

8. Expanding overseas study and research opportunities for young Japanese researchers

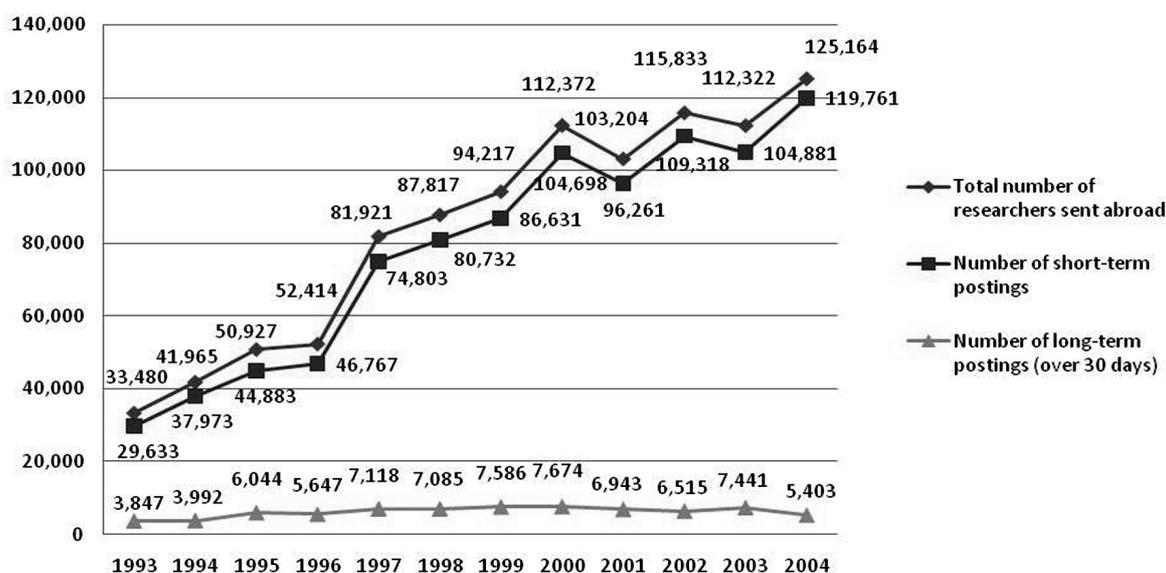
(1) Trends and issues

According to survey results, 37% of Japan's top researchers with high global citation rankings have experience working overseas, and the majority of researchers with post-doctoral experience undertook their post-doctoral fellowships abroad.¹⁾ These results suggest that in order to foster scholars who can play an active role internationally, it is important to provide researchers with opportunities to gain experience overseas at an early stage.

The overall number of Japanese researchers posted abroad has been increasing steadily. However, the number of long-term postings (over 30 days) is actually tending to decrease.²⁾ This indicates that in reality, overseas experience for researchers is not necessarily being advanced (Figure III-8-1).

Figure III-8-1 Number of researchers sent abroad by period of stay (short and long term)

Source: Ministry of Education, Culture, Sports, Science and Technology (MEXT) (2006) *Kokusai kenkyū kōryū no gaiyō (heisei 16nendo)* [Outline of international research exchanges (FY 2004) (unofficial translation of title)].



One characteristic of outbound overseas programs offered by Japanese universities is that an overwhelmingly larger number of them operate at undergraduate level than at graduate school level (Table III-8-1).

A study conducted by Yokota et al. (2006) revealed that Japanese universities usually only send “between one and nine” graduate students abroad at any one time, while very few universities had organized “double degree” programs or “curricular programs with mandatory study abroad”.

In summary, outbound study abroad programs at Japanese universities generally focus on the undergraduate level while development of systematic study abroad programs at graduate level lags behind significantly.

Table III-8-1 Number of students sent abroad under study/training abroad programs in FY 2004 (Multiple answers)

Course	Period	Number of students sent abroad				Number of universities with a study abroad program
		1-9	10-29	30-59	60 or more	
Undergraduate	Not longer than 2 months	39	56	32	57	184
	3 months – 1 semester	77	30	—	—	107
	1 year or more	72	43	26	—	141
Graduate school	Not longer than 2 months	33	—	—	—	33
	3 months – 1 semester	32	—	—	—	32
	1 year or more	42	—	—	—	42

Source: Yokota et al. (2006)³⁾

According to the study conducted by Yokota et al. (2006) (Table III-8-2), major issues in study/training abroad programs are the “lack of foreign language ability (74.4%)”, “small number of applicants (52.7%)”, “insufficient risk management systems (44.0%)”, “disadvantage in job hunting (27.4%)”, and “difficulty in transferring credits earned during study abroad (25.3%)”.³⁾

Table III-8-2 Issues in study/training abroad programs (Multiple answers)

Issue	Number of Universities responding	% (of 277 universities)
Lack of foreign language ability	206	74.4
Small number of applicants	146	52.7
Insufficient risk management systems	122	44.0
Disadvantage in job hunting	76	27.4
Difficulty in transferring credits earned during study abroad	70	25.3
More applicants from certain departments or courses	60	21.7
Large administrative burden	51	18.4
Discontinuity in study progress at home university	43	15.5
No cooperation from faculty members or departments	33	11.9
Others	26	9.4

* Total number of responses: 277

Source: Yokota et al. (2006)³⁾

Meanwhile, Yokota et al. (2006) also described the following trends:³⁾

Regarding future policy on study/training abroad programs for Japanese students, 22% of universities indicated that they were “planning to expand substantially” and 35% responded “planning to expand slightly”. This proves that a majority of Japanese universities (56%) have a intend to expand such programs. On the other hand, no university indicated that plans to scale down such programs. Figures from different categories of university show . . . 51 of 64 national universities (approximately 80%) planning to expand study/training abroad programs. This percentage is almost twice that of public universities (42.3%) and private

universities (52.8%). National universities, which have conventionally been rather passive about developing study/training abroad programs for students, have begun to work on such programs at last.

As stated above, organizational efforts at graduate school-level in particular are important in expanding outgoing mobility opportunities for Japanese students and researchers. Further active efforts are expected, particularly in national universities.

The section below highlights some noteworthy initiatives pursued by the pilot institutions to expand outgoing mobility opportunities for Japanese students and researchers.

(2) Notable efforts

Tohoku University: Concluding joint curriculum (double degree) agreements with three leading institutions in the world over a year and a half under the initiative of headquarters

Tohoku University concluded joint curriculum (double degree) agreements with INSA-Lyon and Ecole Centrale in France and Tsinghua University in China over a year and a half under the initiative of its Global Operation Centre (GOC) established in June 2005. The university's Executive Vice President for Research and International Affairs serves concurrently as GOC director, and the university recruited two international development managers from the private sector through open recruitment. As a result of these efforts, the university developed a system that allows prompt negotiation, internal coordination, and decision making, and succeeded in concluding the above three agreements in a short space of time. It opened a U.S. office in Los Altos, California, in May 2006 with a view to further expansion of joint education programs. The university also opened a China office in Beijing in April 2007. It is considering opening an office with similar functions in France as well.

Tottori University: Utilizing an overseas base in outbound programs

From October to December 2006 Tottori University implemented an overseas practical education curriculum integrating lectures and fieldwork at the Northwest Center for Biological Research (CIBNOR), the university's research base in Mexico. Faculty and administrative personnel were posted specially to work with CIBNOR staff to provide support for the students participating in the program.

Kyushu University: Overseas experience program utilizing donations from foreign alumni

Using funds donated by a Taiwanese graduate of Kyushu University who went on to become a successful entrepreneur in the United States, the university launched an entrepreneur education program ("Kyushu University - Robert Huang Entrepreneurship Program") in 2006. Under the program, 20 students of the university undergo a one-week on-site program including informal discussion with prominent entrepreneurs and engineers in Silicon Valley, exchange with college students (including Japanese and American students enrolled at Stanford University), and visits to high-tech enterprises and immigrant localities. The program is implemented with support from the university's California office.

Osaka University, Nagasaki University, Hitotsubashi University, and Kyoto University: Development of a risk management manual

Osaka University: Produced the "Osaka University Crisis Management Guideline" for international exchange, etc. in FY 2005.

Nagasaki University: Produced the "Risk Management Manual for International Exchange (Sending Japanese Students Abroad and Accepting Foreign Students) (unofficial translation of title)" and "Risk Management Manual for Overseas Business Trips and Transfer of Staff (unofficial translation of title)" in FY 2006.

Hitotsubashi University and Kyoto University:
Currently developing a risk management manual.

Waseda University: Strengthening risk management systems based on services offered by a private enterprise

In July 2006 Waseda University introduced a risk-handling support system developed and operated by a private company. Services provided by the company include regular provision of local risk information for students and faculty/staff abroad and 24-hour free call center services.

Tokyo University of Foreign Studies: Overseas risk management training

The university invited risk management experts in July 2006 to operate a two-day intensive “Overseas Risk Management Training” program for faculty/staff and students.

Tokai University: Development of a traveler tracking system

In response to the growing number of visits to foreign countries by students and faculty/staff as a result of the expansion in international activities, in FY 2006 Tokai University began developing a traveler-tracking system as part of its risk management strategies. The university plans to start trial operations of the system in FY 2007. It will oblige students and faculty/staff going abroad to register their travel information (departure and return dates, destination country, and reason for the travel) in advance and encourage them also to register means of travel, specific destination cities/countries, contact information, etc. Users input information online, and ID codes are issued for all data registered.

The university also plans to use data accumulated in this system to analyze trends in overseas travel among students and researchers.

Keio University: University-wide goal setting

Under the initiative of the Organization for Global Initiatives (OGI), Keio University has taken an institution-wide approach to setting concrete numeric goals regarding intake of foreign students and dispatch of Japanese students on overseas programs. Specifically, it plans to achieve the goal of 1,000 inbound and 1,000 outbound students in FY 2007, the university’s 150th anniversary. As of FY 2003 these numbers were 636 and 355 respectively.

Waseda University: Mandatory study abroad program

The School of International Liberal Studies, established by Waseda University in 2004, sets a one-year mandatory study abroad program as a condition for graduation, with students going abroad from the second semester of the sophomore year to the first semester of the junior year.

Students are free to choose their preferred destinations, with approximately 70% selecting Western countries. The university plans to introduce measures to promote study abroad in non-Western and non-English-speaking countries.

The university’s Center for International Education coordinates support services for students studying abroad.

(3) Analysis and proposals

Need for strategic and organized study abroad programs

It is widely recognized that giving students and researchers opportunities to gain experience overseas at an early stage is very important from the perspective of enhancing the quality of education and research and increasing a university’s appeal to prospective students. However, not much progress has been made in developing organized approaches to enhancement of study abroad programs. In particular, there are very few systematic

programs for graduate school students.

In contrast, many universities in Europe are developing courses and programs that enable students and researchers to undergo education and experience research at institutions other than their home university. In the context of Europeanization of education and research, it is recognized that these moves can contribute to improving the quality of education and research and increasing the appeal of the universities.

Establishing partnerships with prominent universities around the world and developing attractive study abroad programs has thus become an important theme from an international strategic perspective. All universities around the world are currently seeking good partners.

There is a tendency for many Japanese universities to accept a larger number of foreign students and researchers than the students and researchers they send abroad. Some universities, however, perceive improvement in outbound study abroad programs as a more urgent issue than accepting foreign students/researchers, and set numeric goals to achieve balance between the overall numbers of students/researchers sent abroad and those accepted. Development and enhancement of study abroad programs are tasks that require time, labor, and funds. Therefore, an approach that positions them clearly as strategy issues and sets specific goals is likely to be effective in achieving practical progress.

Development of a “risk management” system for outbound programs

Major issues in study/training abroad systems offered by Japanese universities are the “lack of foreign language ability,” “small number of applicants,” “insufficient risk management systems,” “disadvantage in job hunting,” and “difficulty in transferring credits earned during study abroad” (Yokota et al. [2006]).³⁾

Development of a risk management system is an issue that universities cannot avoid when they expand outgoing mobility opportunities for researchers and students. Some universities are making notable efforts to improve their risk management systems.

It will be beneficial for Japanese universities to develop shared awareness and work together on the issue of risk management rather than attempting to tackle it on an independent basis, particularly because it encompasses issues requiring specialist expertise. It is necessary to establish a mechanism for all universities to share information on risk management and cooperate with one another in the development of experts and implementation of training initiatives.

Utilization of overseas bases

Note should be taken of universities that have established an overseas research base as a training site and utilize the base as a support office for study abroad programs.

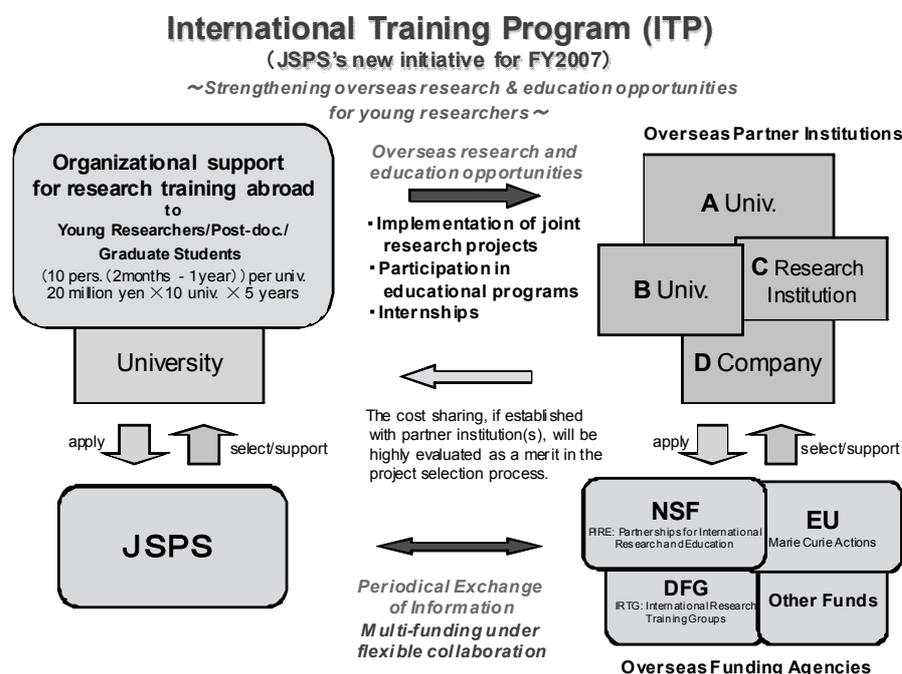
National-level efforts to expand outgoing mobility opportunities

Funding agencies overseas are promoting initiatives to provide more outgoing mobility opportunities to students and young researchers. These include the “Partnership for International Research and Education (PIRE) Program” in the U.S. National Science Foundation (NSF), designed to provide overseas experience for young researchers, and the “Initial Training Network” project proposed under the Marie Curie Actions in the EU.

In Japan, JSPS has launched the “International Training Programs (ITP)” for young researchers as a new project for FY 2007. In this project, JSPS provides young researchers with research opportunities at overseas institutions (for periods of two months to one year) under organizational collaboration between Japanese universities and overseas partner institutions (universities, research institutes, enterprises, etc.) (see Figure III-8-2).

It is important to develop this kind of funding mechanism and create opportunities for universities to exchange information on an international level.

Figure III-8-2 International Training Program (ITP) for young researchers



References:

- 1) Hiroyuki Tomizawa, Takayuki Hayashi, Yasuhiro Yamashita, and Masayuki Kondo (2006) *Sugureta seika o ageta kenkyū katsudō no tokusei – toppu risāchā kara mita kagaku gijutsu seisaku no kōka to kenkyū kaihatsu suijun ni kansuru chōsa hōkokusho [Characteristics of excellent research activities: Report of survey on top-researchers' activities and their views on effects of Japan's science and technology policy and R&D status]*, Second Theory-oriented Research Group Survey Material 122, National Institute of Science and Technology Policy, Ministry of Education, Culture, Sports, Science and Technology.
- 2) Ministry of Education, Culture, Sports, Science and Technology (MEXT) (2006) *Kokusai kenkyū kōryū no gaiyō (heisei 16nendo) [Outline of international research exchanges (FY 2004) (unofficial translation of title)]*.
- 3) Yokota Masahiro, Tsuboi Tsuyoshi, Shiratsuchi Satomi, Ota Hiroshi, and Kudo Kazuhiro (2006) *Kiro ni tatsu nihon no daigaku – zen yonensei daigaku no kokusaika to ryūgaku kōryū ni kansuru chōsa hōkoku [Japanese Universities at a Crossroads: Research Report on the Internationalization and International Education Exchange of Japanese Universities.]*, Centre for Student Exchange, Hitotsubashi University.