

# Universities Playing a Critical Role in Globalization & Innovation

By *Yoko ISHIKURA*

## Japan Increasingly Isolated from a Globalizing World?

Judging from reports in the media, the issues being discussed and debated in Japan lately are all very domestic, and do not reflect the issues discussed elsewhere in the world. Debate in Japan focuses on the widening gap between its highly populated cities, which house many corporate headquarters, and the rapidly aging local regions, which have few significant industries, and on politics literally divided by the two major parties. This debate is in sharp contrast with the issues discussed and debated at world conferences, namely, the flattening world, global competition involving a larger number of rapidly growing economies such as India and China, and the need for collaborative innovation to resolve environmental, energy, and healthcare issues. Looking only at media reports in Japanese and listening to discussions among political leaders in Japan create the illusion that these global issues do not exist or do not affect Japan. And yet, the issues mentioned above all have a significant influence on Japan as the world economy becomes increasingly integrated.

It is clear that Japan needs to be integrated into a rapidly globalizing and flattening world, whether we like it or not. And yet, the recent trend toward a more “insulated” economy and society poses a concern in the face of the trends currently sweeping the globe and the moves made toward global integration by many emerging economies.

It is also clear that broad-based innovation involving not only science and technology, but also other social factors, such as education, funding and information dissemination, is one of the few means to resolve the global issues we face today. In fact, during the first half of 2007, the term “innovation” was often cited in the general media and business periodicals as the key to rejuvenating

Japan. The campaign to make Japan one of the most innovative countries in the world by 2025 captured the attention of public policymakers, the business community and academia. This initiative was well represented by the long-term strategy “Innovation 25” and by other campaigns by private-sector companies to promote innovation. The need to reestablish Japan, with her unique strengths, in a globalizing world was advocated as an effective and efficient means to improve Japan’s competitiveness and contribute to the global cause by making technologies that are already well developed in Japan available throughout the world. The unique strengths of Japan often cited include not only world-class technologies related to the environment and tremendous efforts to develop energy-efficient products, but also deeply ingrained social values in Japan that emphasize making the best use of its limited resources.

The need to develop a young generation with high aspirations, a risk-taking mentality and perseverance was also emphasized in this campaign for innovation. University reform was one of the central policy initiatives for implementing a long-term strategy.

The momentum for structural reform to compete more effectively in the global market and for innovation as the engine for growth seemed to have been lost, however, as the second half of 2007 saw a rapid shift toward domestic and local issues. Little mention has been made about innovation initiatives with a global perspective in mind and the importance of developing a young generation.

In this paper, I will argue that the move to integrate Japan into the rapidly globalizing world and the momentum to drive innovation need to be revisited. In particular, I will propose that the role universities can play has become so critical in Japan now that it will make or break the future of Japan in its attempt to globalize and innovate.

## Two Missions for Universities – Research & Education

Universities have two major objectives, namely, research and education, and I think this dual mission of the universities makes the institutions more important for the country than ever before.

In the past decade or so, with an increasingly prevalent knowledge-based economy, the role of universities as knowledge capitals and research centers has been emphasized throughout the world. Universities have often generated new ideas and scientific discoveries.

As innovation increasingly requires combinations of diverse technologies and multi-disciplinary approaches, it also requires collaboration between members of various sectors – the public and private sectors and/or business, academia and policymakers. It also requires skills and experience from a variety of fields such as economics, politics, technology, sociology, life sciences, art, business and law, just to name a few.

Universities or private-sector companies alone are unlikely to carry out the whole process of innovation by translating new scientific knowledge into the form of new products and services with social and economic benefits for the public. It is quite natural then to see increasing interest and attention being paid to business-academia collaboration.

The major drive for business-academia collaboration began in the United States in the 1980s as the “Bayh-Dole” bill was passed in 1980. Many more ventures were generated, including some start-ups by university professors, in high-technology industries such as ICT (information and communications technology) and biotechnology.

In Japan, the campaign to promote business-academia collaboration began in 1999, following the successful model of the many start-ups to be found in Silicon Valley and elsewhere.

Private-sector companies have the inherent incentive to keep new discoveries and ideas proprietary to themselves so that they can recover their investments. Compared with this incentive for maintaining a “closed system” of innovation, universities are expected to stay “open” and “accessible” to society with “public” interest as the top priority. In other words, universities are expected, by definition, to function as an “open system” for the rest of society. As open-system innovation has become more important lately, the role that universities can play in research has become even more significant.

### Universities as Ideal Places to Shape Future

What I would like to emphasize in this paper is the role of universities in education in addition to research. Universities play a very important role in developing young generations who will determine the future of the country.

Universities are in the unique position of being able to see a constant flow of the young generation. Most students spend four years around the age of 20 at universities. There are no other institutions that have greater potential to make a significant impact on the majority of youth than universities. Primary education is the starting point for developing the next generation, but universities play an even more significant role in developing human capital for the future because of its role for research as stated above.

If students are exposed firsthand during their time at university to the globalization trend, the most up-to-date discoveries in the field of science, and the historical development of socioeconomic paradigm shifts triggered by technological innovation (as described by Carlota Perez in her book “*Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*”) as well as to the general liberal arts and humanities that have formed the foundations of society over the centuries, they will be well equipped with the mentality, knowledge, know-how and skills to prosper and pioneer in years to come. On the other hand, if they are kept isolated from the realities of global competition, integrating economies and

societies with geopolitical issues, and the exciting potential for global collaboration, and stay in an “intellectually and culturally isolated island,” the young generation will be unable to develop the know-how and skills to survive the new era, much less innovate and lead the new emerging world.

Young people have an incredible amount of energy and intellectual curiosity when exposed to an unexplored world with many unresolved issues. This unexplored world will offer tremendous opportunities to those who are curious enough to keep questioning to find out the real issues and experiment with various approaches to resolve those issues. If they are given the opportunity to meet, interact and share experiences with similar people from different parts of the world, they will have a chance to test their own sensitivity to the diverse cultures and value systems to be found in many different countries and from many different people. They will develop cultural sensitivity and broad perspectives by actually expressing their own views along with others of the same age from different parts of the world, holding discussions to find the source of differences in their ideas and views, and thus sharpening their understanding of different ways of thinking and value systems.

The key is to give these young people sufficient opportunities to experience for themselves a variety of other people and new theories and previously unknown fields. Direct contact and interaction with different cultures and disciplines has much more impact than knowledge transmitted in the form of textbooks or lectures.

### ICS Experience

The Graduate School of International Corporate Strategy of Hitotsubashi University (hereafter called ICS) where I teach was established in 2000 as one of the first professional schools by the national universities (which became incorporated in 2004). There were two major objectives that ICS tried to accomplish. The first was to put ICS on the global map of business education. The second was to shake the higher education system in Japan by taking a com-

pletely different approach from before as the higher education system in Japan was not known to be world-class. The new academic year at ICS begins in October, and MBA programs are offered in English. Though this was a departure from the traditional Japanese system, ICS followed the global rule of advanced business education.

The rationale behind offering the programs in English in line with the global academic calendar was to attract students who passed through Japan on their way to graduate business schools in the United States and in Europe. Japan is the second largest economy in the world, with several globally competitive companies such as Toyota, Canon, Nintendo and Kyocera. At ICS, we believed that “building bridges between two different worlds” such as East and West, theory and practice, the seminar system well-known in the Japanese university system and the case-discussion method of the Western business school would be a good concept for a new institution located in Japan, a part of Asia. Hitotsubashi in Japanese means “one bridge,” after the original location of the university.

Now that six years have passed since its foundation, the experience gained by ICS offers quite a few insights and suggestions.

### Lessons from ICS

By offering MBA programs in English with the academic year following the global calendar to a diverse group of students (see *Charts 1-4* for the profile of students), we have learned several things about the value of opening the university to the world.

- 1) We realized how close the world can become if universities become open to the world by operating with a global model in a globalized world, i.e. English materials, English websites and English classes. We realized how seamlessly many activities can be conducted without the hurdle of translation and with the technologies available.
- 2) Diversity is no longer just a “term,” as it is alive both inside and outside the classroom everyday, giving the faculty

and the students direct and immediate experience of what the interdependent world is all about. A significant amount of learning takes place about the differences/similarities between cultures, mentalities, customs, history and infrastructure etc. of various countries, so that those involved (the faculty, students and staff) develop more sensitivity and sophistication.

- 3) By having so many nationalities, the Japanese students learn a great deal about the reality of global reach while still in Japan.
- 4) Opening the university to the world provides tremendous opportunities to reflect, review and revisit ways of doing things and thinking that has been taken for granted. Thus, it gives fresh perspectives on people's own uniqueness and the strengths/weaknesses of their own tradition, heritage, business and social practices, in a global context.
- 5) It also provides many opportunities to students to express their own views in English, the de facto global language, share them with students from other countries and regions, explore their differences and similarities, and arrive at better, more synthesized ideas/solutions.

For example, lively Q&A sessions that do not usually take place at Japanese universities are the norm at ICS, and both Japanese and other Asian students who are not accustomed to questioning and raising issues are encouraged to do the same.

### Benefits of Opening Up Universities

Making universities open to the outside world will go a long way to globalizing Japan further, and making its presence felt in the world. It will make the young Japanese people more aware of the unique strengths of their country in a global context, and encourage them to take action to improve Japan's declining status.

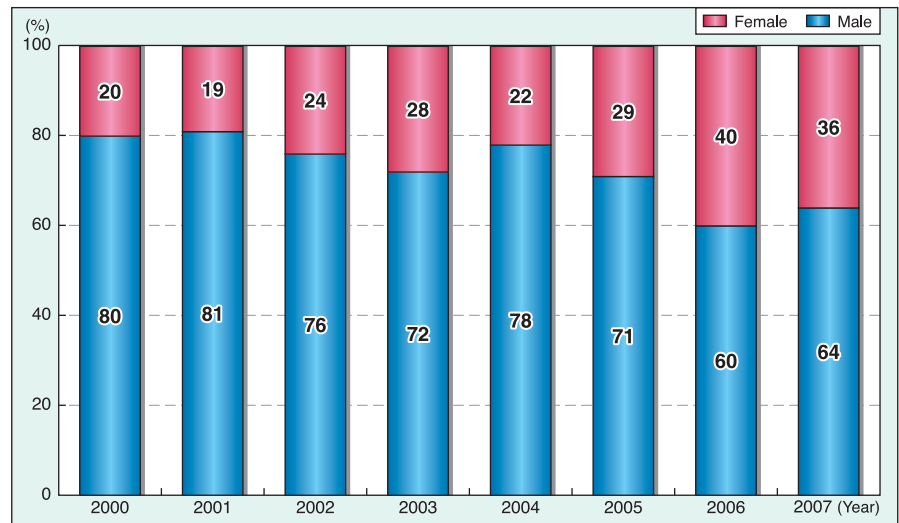
Making universities open will promote innovation in Japan by two different, but closely related avenues: 1) by promoting an open-system type of innovation based upon closer and more pro-

ductive business-academia-government collaboration; and 2) by ensuring that future generations are exposed to the diversity and multicultural interdisciplinary elements of today's knowledge creation and innovation.

Human capital and its development, after all, are what make a society or country innovative in the long run. The development of young generations forms the foundation for the competitiveness and presence of the country in the "flattening" world of today. Now

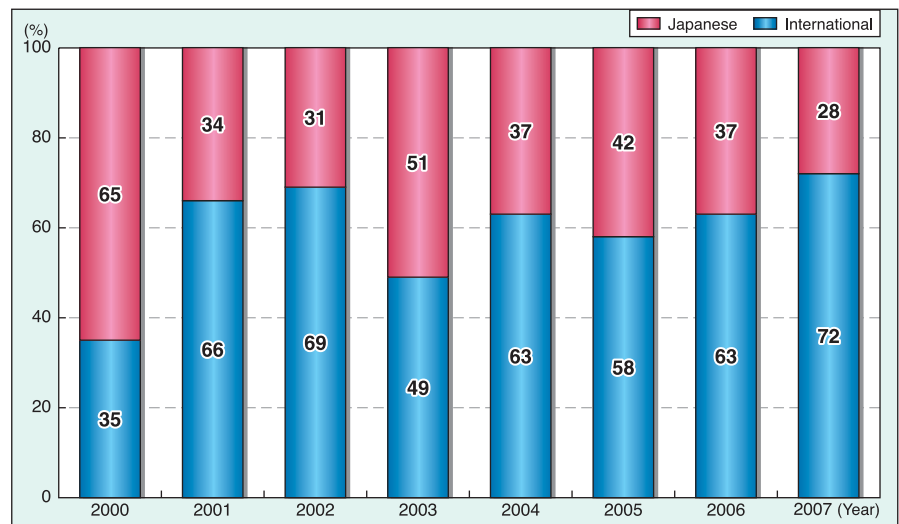
that advancing ICT makes knowledge available and accessible to anybody, anywhere in the world, the knowledge distributed and sorted through search engines such as *Google* is quickly becoming a commodity. Without people who can put together knowledge across diverse fields and disciplines, think on their own, make choices and take risks, the economic and social status of Japan and the Japanese people in an ever-integrating world will never be restored.

**Chart 1 Male-female ratio of ICS students**



Source : Hitotsubashi University's Graduate School of International Corporate Strategy (<http://www.ics.hit-u.ac.jp/school/studentprofile.html>)

**Chart 2 Japanese/international ratio of ICS students**



Source : Hitotsubashi University's Graduate School of International Corporate Strategy (<http://www.ics.hit-u.ac.jp/school/studentprofile.html>)

## Plan of Action

From the experience of ICS and other universities, I would like to propose the following set of actions.

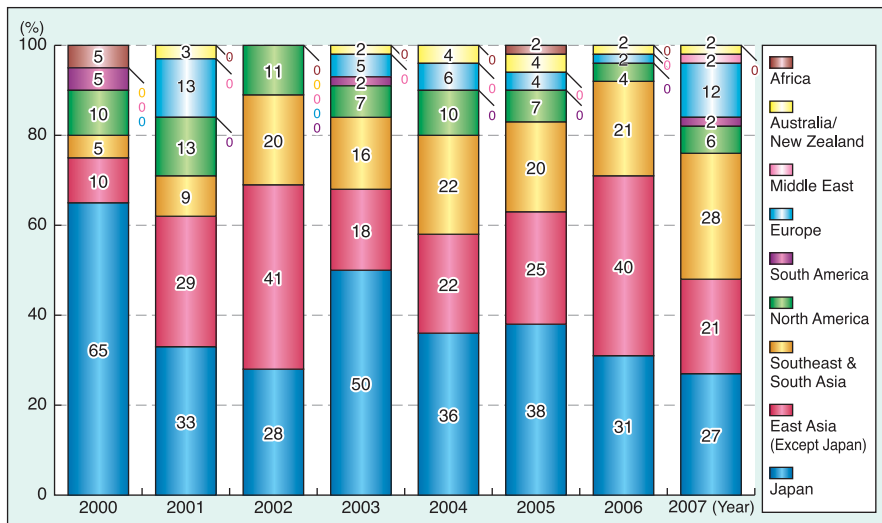
- 1) Society should become more conscious of the influential role of universities in globalizing the country and promoting innovation by developing future generations.
- 2) We should promote business-academia collaboration on various fronts, having
- 3) We should make a significantly high ratio (such as 30%) of faculty, staff

a revolving-door system, encouraging an exchange of significant numbers of people in other sectors (such as having a minimum of 30% from other sectors), and producing a large number of people with actual experience in all three sectors. This type of action will promote the translation of new scientific knowledge and innovation into new products and services with new concepts and the creation of new markets.

and students non-Japanese by accepting large numbers of international people.

- 4) We should send a significant percentage of Japanese students overseas for at least six months so that they can live in non-Japanese societies as regular citizens and see the outside world themselves. In the future, spending a part of college life overseas may be made a requirement.
- 5) We should make conscious efforts to balance the following two types of actions: a) expose students to the “globalizing world,” integrated economies, the “flattening world” and emerging scientific discoveries; and b) expose them to the long history, legacy and heritage of various traditional disciplines, including liberal arts and humanities.
- 6) We should expose students to diverse fields so that they themselves can feel diversity and dynamism and invite a significant number of world-class professionals in different fields to come into contact with students.

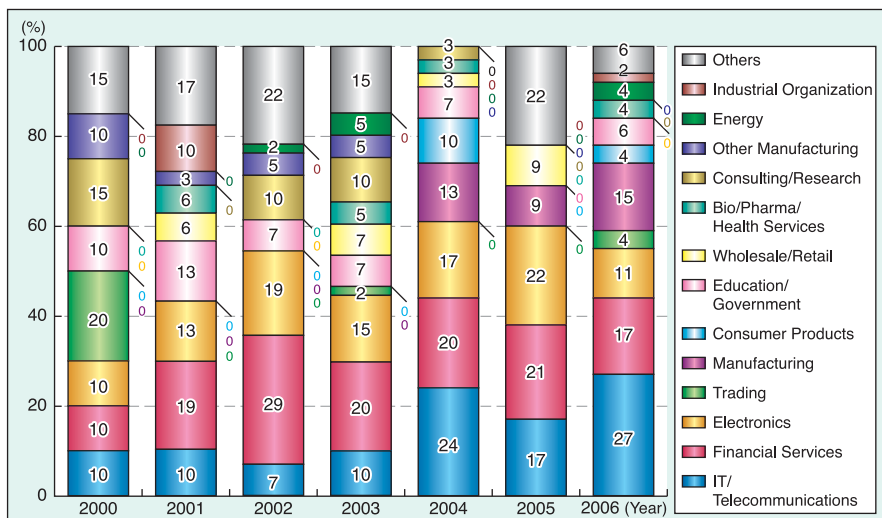
**Chart 3 Nationality of ICS students**



Note : East Asia = China, South Korea, Taiwan, Hong Kong, Mongolia  
Southeast & South Asia = Malaysia, Thailand, Singapore, Philippines, Indonesia, Myanmar, Cambodia, Vietnam, Bhutan, India, Sri Lanka

Source : Hitotsubashi University's Graduate School of International Corporate Strategy (<http://www.ics.hit-u.ac.jp/school/studentprofile.html>)

**Chart 4 Industry background of ICS students**



Source : Hitotsubashi University's Graduate School of International Corporate Strategy (<http://www.ics.hit-u.ac.jp/school/studentprofile.html>)

The next challenge in opening universities to the world, with the rapid advances in ICT, is to make knowledge assets such as the syllabuses, teaching materials, and audio/video materials used in the courses of universities available to the public, both in Japanese and in English, so that the world can benefit from them. This is related to the second objective of ICS, mentioned earlier.

In this task, ICS still has some room to improve. The ICS website has been improved greatly to keep news, application procedures, etc., available and accessible to the public in English, no matter where they are. However, teaching materials have yet to be made public.

Universities can and should play a critical role in globalizing Japan and in promoting innovation. Without “open” universities with public interest, Japan will remain “isolated” from the rest of the world.

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