

International Competition and Cooperation in Higher Education in East Asia:

Some reflection based on the concept of “knowledge diplomacy”

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Introduction

Today’s universities are under strong influence of globalization in various aspects. A particularly marked manifestation of this trend is the transnational movement of students. On a worldwide basis, the number of students who study at higher education institutions outside their home countries passed the one-million mark in the 1990s, currently exceeding two million (Sugiyama 2009). The number is expected to reach 7.2 million in 2025 (Brown et al. 2003).

In the background of such a remarkable increase in the number of students studying abroad is the emergence of a global higher education market. This has promoted partnerships between universities in different regions (such as North America, Europe, and Asia), accelerating the mobility of students and researchers. At the same time, intra-regional international alliance and cooperation have also become active in higher education, resulting in an unprecedentedly vigorous movement of persons within the respective regions. In such a situation, the actors of higher education all over the world are pondering over how their human and intellectual resources can be put to optimal use within and between the regions. In Asia, in particular, which had overcome the financial crisis of the late 1990s, higher education expanded rapidly in response to the demand for

human resources supporting the globalizing economy and the formation of a knowledge-based society (Yonezawa et al. 2014).

The purpose of this paper is to examine international competition and cooperation in higher education, with special focus on East Asia, where universities are being rapidly globalized, and student mobility is increasingly accelerated. (In this paper, the greater geographical region composed of the regions generally known as Northeast Asia and Southeast Asia is collectively referred to as “East Asia.”) To do so, we will first address the question of the quality of higher education, which largely determines the transnational flows of students, surveying the progress that has been made thus far through international collaboration for ensuring quality in higher education. Secondly, we will attempt to apply the concept of “knowledge diplomacy” to the analysis of the globalization of higher education. Finally, we will discuss international cooperation as an essential aspect that must be explored in the discussion of the globalization of higher education.

It should be noted at the outset that this paper is intended to describe the current status and tentatively present a new angle of analysis. More demonstrative studies would be necessary to develop a fully conclusive argument.

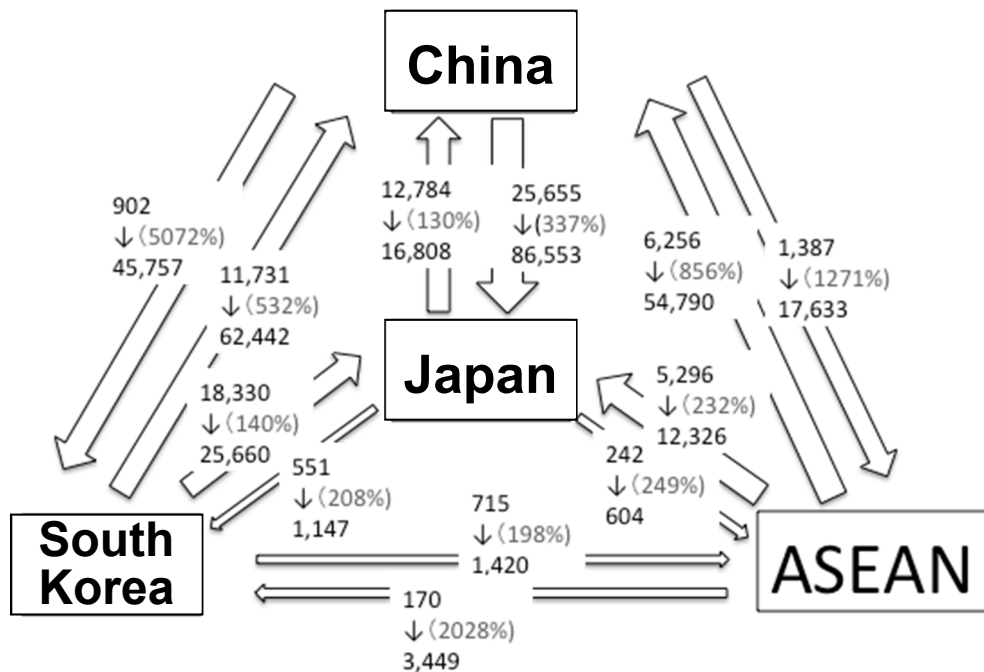
Studying abroad in East Asia

As is generally known, Europe has been the world leader in the globalization of higher education, particularly since the second half of the 1990s. With the Bologna declaration, that is, the joint declaration signed by the 29 European ministers in charge of higher education, in Bologna, Italy in June 1999, Europe launched the Bologna process, a series of reforms aimed at the harmonization of higher education in Europe. In concrete terms, the Bologna process has so far resulted in the Europe-wide adoption of a credit conversion system, a comparable degree system (a three-cycle structure composed of bachelor’s, master’s and doctorate programs), the Diploma Supplement (a document

attached to higher education diplomas to increase international transparency), and the “tuning” of educational structures. Furthermore, a European framework of qualification has been developed to explicitly indicate the levels of knowledge, skills, and competences required to acquire specific qualifications. While these mechanisms are intended to facilitate the mobility of students and guarantee the quality of education, their ultimate goal is to construct a European Higher Education Area (EHEA).

Referring to such pioneering European initiatives, East Asia has been undergoing rapid changes with respect to students studying abroad in recent years. One remarkable change is a rapid increase in the number of students who study in other countries within East Asia, in addition to their traditional destinations, mainly English-speaking countries in North America, Europe, and Oceania. As Fig. 1 illustrates, the last 10 years or so have seen an impressive increase in the number of students from Japan, China, and South Korea who study in ASEAN countries, and vice versa.

Figure 1: Increase in the number of students studying abroad within East Asia (from 1999 to 2010)



* Upper figures: Number of students studying abroad in 1999
 Middle figures: Percentage of increase from 1999 to 2010
 Lower figures: Number of students studying abroad in 2010

Source: Kitamura (2014)

While student mobility is accelerating within East Asia in this manner, in Australia, which used to be a predominant host country for foreign students in the Asia-Pacific region until the beginning of the first decade of the 21st century, the number of students from other countries has been gradually leveling off. This is not to suggest, needless to say, that universities in Australia and New Zealand, as well as other regions outside Asia, are watching from the sidelines the rapid expansion of demand for higher education in East Asia. On the contrary, educational institutions in non-Asian countries have been trying to attract East Asian students through their active involvement in the region.

Pioneering examples in this regard include the Malaysian Campus of Australia's Monash University, and Yale-NUS College, which Yale University and the National University of Singapore jointly opened in Singapore in 2011. This liberal arts college has been attracting great attention for its uniqueness. There are other European and North American universities opening their branch campuses in East Asia, particularly in China, Singapore, Malaysia, and Thailand, or starting common-degree programs with local universities. Such initiatives have rendered the opportunity to study abroad more accessible to East Asian students, who have hesitated to leave for Western countries to study for financial or socio-cultural reasons.

International inter-university alliance

The number of East Asian students studying in other East Asian countries has jumped recently on the strength of the widespread conviction that East Asia is destined to be the growth center of the 21st century. Another important factor is the active development of a range of educational programs that support students wishing to study abroad within the region amid growing inter-university alliance and cooperation within East Asia.

The educational programs in this context include, most commonly, exchange programs based on academic exchange agreements between individual universities. At the same time, it should be noted that various international networks of higher education have been or are being constructed in order to promote inter-university exchange and student/researcher mobility within East Asia. Such networks include the following: in Southeast Asia, where intra-regional higher education alliances have been actively developing, the ASEAN University Network (AUN), composed of leading research-oriented universities in the ASEAN countries, and the ASEAN International Mobility for Students (AIMS), led by the Regional Center for Higher Education and Development (RIHED) of the Southeast Asian Ministers of Education Organization (SEAMEO); and

in Northeast Asia, CAMPUS Asia, a Japan-China-Korea trilateral inter-university consortium, operates an exchange program with a uniform system of mutual credit transfer, grading control, and degree conferment. This is an epochal initiative in that it has been designed and developed through close cooperation and accumulated efforts by the three governments and member universities.

One major common characteristic of these networks is that they aim to improve quality in education with reference to the international standards that have been established in the mainly Western-led higher education market, while at the same time allowing for more Asian diversity. In such developments, the framework of Southeast Asia plus Japan, China, and Korea, that is, “ASEAN Plus Three,” has been growing in importance in more recent years. On the occasion of the workshop organized by the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT) at the end of September 2013, the governmental officials in charge of higher education and representatives of some higher education networks from the ASEAN Plus Three countries assembled in Tokyo and engaged in active discussions on the formulation of guidelines for quality assurance in education, essential for greater transnational student mobility.

Such initiatives through international higher education networks are also faced with a mountain of challenges. It is often pointed out that it is extremely difficult to promote international higher education alliances, particularly due to the educational systems that largely differ from one country to another in East Asia. For example, a joint educational program between universities in different countries cannot be developed without great difficulty because each country has different systems of university accreditation, credit transfer, and so forth. In this regard, an active debate has been taking place recently in Japan over the question of the academic calendar, and whether or not to standardize university admissions in the autumn. In Southeast Asia, where each country has a

different academic calendar, launching a joint international program at the same time for all participating students would be next to impossible. A SEAMEO/RIHED report indicates that there are only about 10 weeks within a single year during which the academic calendars of the 10 ASEAN countries overlap (this problem is all the more serious in the domain of higher education, which has more extended holiday periods). Further promotion of an international alliance would be quite challenging, as it would require some extensive institutional rearrangements.

International competition for students

As the environment surrounding international students has been dynamically changing as surveyed above, the importance of government-led strategies for sending and accepting students across national borders is becoming widely recognized. Prof. Jane Knight of the University of Toronto points to the trend among some Asian and Middle Eastern governments to aim to become an international education hub (a center of an international higher education network) as part of their strategies for the globalization of educational programs (Knight 2011). In East Asia, Singapore and Thailand seem particularly enthusiastic in this regard, actively accepting foreign students, establishing centers of research, knowledge, and innovation, and improving and expanding education and training structures designed to produce highly-skilled workers. It should be noted, however, that these countries do not share a single model of an international higher education hub since they are trying to build varying types of hub that reflect their respective national situations and contexts, as well as their respective sets of policy goals.

Moreover, as already stated above, it has become clear that there are challenges to be overcome in the process of promoting student mobility in Southeast Asia, while this process has nevertheless steadily yielded positive results through accumulated efforts. For example, the AIMS program led by SEAMEO/RIHED is confronted with the difficulty

of maintaining a balance between incoming and outgoing flows of students. One concrete factor in this is the fact that Malaysian and Indonesia students are far more enthusiastic about studying in Thailand than Thai students are about studying in those countries. As another factor, Singapore, which is generally more Western- than Asian-oriented in its university reforms, attaches greater importance to partnerships with North American and European universities, which the Singaporean government also supports, while collaboration within regional frameworks such as those with the ASEAN Plus Three is kept to a certain level. As a result, Singapore's higher education, whose standards are extremely high in Asian terms, does not benefit its neighboring countries very much.

As for joint educational programs between East Asian and Western universities, whose number has been on the rise, the flow of students is predominantly directed from Asia toward North America and Europe, except in the case of Singapore. The movement of students in the opposite direction is not very brisk. Consequently, some universities in East Asia have turned into a kind of common hunting ground, where Western universities vie with one another for students.

The globalization of higher education in East Asia can be contrasted with that of Europe in terms of the situation surrounding students. Kazuo Kuroda of Waseda University argues that East Asia is undergoing, not a process of simple harmonization, but harmonization that aims at enhancing connectivity (Kuroda 2013). In other words, while a highly homogeneous and standardized zone of higher education is possible in Europe through simple harmonization, Asian countries with their diversities and disparities are attempting harmonization, not to drastically reform their educational systems from within, but to strengthen connecting points between the systems (parts that different systems can share). Students comprise the most important constituent of these connecting points.

Importance of the quality of higher education and intra-regional networks

Various problems have been identified amid the increasingly active transnational student movement in recent years, not only within East Asia but across Asia. The problem of the quality of higher education is widely recognized as one of the most important. As a region, Asia is particularly characterized by its diversity. Asia is diverse politically, economically, socio-culturally, and in terms of its higher education systems. Even within East Asia, on the one hand, countries and areas such as Japan, South Korea, Singapore, and Taiwan, enjoy high and stable reputations in the international higher education market, while, on the other hand, countries such as Cambodia and Laos are still in the process of establishing their higher education systems. In China, there are an increasing number of universities mainly in the coastal areas that are highly evaluated internationally, whereas many universities in inland areas lag behind. This Asian diversity takes on an even more complex dimension when South Asia, Western Asia, and Central Asia are included in the comparison. In such a situation, the disparity in the quality of higher education at universities in different countries and areas has resulted in problems in various situations.

When students move between higher education systems constructed in such widely diverse Asian countries and areas, coordination is extremely difficult in the field of university education. Take, for example, credit transfer. In an exchange program based on an agreement between two universities, credit transfer is relatively simple. Today, however, students study abroad in more varied manners, and more and more universities are troubled by the question of how or whether to recognize credits that students have obtained in universities abroad outside a traditional exchange program. At the same time, universities, for their part, are trying to increase the number of international academic exchange partnerships on their way to furthering university globalization. This process can be especially troublesome if a university is trying to build a partnership with a

university in another country or area with which the first university's country has not cultivated a long history of academic exchange and whose educational system is unfamiliar. How can one decide what mode of credit transfer is adequate in such cases? (For the diversity of credit systems in Asia, refer to the table comparing 13 countries in East Asia included in Hotta 2010.) In any case, what is most importantly revealed in this example is that credit transfer between two universities only becomes possible when they mutually acknowledge the acceptable quality of each other's education.

The importance of carefully examining a credit transfer system for a regional network has thus come to be recognized. Europe has been the pioneer in this regard with the European Credit Transfer and Accumulation System (ECTS), developed in accordance with the Bologna declaration of 1999. With reference to ECTS, two credit transfer systems have been developed in Asia: the ASEAN Credit Transfer System (ACTS) and the University Mobility in Asia and Pacific (UMAP) Credit Transfer Scheme (UCTS). The two systems, each forming a network, support credit transfer for students in transnational movement. Nevertheless, the parallel existence of two or more systems creates another problem: insufficient coordination between the systems. There are numerous technical obstacles to interlinking several credit transfer systems due to their differences, including, for example, the notion of a credit, that is, whether it is based on the period of time spent on learning or on the period of time combined with the learning outcomes. However, a solution to this problem is expected to emerge before long, since Vice Executive Taiji Hotta of Hiroshima University has been conducting research in collaboration with SEAMEO-RIHED and other parties on this theme.

Another problem whose importance is also growing along with the transnational mobility of students is quality assurance. As already mentioned, in greatly diverse Asia, the quality of higher education is also diverse. Although international networks have been

formed in Asia for quality assurance in education, they have not been very successful in realizing practical alliances due to the widely differing educational situations in the member countries⁽¹⁾.

Whether it is rearranging a credit transfer system or securing quality assurance, what is essential is that such effort should lead to easier transnational mobility for students. Furthermore, higher education should be invigorated across Asia through the anchoring and generalizing of higher education at a certain stable level. The author believes that not only quantitative but also qualitative development of higher education is highly contributory to regional peace and stability, considering that East Asia is expected to play an increasingly important role in the international community, partly because further economic growth is anticipated in the region and also because it is geopolitically significant for the location of China, an emerging great power. The presence of students, who represent the younger generation of the population, moving across national borders and accumulating cross-cultural encounters through studying abroad, is extremely meaningful in this regard.

In view of all these ramifications of the globalization of higher education, the ASEAN Plus Three Working Group on the Mobility of Higher Education and Ensuring the Quality Assurance of Higher Education has been repeating discussions on transnational student mobility and quality assurance in East Asia. The objectives of this group are (1) to pursue examination toward the formulation of guidelines for the promotion of quality-assured student exchange while respecting the different educational systems and diversity of the ASEAN Plus Three countries and (2) to hold discussions among the concerned parties toward the creation of opportunities for the periodic gathering of ASEAN Plus Three quality assurance organizations⁽²⁾.

The formation of the Working Group was agreed at the First ASEAN Plus Three

Education Ministers Meeting held in Jogjakarta, Indonesia, in July 2012. The initiative that the Japanese government took in this process was highly appreciated by the East Asian education ministers. The Working Group's First Meeting was held in Tokyo in September 2013, followed by the Second Meeting in Jakarta, Indonesia, in June 2014, and the Third Meeting in Bali, Indonesia, in October 2014. The Fourth Meeting is scheduled in Bangkok, Thailand, in June 2015. As stated above, the Working Group is mainly concerned with the development of guidelines for credit transfer and quality assurance so as to realize the smoother international movement of students. The Working Group's deliberations on guidelines will be reported at a future meeting of the education ministers. The adoption of guidelines at this meeting will mean the formation of a fixed common framework for studying abroad among the ASEAN Plus Three countries.

The regional networks and guidelines mentioned in this section are all important steps toward constructing a common space of higher education in East Asia. In 2015, the ASEAN Community will be established, ever more strongly solidifying the links between the ASEAN countries. With regard to higher education, transnational alliance and cooperation will be even more actively discussed within the framework of the ASEAN Socio-Cultural Community, a component of the ASEAN Community. As East Asia differs from Europe in its historical, political, economic, social, and cultural aspects, it is evident that East Asia's common space of higher education will not be completely comparable to the European Higher Education Area as an intra-regional framework of partnership. Still, efforts are likely to be continued and accumulated in the future to promote system standardization and improve inter-system connectivity. In this process, not all states, organizations and people will share exactly the same vision. Their differing, and even conflicting, speculations and intentions could manifest themselves even more clearly than they do today. Considering such developments, in the section that follows, we will briefly

discuss how the concept of “knowledge diplomacy” is related to the globalization of higher education.

Some reflection based on the concept of “knowledge diplomacy”

In today's international community, which is said to be founded on knowledge, many governments are racing against one another to increase their investment in academic activities and research and development, in order to gain supremacy in the creation, acquisition, and transmission of knowledge. Many such countries recognize scientific research and intellectual output as important pillars of their foreign policy. How such international competition in knowledge has become an essential factor in the establishment of a state's political and economic supremacy in the international community is described by Joseph S. Nye Jr., University Distinguished Service Professor at Harvard, in his works presenting the concepts of “soft power” and “smart power” (Nye 2004, 2011). In recent years, as universities all over the world promote globalization, the movement of researchers and students has become galvanized, and these individuals have come to play increasingly important roles as “cultural diplomats.” In addition, many students who study abroad later assume leading positions in political, economic, cultural and other fields upon returning to their home countries.

These phenomena can be perceived as manifestations of “knowledge diplomacy” and its effects. This concept has been discussed since the 1990s, mainly by specialists in international political science and international relations, including Michael Ryan (1988). However, most discussions have basically focused on international negotiations and competition centering on intellectual property rights (such as patent rights, copyrights, and trademark rights). It is only recently that “knowledge diplomacy” has come to be examined in a manner reflecting the broad sense of the word “knowledge.”

The essential importance of promoting strategic knowledge diplomacy or science

diplomacy in practical terms for the maintenance and enhancement of a state's international competitiveness has come to be widely recognized, especially among advanced countries. With the enforcement of the Science and Technology Basic Act in 1995, Japan pledged to reinforce itself on the foundation of science and technology, which would be promoted through industry-government-academia collaboration. Similar moves have been observed in other countries as well. In 2010, the Royal Society of Great Britain published a report titled “New Frontiers in Science Diplomacy—Navigating the Changing Balance of Power.” In 2012, the Advisory Panel on Canada's International Education Strategy compiled a report on “International Education: A Key Driver of Canada's Future Prosperity.” In all these examples, strengthening knowledge diplomacy is viewed as a factor for greater national power in the future.

It should be noted, however, that such international competition in knowledge has proven a threat to some traditional values such as the public utility of scholarship and the freedom of learning. In particular, higher education institutions, as centers of intellectual output, are exposed to tremendous pressure from the cause of knowledge diplomacy. This has resulted in situations in which universities are forced to reexamine their autonomy and other fundamental principles as higher education institutions. A particularly marked trend against the background of the increasingly accelerated globalization of universities is the demand for reform imposed on universities not for academic but for political or economic reasons (refer to the theory of “academic capitalism” in Ueyama [2010], the WTO General Agreement on Trade in Services, and the institutionalization of intellectual property protection by WIPO). One factor that further accelerates this trend is the growing influence of international university rankings.

Prof. Jane Knight of the University of Toronto is an international leading specialist on the question of the public nature of higher education as it undergoes globalization. The

worldwide survey that she conducted with the International Association of Universities (IAU) sheds light on the current status of the increasingly globalizing higher education market, and presents the effects that the globalization of higher education can have on the public nature of scholarship, as well as future challenges. Later, while studying the regionalization of higher education, Prof. Knight began to point to the important role that higher education plays in respective countries' diplomacy, especially knowledge diplomacy (Knight 2014a). As studies on the current status of diplomacy and soft power in East Asian countries, Lee and Melissen (2011) can be cited. However, discussions on knowledge diplomacy are still in the early stages: as far as the author has verified, little demonstrative research has been conducted, either in or outside Japan, on the possible impact of the globalization of higher education on knowledge diplomacy. In such a situation, in the face of the ongoing trend of examining diplomacy in terms of “power” (strongly influenced by Nye's theory of “soft power”), Prof. Knight has raised the question of whether it is appropriate to attempt to understand knowledge-related international relations from the perspective of “power” (Knight 2014b). While unable to present a conclusive view after studying knowledge diplomacy only for a short time, the author agrees with her that it is essential to find a perspective that does not depend on the concept of “power”⁽³⁾. This is because knowledge is essentially a common good for humanity, and the form it should take must not depend on factors of power.

International cooperation in higher education

In the survey of international competition and cooperation in higher education in East Asia presented above, the importance of examining this situation from the perspective of knowledge diplomacy has been suggested. In this section, we will examine international alliances and cooperation in higher education to contemplate how they should be promoted in the future.

International alliances and cooperation in education became active in the 1960s in various parts of the world. Regional conferences on education organized or led by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in those days served as opportunities for member countries in the respective regions to confirm the importance of international cooperation for the popularization and qualitative improvement of education. These conferences also spurred the movement to build international networks in various regions, as exemplified by the commencement of periodic ASEAN education ministers' meetings (Jones 1988).

Such efforts continued throughout the 1970s and 1980s. In the domain of higher education, different actors including education ministries, universities, research centers, and international organizations undertook various activities to deepen international alliances. However, it cannot be denied that in the domain of higher education in particular, international cooperation, whether in the form of the exchange of students and researchers or in joint research projects, remained highly restricted, given the largely differing situations of developed and developing countries. In the 1990s, however, international networks for higher education were put in full-scale operation in various parts of the world. This trend was further accelerated in the first decade of the 21st century (Knight 2008).

Over the years, Asia, Africa, and Latin America, where many developing countries are situated, have slowly but surely developed in economic terms, while intra-regional disparities in economic, political, and socio-cultural terms and other problems have remained unresolved. In such a situation, for many developing countries, human resource development to equip the population with advanced knowledge and skills is an urgently needed task to reduce the disparities within each region and to realize each region's autonomous development. That being said, advanced professional and technical training

is not an easy task for developing countries. This is why improvement in higher education is actively sought through international cooperation.

With regard to international cooperation in higher education, there is an important question to be answered: who is responsible for, and who benefits from, the improvement and expansion of higher education? While higher education has diverse objectives, one of the most important is the training of society's future leaders. Therefore, it must be clearly understood that to improve and expand higher education in a developing country, the country's leaders must basically take responsibility, as well as every single citizen of the country as a supporting member sharing in the social responsibility.

This is obvious from the financial standpoint. For example, the cost of higher education per student (unit cost) is at least several times higher than that of primary or secondary education, with some variations from one country to another. The large part of the cost of higher education is, especially in the case of national and public universities (and also private universities to some extent), covered by public funds (of course, students and their households must also bear part of the cost, but the percentage of burden sharing by society is much greater for higher education than for primary and secondary education⁽⁴⁾). Considering that those who complete higher education usually assume greater responsibilities in society in more socially and economically privileged positions than those completing only primary and secondary education, it seems quite natural that a larger contribution is expected from the public sector⁽⁵⁾.

Therefore, it can be said that the primary party responsible for higher education, which has a highly public nature, is the state. Considerable expenditure of public funds is generally accepted because the state must be responsible for training society's future leaders (Maruyama 2007). However, when it comes to developing countries, it is necessary to ask anew what role higher education is supposed to play, keeping in mind

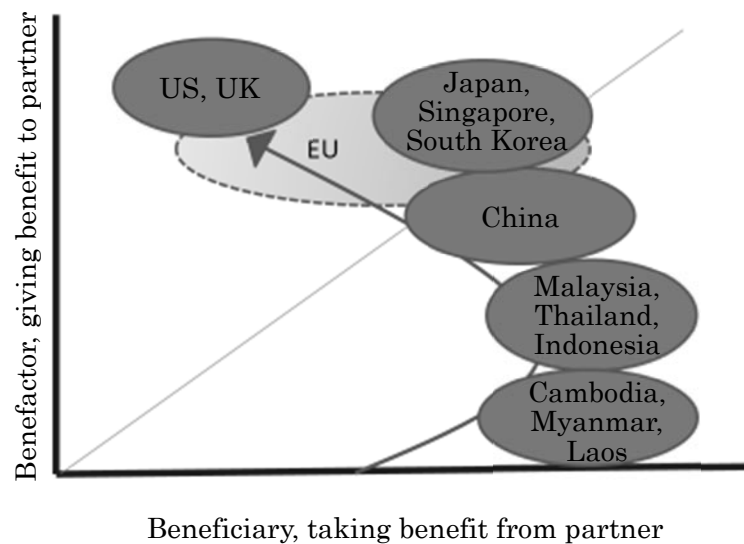
that those with higher education usually enjoy more social and economic benefits as stated above.

This question takes on a special meaning when aid is provided to promote higher education in developing countries through international alliances and cooperation. Assistance for higher education basically consisting of tax revenues in developed countries can end up creating an extremely problematic situation in many cases, if the assistance is heavily targeted at a handful of individuals who are in fact rather well off in their domestic context, leaving out the truly socially and economically vulnerable. With such a situation in mind, assistance by aid organizations in developed countries and international organizations for higher education in developing countries often does not provide a fully satisfactory response to the questioning of the largest benefactor, the general public of developed countries. Possible causes for this include a lack of in-depth deliberations between donor and recipient organizations (embassies, aid organizations, governmental agencies for international exchange, etc.) and the persistence of stereotypical ideas about international cooperation.

This problem is perceived presumably because the stages illustrated in Fig. 1 have been presupposed for international cooperation partners in higher education. In other words, a partner may be positioned as a benefactor rather than a beneficiary, or a beneficiary rather than a benefactor, depending on whether it gives more than it takes, and depending on the country's degree of socio-economic development, maturation of higher education, and so forth. Needless to say, these positions can gradually change as the country achieves socio-economic development and its higher education system improves. Nevertheless, as many proponents of the world-systems theory and the dependency theory have criticized, it is reasonable to assume that the relationship between developed countries at the core and developing countries on the periphery does not change

easily within the framework of the international creation of knowledge (Altbach 2007; Wallersteinm 1999). While it is true that more knowledge creation is taking place in developing countries today than in the past, this is still limited to leading research-oriented universities, and the range of research and development has not been fully expanded in developing countries (in this regard, refer to Altbach et al. 2009).

Figure 2: Relationships of international cooperation for higher education



Source: Drawn by the author based on Kaneko, Kimura, and Yamagishi (2002)

To further examine this point, the author proposes in this paper to adopt two perspectives: intellectual exchange and development assistance. Accordingly, the author classifies international cooperation for higher education in developing countries into intellectual exchange and development assistance (Table 1). Intellectual exchange includes academic exchange conducted at the level of universities, faculties, laboratories,

and individual researchers, as well as international cooperation conducted through support provided by organizations charged with the promotion of academic exchange (such as the Japan Society for the Promotion of Science, the Japan Foundation, the Fulbright Program, and the British Council). On the other hand, development assistance, classified into multilateral assistance by international organizations and government-led bilateral assistance, is provided to developing countries in various modalities such as technical assistance, non-reimbursable funds, and reimbursable funds.

Table 1 Classification of international cooperation for higher education

	Intellectual Exchange	Development Assistance
Knowledge transfer	Two-way	- Basically one-way
Funding	- Non-ODA - Funding often by universities or organizations in developed countries, in some cases, in collaboration with organizations in developing countries	- ODA (official development aid) - Funding mainly by developed countries; in some cases, funds secured through collaboration between developed countries and universities/organizations in developing countries
Relationship of actors	- Equal partnership	- Donor-recipient
General period	- Mid- to long-term	- Short- to mid-term

Source: Created by the author

The two types of international cooperation have some characteristic differences. Firstly, in intellectual exchange, “knowledge transfer” does not necessarily occur solely from a developed country to a developing country. Knowledge is often transmitted from

the developing country to the developed country as well. In this sense, the parties are in a bidirectional relationship. As for development assistance, on the other hand, its main objective is the transmission of resources possessed by a developed country (such as knowledge, skills, and funds) to a developing country. This therefore indicates a unidirectional relationship. Considering this difference, the actors involved in intellectual exchange are equal partners, whereas in development assistance, a donor-recipient relationship tends to be emphasized between the actors.

In terms of funding, in intellectual exchange, various funds are collected. In many cases, funds tend to be provided by a university or organization in a developed country. In some cases of collaborative projects with an organization in a developing country, funds are also secured by the developing country. On the other hand, in development assistance, official development aid (ODA) constitutes the basic source of funds, provided by the developed country. However, there also cases of development assistance in which the developed country and a university or organization in the developing country work together to secure funds. The duration of the project period, which can be related to funding, tends to be medium- to long-term for intellectual exchange, regardless of the availability or non-availability (or amount) of funds. Development assistance, which largely depends on the ODA budget, is often conducted from a relatively short- or medium-term perspective.

It should be also noted that international cooperation for higher education has basically taken place within one of these two types thus far, but the actual ongoing projects suggest an increase in the number of international cooperation projects that cannot be clearly classified into one or the other.

For example, the most typical example would be the Science and Technology Research Partnership for Sustainable Development (SATREPS), which Japan has been

actively promoting in recent years. In SATREPS, jointly operated by the Japan Science and Technology Agency (JST) and the Japan International Cooperation Agency (JICA), researchers from Japan and developing countries conduct studies together to find solutions to global problems (relating to the environment, energy, natural disasters [disaster reduction], infectious diseases, food supply and so forth), and propose problem-solving measures through research. International and inter-regional cooperation is indispensable to solve global problems. Developing countries, particularly vulnerable in the face of global problems, require research and development that closely reflect local needs to better respond to these problems. Moreover, the integration of knowledge owned by developing countries and Japan's cutting-edge science and technology is expected to produce highly positive results⁽⁶⁾.

Until recently, it has been difficult to expect researchers in developed countries (especially specialists in natural sciences) to actively take part in development assistance, since being based in a developing country, where the research environment is often far from ideal, means that the scientists would be distanced from the front line of international R&D competition. In research programs under SATREPS, however, working in developing countries becomes an advantage for scientists due to the conspicuous manifestation of global problems there, which enable more advanced research. Moreover, in such research programs, it is essential for researchers from developing and developed countries to work on an equal footing, sharing each other's knowledge. Such initiatives have also been promoted by aid organizations of other countries and are likely to spread in the future. (For example, the US Agency for International Development [USAID] is promoting programs called Partnerships for Enhanced Engagement in Research [PEER] in collaboration with the National Science Foundation [NSF] and the National Institute of Health [NIH]⁽⁷⁾.)

These programs represent a new model that combines the two types of international cooperation—intellectual exchange and development assistance—which the author proposes to call “Intellectual Development Cooperation.” This model, which transcends the conventional two types of cooperation, proposes a new approach to international cooperation in higher education, which is accomplished through mutual efforts by developed and developing countries. To promote international cooperation in this new form, problems facing developed and developing countries must be accurately grasped, and how optimally the resources available on either side can be utilized must be determined to find solutions to these problems, and competencies must be developed that are necessary to make full use of the resources.

Conclusion

The globalization of higher education is basically a phenomenon that naturally occurs as society changes. As a knowledge-based society expands beyond its national borders, students spontaneously move in search of better educational opportunities. In response, universities offer various programs, trying to attract as many excellent students as possible. Governments also devise policy measures that support universities and individual students from the standpoint of building national power or for the purpose of realizing a culturally enriched society. In this process, as symbolized by the concept of knowledge diplomacy, the principle of competition is at work between countries that want to develop or attract quality human resources. Perhaps the globalization of higher education can be described as a phenomenon that occurs as a result of responses by universities and governments, influenced by changes in the international socio-economic environment, to student mobility, which has been a characteristic of university education since its very beginning.

East Asia is one of the regions where the most dynamic environmental changes are

taking place in connection with the globalization of higher education. Among the higher education systems in the world, universities in Asia, including East Asia, are expected to promote globalization most actively, as suggested by the rapid increase in the number of transnational students in East Asia. Phil Baty, an editor-at-large at Times Higher Education says in an article that appeared on the website “ReseMom” that, compared to Europe and North America, Asia will witness an increase in the number of students who will go on to higher education in the future, as well as in the number of universities that will focus efforts on research that will create a knowledge economy as a central presence in the world.

The presence of Asian countries has been growing in political and economic terms and in the international community. In the future, it would be necessary to conduct studies to clarify how the geopolitical factors of Asian countries influence the utilization of higher education in knowledge diplomacy. Phenomena such as the globalization of universities and the gathering of students of varying backgrounds are already part of knowledge diplomacy, as well as important developments in the fostering of future actors of knowledge diplomacy. However, little demonstrative research has been conducted from such a perspective. It is essential that researchers and practitioners interested in the globalization of higher education continue further examination of these trends.

Designing systems for quality assurance is essential to improve the quality of higher education in Asia and ensure that students studying outside their home countries, whose number has been increasing, can access appropriate educational opportunities. At the same time, universities must reinforce their administrative and operational abilities and actively engage in faculty development. In making these efforts, the optimization of accreditation and credit transfer systems constitutes an area in which the results from the

efforts can be concretely gauged and evaluated. Further efforts are expected in this regard from the governments and universities in East Asia.

To tackle challenges that lie along the way toward realizing optimal higher education, it is important to further examine how international competition and cooperation should be in higher education.

Notes

(1) Network (APQN) and in ASEAN region, the ASEAN Quality Assurance Network (AQAN) have been established. They are faced with several challenges to overcome before becoming practically functioning networks. For these challenges, refer to ideas presented in Kuroda (2013).

(2) Regarding this working group, refer to the report on The First Meeting of the ASEAN Plus Three Working Group on the Mobility of Higher Education and Ensuring Quality Assurance in Higher Education (in Japanese) on the MEXT website

http://www.mext.go.jp/b_menu/houdou/25/10/1340245.htm (Retrieved on December 24, 2014).

(3) In her lecture at the international symposium organized by Sophia University in Tokyo on December 13, 2014, “Higher Education Harmonization and Networking in East and Southeast Asia: How the AIMS Program Can Contribute to an Emerging ASEAN Community,” and during the conversation that the author had with her following the symposium, Prof. Knight pointed to the importance of research into knowledge diplomacy without reference to the “power” theory.

(4) For higher education costs, refer to the international comparative studies by the Center for Research and Development of Higher Education at the University of Tokyo (2007).

(5) Needless to say, in developing countries, there is often the problem of unemployment

of the highly educated, since the economy and the job market have not fully developed to hire them. Nevertheless, in higher education, low-income countries are characterized by a private earning rate that is far higher than the public earning rate. This clearly indicates that, in general, those who have finished higher education are far more economically privileged (Psacharopoulos and Patrinos 2004).

(6) For details of SATREPS, see the program's website: <http://www.jst.go.jp/global/> (Retrieved on June 1, 2015)

(7) For details of PEER, see the USAID website: <http://www.usaid.gov/what-we-do/GlobalDevLab/international-research-science-programs/peer> (Retrieved on June 1, 2015)

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