process, convergences and divergences can be observed in the global post-secondary sector – and the higher education systems therein. In this context, the author distinguishes between the Continental European, the Atlantic and the East-Asian understanding of the university. While universities in the Continental European system mainly follow the aim of general education for human development (“Bildung durch Wissenschaft”), this understanding has been transformed in the Atlantic system, which considers the employability of graduates as the universities' core mission. The East-Asian understanding of the university is based on the Confucian tradition where general education (“Bildung”) with the aim of educating citizens for social harmony and loyalty towards the state is the most highly regarded goal.

In the current process, where the three main systems are struggling for predominance, there is the danger of a one-sided dominance of one single system over the others if no action is taken. Thus, intensive dialogue on a global scale is needed in order to find common ground on the basic orientation of the university with a view to its core mission and the underlying concept of education (“Bildung”). At the same time, acceptance of national, regional and local specificities is crucial.

From the European point of view, it is essential to safeguard the following core concepts of higher education and university research:

- the university as an institution of “Bildung durch Wissenschaft” in the general sense, not primarily of (vocational) training for employability;
- the university as a place of research and teaching & learning;
- the obligation of science to be sustainable;
- the autonomy of the organisation while taking on social responsibility and ensuring continuous dialogue with society, business, and politics;
- ensured access to university;



- the internal differentiation within higher education systems or institutions based on decisions coming from within the system or the institution itself;
- higher education as a commodity that is (predominantly) publicly funded; and finally,
- universities as institutions that take on global responsibility by providing opportunities to participate in education and scientific progress, thereby supporting development in all parts of the world.

Based on growing convergences in the Japanese and German post-secondary sector, the author suggests that universities of both countries jointly discuss what a basic consensus on the form and content of a global higher education system would consist of and what – on a global scale – the mission and the “place” for the universities of the future will be. Based on these convictions, Japanese and German universities shall – individually and jointly – shape this process according to their needs.

### **The Future of Social Science Research in the 21st Century University**

Katsuichi Uchida

Generally speaking and conceptually thinking, the university is a social system that consists of three key components: research, education and professional training. Which component or components a university pursues decides the role the university would basically take in society. Among various university stakeholders, the perspectives of students, the actual learners in the environment, and demands from the nation state, the central authority in higher education management, are crucial in developing universities as a system embedded in society. As universities expand and diversify, university governance has gained a significant importance.

The 21st century can be characterized by rapid globalisation and exceptional advances in such fields as information technology and bio-science. In this regard, universities are faced with new challenges in a new era.

For research in the humanities and social sciences in particular, it is crucial to embrace diversity amid growing globalization as well as to appreciate the significance of comparative studies, to make scientific use of big data and to facilitate inter-disciplinary collaborative research activities.

**PRESENTATIONS – Session 2**  
**The Internationalization of Higher Education –**  
**Developments, Progress and Issues**

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**Structures, Challenges and Choices in Internationalisation Strategies**  
**Among German Universities**

Michael Bollig

Policy papers of international and national organisations in tertiary education describe the rapid internationalisation in research and teaching as the engine of globalised knowledge rankings, both international and national. These rankings nowadays attempt to measure the success of internationalisation using quantifiable and non-quantifiable indicators, thereby make internationalisation efforts comparable across the globe. While the exactitude and the choice of indicators is sometimes questionable, these figures and tabulations give us some hints as to how to understand structures, challenges and options of contemporary internationalisation efforts in higher education. They measure percentages/cohort size of national and international students and staff and count papers published in international teams. Firstly, the author outlined some of the pertinent structures of internationalisation in tertiary education, followed by a reflection upon weaknesses and challenges commonly associated with internationalisation efforts in Germany. He finally shared some strategies drawn from his home institution – the University of Cologne – devised to address these challenges.

Firstly, the presentation compared results from different international rankings. The efforts of highly internationalised universities were singled out and national patterns of internationalisation at university level deduced. The presentation attempted to illustrate that in order to achieve very high scores of internationalisation, an entire university will have to adopt an ambitious internationalisation programme, profoundly internationalising its staff first of all. This would then ensure a quicker turn-over of staff and an expansion of academic networks.

Secondly, the author discussed patterns of internationalisation in Germany, adding insights from the University of Cologne's internationalisation programme. Finally, he described measures of internationalisation developed at the University of Cologne over the past three years. The University was one of eleven German universities to win the Excellence Award in 2012, a highly competitive national funding line open to research universities. One of the competition's benchmarks was a comprehensive internationalisation strategy for the university. The University of Cologne was awarded funding for its institutional strategy, including its internationalisation strategy. In conclusion, the author shared some initial experiences and advances in the implementation of these strategies.

Masako Egawa

One of the pillars of The University of Tokyo's Action Scenario (similar to a medium-term strategic plan), which was announced in 2010, is to build a truly global campus. We have undertaken a number of initiatives to enhance mobility of our students and researchers and to provide significant international experience to our students through study-abroad programmes, summer schools, internships, and other programmes. Our target has been to offer study-abroad opportunities to 15 per cent of students, and to offer short-term programmes, such as summer schools or language programmes, to 35 per cent of students. The rest, or approximately 50 per cent, will gain international experience through studying or interacting with international students on our campus.

When we began to work on the mobility of undergraduate students, we realized that the Japanese academic calendar, which starts in April, is a problem. In May 2011, the University of Tokyo launched a task force to study the feasibility of changing the academic calendar to autumn enrolment. In January 2012, the task force published a report recommending autumn enrolment, and we began to work with other universities and various stakeholders to discuss how to make the change. In July 2013, after 18-months of deliberation, our university decided to implement a four-term system; rather than changing the start of the academic calendar from April to September, we will stick to the calendar starting in April, but will split the semesters into four terms and shift the timing of the summer break to synchronize with the majority of universities around the world. This will allow our students to participate in overseas summer programmes. Also, we can organize summer programmes in June or July on our campus and invite international students to study together with UTokyo students. This change will take place in April 2015, and we expect it will enhance the mobility of our students significantly.

In addition to implementing a four-term system, we have undertaken initiatives to upgrade our educational programmes. We are developing the Global Leader Development Program in order to provide special courses and international learning opportunities to about 100 students out of 3,000 students per class. Our objective is to develop global leaders who are trilingual; they have to be fluent in Japanese, English and one Asian language, such as Chinese, Korean or Arabic.

In 2012, we began to offer PEAK (Programs in English at Komaba), undergraduate programmes taught in English. We have just welcomed the third cohort this month. These students major in either Japan in East Asia or Environmental Sciences. This autumn, we launched another undergraduate programme in English, the Global Science Course. In

the case of PEAK, we recruit high school graduates around the world, educate them for four years and confer BA degrees. In the case of the Global Science Course, we recruit students who have studied for two years at other universities around the world, educate them for another two years and confer BA degrees.

The University of Tokyo is also offering several courses on MOOCs, on both the Coursera and edX platforms. Last autumn, we offered two courses in astrophysics and political science. We were pleasantly surprised that about 80,000 students from over 150 countries had registered for those courses and over 5,000 students earned certificates. We are adding four new courses during this academic year.

Last year, we entered into a strategic partnership with Princeton University. The idea is to develop a strong relationship in education and research with a small number of universities around the world, and we expect the nature of the relationship will be different for each university.

Notwithstanding those accomplishments, we face many challenges. They include philosophical questions such as “How many of our undergraduate classes or courses should be offered in English?” and “How should we allocate research funding to develop strategic partnerships with a small number of universities?” as well as more practical, mundane questions such as “How can we offer incentives to faculty members to develop summer programmes?” and “How can we secure resources for international student housing and scholarships?”

### **Kyushu University’s Endeavour for Internationalization:**

#### **Past Achievement & New Challenge**

Koichiro Watanabe

In terms of reforms in the higher education sector, this decade (2004-2014) is very critical for national universities in Japan. Since Japanese national universities were incorporated in 2004, they have coped with various issues. While worldwide collaborations have become commonplace in almost any academic and research field, there exists an increasing need for further promotion for the internationalisation of education, which is rather complicated and difficult but not avoidable in the age of globalisation.

One of the issues that Japanese universities are eager to address is to enhance the international mobility of students. The Japanese government has decided on the national initiative to accommodate more than 300,000 international (incoming) students on Japanese campuses by 2020. Lately, the national government has also decided to double the num-

ber of Japanese students who study abroad (outgoing) from 60,000 (2010) to 120,000 by 2020. In order to achieve this plan, the government has launched such projects as the Global 30 Project (2009), the Re-Inventing Japan Project (2011), the Program for Leading Graduate Schools (2011), the Project for Promotion of Global HR Development (2012), Tobitate Japan (2014), and the Top Global University Project (October 2014), for all of which Kyushu University is among the selected venues.

Among other initiatives by Kyushu University, EUIJ-Kyushu was established in April 2011. It offers diploma programmes in EU studies, a residential summer course, and an EU study tour. Besides, we have various strong initiatives for pursuing cutting-edge research in a global context, including the International Institute for Carbon-Neutral Energy Research (I<sup>2</sup>CNER).

While the internationalisation of higher education is further emphasized in Japan, we still have a lot to learn and improve. From the stakeholder analysis based on this decade's experience, we can see what we should do to move forward. From the academics' perspective, for instance, the heavy burden on them is one of the biggest issues. Some students and their parents might prioritize employability on the international market. It is important to identify various stakeholders' demands and needs to accelerate our endeavour for internationalisation.

The Top Global University Project, starting from October 2014 (funded by MEXT till 2024), is designed to further accelerate the internationalisation of higher education in Japan. This year marks a turning point for Japanese higher education. Over the next decade we have a lot to do in order to fully and truly internationalise so as to provide borderless learning opportunities. As our mission statement indicates, Kyushu University is committed to the highest level of academic excellence in education and research, aiming to position itself as one of the world's top 100 leading universities.

**PRESENTATIONS – Session 3**  
**Workforce Development versus Personality Development –**  
**What Kind of Knowledge, Skills and Competences Do Future**  
**University Graduates Demand?**

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**Attributes, Skills and Knowledge Required by Corporations when Hiring**  
**University Graduates, and Expectations for the Public Education**

Hiroshi Inoue

Faced with a shrinking population and therefore a shrinking domestic market, Japan needs to maintain sustainable economic growth. It is an urgent task to attract investment and talent from around the world by pursuing the Abenomics policy, so that we can cope with the rapid globalisation.

The long-term Japanese business model, by which Japanese companies manufacture high-value added products domestically and export them to the world, is losing competitiveness amid the fierce competition with the emerging economies. On the other hand, Japan is now a front-runner in infrastructure development, such as transportation systems and power plants. Therefore, Japan can harness the rapidly growing demand in the emerging economies by transplanting infrastructures to these countries and contributing to their economic growth. In order to do so, Japan needs to nurture young talents who can drive innovation and play a leadership role in global business.

According to a Keidanren Survey (Jan. 2011), the major attributes and skills corporations look for when hiring global talents are as follows: firstly, the ability to meet challenges not bound by stereotype notion, followed by English communication skills and a broad mind to appreciate foreign cultures and values. It is also pointed out that corporations expect college graduates to have logical thinking and problem-solving skills.

In order to respond to these expectations, Japanese universities are required to implement various reforms, including a shift to autumn enrolment which is conducive to accelerating student exchanges between Japanese and foreign universities and further promoting the globalisation of Japanese universities. If the universities carry out these reforms in earnest, including a reform of the entrance examination and admissions system, these reforms will in turn change the nature of Japanese secondary education. The current university entrance examination, in which emphasis is put on the scores of paper tests, should be changed to a system in which emphasis is put on the comprehensive evaluation of the student's motivation, abilities and aptitude.

Through these educational reforms across the board, Japan will be able to nurture students with high communication skills who can act independently, and eventually, it will enable Japan to carry out its growth strategy.

Udo Wolz

The Bosch Group is a global technology company and market leader in various fields. In 2013, 281,000 employees were working for Bosch worldwide. In Japan, the Bosch Corporation has 27 offices, 10 development and application locations and 14 manufacturing locations. Its diverse workforce is the main asset of the Bosch Group, also here in Japan. The future needs even more international collaboration, with our customers, suppliers as well as in our company itself. Internally therefore we interviewed a representative group of management staff to find out what kind of skills our Japanese engineers in particular will need to lead in the future.

The four main pillars were identified as: Skills in Project Management and Communication, Intercultural Competence and Holistic Engineering. Here we still see the need and potential for development of Japanese graduates. The detailed skills and competences behind these four key words actually go hand in hand with what is stated in the Bosch Competence Model. There are already successful examples in the Bosch world showing how academia and industry can jointly support the associates to foster these skills. Also, we are now already hiring and developing young talents with exactly these competences. Examples of this were shown during the presentation.

## **Academic Knowledge in Times of Human Capital**

Michael Kämper-van den Boogaart

The ongoing discussion about whether or not the system of higher education should focus on economic issues with the aim of keeping up in global competition, raises the question of whether this approach is still compatible with the genuine values and educational ideals of a university associated with the name Wilhelm von Humboldt.

The presentation raised the question of whether criticising the phenomenon “employability” is justified or rather a contemporary version of the basic ideas of the age of Enlightenment that manages to compete with the growing demands of globalisation and European requirements in education.

Taking into account theories of acquiring knowledge and their criticism by referring to the topos of bread-fed scholars of the 18th century, the presentation pointed out that the requirements of the higher education system around 1800, i. e. to contribute to the establishment of a knowledge-based society and to invest in lifelong learning strategies (since these were necessary to face the challenges of competitiveness and to improve social cohesion, and by this the quality of life), can actually be put into perspective with the concept of employability that played a major role during the Bologna educational reforms in the early 2000s.



## PANEL DISCUSSION

### Recommendations Towards Universities, Politics and Business<sup>1</sup>

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On the occasion of their joint symposium, the DWIH Tokyo, the German Rectors' Conference and The University of Tokyo welcomed approximately 200 participants from academia, university administration and from industry and politics on 8 October 2014. The following topics were covered during the productive and stimulating panel discussion:

- similarities and differences between the German and Japanese higher education system,
- the role of the universities in a globalised world,
- responses of universities in Japan and Germany to demands from the business sector, society and politics, and
- possibilities for further cooperation.

#### **Similarities and Differences between the German and the Japanese Higher Education System**

- It became clear that both systems are facing tremendous challenges caused by globalisation and that they share a lot of similarities in how they deal with these new developments.
- Japan originally modelled its education system on that of Germany, and after WWII assumed many elements of the system in the USA. However, recently the university systems have started to converge again: with the implementation of Bachelor's and Master's degrees in Germany, its university structure has become more similar to the one in Japan. A difference, however, is the status and structure of the doctorate. In Japan, usually the study for a doctorate is done in the framework of a structured doctor course, in Germany many researchers pursue their PhDs through individual doctoral study.
- With the large number of universities in Japan, there is a wide difference between the various types. Even before they enter university, candidates undergo a strict selection process. There are indications that a similar trend will be seen in Germany. Currently however, the crucial obstacle in Japan is entry into the university, whereas in Germany it is concluding the degree programme successfully.
- As part of their internationalisation strategies German and Japanese universities are increasing the number of international programmes, often taught in English, to attract foreign students and researchers. Parallel to the acceptance of English as a Lingua franca for research, the universities in both countries wish to ensure that their respective national languages do not lose their significance as languages for science.

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<sup>1</sup> Compiled by Regine Dieth



### **Masashi Haneda**

*“Similarities and differences between the German university and the Japanese university have been examined by the panellists. We recognized that the advance of globalisation is having a major impact on universities in both countries. As universities in non-English speaking countries, we have a common recognition of identity issue as the number of courses in English will continue to increase. We should share ideas with each other on how to globalize universities while still enriching the national identity. Also education issues were discussed by the panellists. Both German and Japanese universities place a high value on education. However there is a slight difference between them with regard to the perceived purpose of university education. Germany considers one of the most important roles of a university contributing to personality development for enriching life, while Japan sees the role of university education as a means to nurture human resources to contribute to society.”*



### **Hans van Ess**

*“There are numerous similarities between Japanese and German universities: for a long time, both have educated students at a high level for highly developed economies and at the same time pursued research successfully on a global scale. On the other hand, the trend towards globalisation and demographic challenges are confronting both educational systems with the same question: it is obvious that the current generation of students will have to be even more proficient in English than the first and second generations of students and scholars after the war. Yet, how far should both countries go in reforming models that have actually performed quite well over the past decades? How plausible is it to change curricula into English and which role shall the Japanese and the German language play in education and research? There are*

*marked differences between the Japanese and the German educational systems, for example with regard to the question of how many people with a university degree are needed for the successful development of the country. Yet, with regard to the internationalisation of our universities Japan and Germany share a great deal. This suggests close collaboration in order to formulate answers to the challenges of the future.”*

### **The Role of Universities in a Globalised World**

- It was agreed that in both countries education and research are regarded as the core mission of the university.
- The importance of an integrated education was emphasised by all the participants. Interdisciplinarity and the links between theory and practice were necessary to create innovation.
- There was general agreement about the need for further elements beyond education and research. For the Japanese it was particularly important to retain and enhance education and research as central functions of the universities and to encourage interdisciplinarity, reinforce it with international collaboration and to be more open to society. (Academic) freedom of thought is essential for developing new, global values and creativity. For the German delegates, the development of personality was an important third pillar. The development of personality required the freedom to allow students to develop the ability to deliberate and think critically, going beyond the assimilation of specialist knowledge.
- The delegates said that they viewed student visits to other countries and international/intercultural experience in general as crucial for developing knowledge of other cultures and how to deal with them.

### **Responses of Universities in Japan and Germany to Demands from the Business Sector, Society and Politics**

- The delegates agreed that universities and business need to cultivate a close relationship. The German delegation felt that it was very important to safeguard the freedom of research and teaching. The courses offered at universities and their key research areas must not be geared towards the demands of business to the exclusion of all else. As well as engineers and natural scientists, humanities and social science graduates also enrich companies.

- The Japanese delegation considered the training of creative people the central task of the universities. The basis of the economy is the constant creation of new values which requires players with creativity. This puts the universities in a key position. They should see themselves as strong strategic partners of companies and form appropriate strategic partnerships.
- Transparency, clearly formulated rules and high quality standards are essential for collaboration between universities and companies on research. One representative from a company emphasised that the most important quality for graduates was flexibility in the way they applied what they had learnt. Capabilities were key to a career in industry. This included the ability to continue to develop steadily and to take responsibility.
- Furthermore, delegates were recorded as saying that small and medium sized companies, which made up the majority of the sector in Germany required graduates with different abilities than the large global players. It was therefore important to encourage diversity at universities, even at the enrolment stage.



#### **Shunya Yoshimi**

*“Japanese universities were greatly influenced by German universities before World War II, while they were very much influenced by universities in the United States after the war. The number of universities in Japan has increased dramatically over the past 60 years along with the development of the country. However, the number of students entering university has been decreasing in recent years and will continue to decrease because of depopulation. Since Germany also faces depopulation, we can exchange ideas on how universities can operate under such conditions. In an increasingly globalised world, I think that the key for universities is to keep up the high quality of education and research. The German side also sees education that will develop personality as one of the key missions. Regarding academia-industry cooperation, we agree that we should not take “freedom” away from the universities. The curricula and projects of universities should not be influenced by the industrial world too much.”*

### Possibilities for Further Cooperation

- It was agreed that already a large variety of excellent cooperative activities between Japan and Germany exist. Nevertheless, participants still saw a lot of potential for improvement, especially in regard to the number of student exchange schemes and joint study programmes.
- To ensure that cooperation and funding programmes are sustainable, the discussion should be continued at university leadership level. General guiding principles and shared values for universities, diversity of university members, the involvement of women in research and questions of ethics and the social responsibility of the universities should be jointly furthered.
- The symposium was an opportunity to identify common challenges and find new approaches for further dialogue and exchange in regard to the core missions of the universities, the internationalisation of higher education and the cooperation between universities and the business sector.



#### Gesine Foljanty-Jost

*“The general guiding principles and values of German and Japanese universities are similar: as players in an environment where knowledge and culture are global, universities bear the responsibility for providing education for society. They can only fulfil this responsibility by defending freedom in research and teaching from political and economic intervention. In both countries, protecting academic freedom is therefore key. I see ways to develop relationships between German and Japanese researchers primarily in their working together on guiding principles and shared values which address the core issues of university education and research. Internationalisation as a shared aim of German and Japanese universities can only be taken forward successfully if both sides communicate on fundamental questions of language policy, academic self-determination, educational aims and diversity.”*

## EDITORIAL NOTES

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### Published by:

German Research and Innovation Forum Tokyo (DWIH Tokyo)

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### Editorial Team:

Editing: Regine Dieth, Marijke Wahlers

Design, layout and lithography: Lisa Eidt

Printed in Japan

ISBN: 978-3-942600-42-2

Tokyo, December 2014

### © DWIH Tokyo

The DWIH Tokyo is jointly organized by the German Rectors' Conference (HRK) and the German Chamber of Commerce and Industry in Japan. It is funded by the Federal Foreign Office of Germany and supported by the German Federal Ministry of Education and Research.

**HRK** German Rectors' Conference  
The Voice of the Universities



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### **German Research and Innovation Forum Tokyo**

The German Research and Innovation Forum Tokyo (DWIH Tokyo) acts as an umbrella body for German scientific and research interests in Japan. Representing both German research organisations and innovative companies, it strengthens both academic and economic cooperation with Japanese partners. The DWIH Tokyo has been set up jointly by the German Rectors' Conference and the German Chamber of Commerce and Industry in Japan and is financially supported by the German Federal Foreign Office.

[www.dwih-tokyo.jp](http://www.dwih-tokyo.jp)

### **German Rectors' Conference**

The German Rectors' Conference (Hochschulrektorenkonferenz – HRK) is the voluntary association of state and state-recognised universities in Germany. It currently has 268 member institutions serving more than 94 per cent of all students in Germany. The HRK is the political and public voice of universities and provides a forum for the process of formulating joint policies and practices. The German Rectors' Conference cooperates with universities and university organisations worldwide, thereby representing the interests of the German universities internationally. In addition, it supports its member institutions in the process of internationalization.

[www.hrk.de](http://www.hrk.de)

### **The University of Tokyo**

The University of Tokyo (UTokyo) was established in 1877 as the first national university in Japan. As a leading research university, UTokyo offers courses in essentially all academic disciplines at both undergraduate and graduate levels and conducts research across the full spectrum of academic activity. The university aims to provide its students with a rich and varied academic environment that ensures opportunities for both intellectual development and the acquisition of professional knowledge and skills.

[www.u-tokyo.ac.jp](http://www.u-tokyo.ac.jp)