

# **Internationalization of Higher Education in Japan: The Aim and Challenge at the University of Tsukuba**

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## **Abstract**

*The influence of internationalization on higher education is rapidly growing throughout the world. In Europe, the interrelation between universities, including the exchange of students and faculty members, has been stimulated through the Erasmus and the Erasmus Mundus Programs and the Bologna process. As for the United States, many of their universities are placed high in world university rankings, attracting many intelligent international students, and both the universities and the federal government constantly pursue strategic methods for strengthening their presence in the international community. In Japan, the accumulated total number of international students reached 110,000 students in 2003, and now the government is aiming to increase this number to 300,000 by 2020. As is evident from the figures disclosed by the government and by the university rankings, statistically speaking, Japan has a low ratio of international students and faculty members in comparison to other countries whose universities rank high on the chart. Focusing on increasing the number of international students is one immediate strategy for concerted action toward internationalization. However, it is important to note that a high ratio of international students and faculty members does not necessarily lead to true internationalization; rather it is the quality of the programs and output that need to be focused upon. This paper explores the current situation of internationalization and its effect through a comparison of Japanese universities with universities of other countries. By examining examples of actual programs currently offered at the University of Tsukuba for meeting the needs and education of students for the globalized world, this paper will also discuss how Japanese universities will be able to grow and strengthen their status in comparison to their competitors.*

**Keywords:** internationalization of higher education, world university rankings, quality assurance, G30, TRANS

## 要旨

高等教育の国際化は世界中で急速に進んでいる。ヨーロッパではエラスムス計画、ボローニャプロセス、エラスムス・ムンドゥスにより、ヨーロッパ内の学生や教員の流動化、大学間の協力関係を促進している。一方、アメリカでは世界大学ランキングのトップを占める大学も多く、既に優秀な留学生を引き寄せているようにも思えるが、それでも多くの大学やアメリカ政府が国際化戦略を強化し、国際競争力の一層の向上を図ろうとしている。日本では、2003年に留学生受け入れ数が約11万人となり、さらに政府は2020年までに30万人の留学生受け入れを目指している。実際、日本の大学は欧米のトップランクの大学に比べ、留学生や外国人教職員の数が少ないことが世界大学ランキングや政府の調査等で明らかになっており、国際化という点でまず留学生の数を増やすことが考えられる。しかし、単に留学生の数を増やすだけが国際化とはいえず、大学の国際的な質の保証を図っていくことが重要である。本稿では、世界の大学と日本の大学の国際化の現状について概観した上で、グローバル化に対する高等教育の国際化の一つとして現在筑波大学で行われているプログラムの紹介を行い、高等教育の国際化という世界の動向の中で、どうすれば日本の大学が国際競争力の一層の向上を図ることができるかを示す。

**キーワード：**高等教育の国際化、世界大学ランキング、質の保証、G30、TRANS

## 1. Introduction

The purpose of this paper is to explore the situation and effect of internationalization in the field of higher education in Japan and the resulting trends seen today. Actual examples from programs at the University of Tsukuba will be introduced to show how the university is working toward internationalization in order to make Japan a more open nation and a productive and reliable member of the international community.

Internationalization has been a subject of much interest in recent years in Japan. The Ministry of Education, Culture, Sports, Science and Technology (MEXT) launched the Global 30 (known as G30) project in 2009 to internationalize universities in Japan by increasing the number of international students to 300,000 by 2020. The Plan for 300,000 Exchange Students (MEXT 2008) was put forward

by former Prime Minister Fukuda as a policy measure to make Japan a more open society. In 1983, Nakasone, the Prime Minister at the time, advanced The Recommendations for a Foreign Student Policy for the Twenty First Century (MEXT 1986) and proposed to increase the number of international students to 100,000 by 2000. The number of international students reached 100,000 in 2003 and continues to rise (Terakura 2009). From these plans, internationalization would appear to be an important issue in higher education in Japan.

Internationalization is often confused with globalization (Altbach 2004). As Altbach and Knight (2007: 290) point out:

Globalization and internationalization are related but not the same thing (...) Globalization is defined as the economic, political, and societal forces pushing the twenty first century's higher education toward greater international involvement.

On the other hand, “internationalization includes the policies and practices undertaken by academic systems and institutions - and even individuals - to cope with the global academic environment” (Altbach and Knight 2007: 290; Knight 2008, 2011). In short, globalization focuses on the worldwide flow of ideas, resources, people, economy, values, culture, knowledge, goods, services and technology. Internationalization emphasizes the relationship between and among nations, people, cultures, institutions and systems. Internationalization of higher education has been positively and negatively influenced by globalization, and the two processes, while fundamentally different, are closely connected (Knight 2012). Knight (1994: 1) also points out:

[T]he purpose and meaning of internationalization are different from institution to institution but typically involve a range of activities, policies and services that integrate an international and intercultural dimension into the teaching, research and service functions of the institution.

This paper defines internationalization in higher education as the active stimulation of growth in the number of international students and faculty members by providing a high quality learning environment and its resultant output synergy in worldwide exchange. This paper will investigate the current global situation of

internationalization and its effect on higher education and will discuss how Japanese universities will be able to grow and strengthen their status. The organization of this paper is as follows. The following section will discuss current global trends of internationalization in higher education. In support of this, section 3 will review examples of actual programs currently offered at the University of Tsukuba. Finally, section 4 will present the conclusions and further discussion on the theme of this paper.

## **2. Current trends of internationalization in higher education**

Today, universities all around the world are ranked according to their status. As this rank affects their chances of being granted subsidies from governments or potential sponsors, and also their chances for international partnerships with other universities, being ranked high is of prime concern. These influential rankings of universities are published by the Times Higher Education-QS World University Rankings (THE-QS) and by the Shanghai Jiao Tong Academic Ranking of World Universities (SJT). This trend of university ranking began in 1983 when the US News and World Report (USNWR) first published information on universities in the United States. Over the years the rankings have grown to cover more countries, (to more than forty countries at present) and to involve more criteria.

The criteria, or the performance indicators, used to analyze the universities by THE-QS are as follows<sup>1</sup>:

### Criteria used by THE-QS

- Teaching: learning environment (30%)
- Research: volume, income and reputation (30%)
- Citations: research influence (30%)
- Industry income: innovation (2.5%)
- International outlook: staff, students and research (7.5%)

These criteria change over time to adapt the basis of how universities are ranked internationally and for fairness. It is interesting to remark that one criteria that has remained over the years is that of international outlook which focuses on the number of international faculty members and students. International outlook accounts for only 7.5% of the overall ranking percentage but it is marked as being

an area where more effort is needed. Leading universities on the chart actually have a high ratio of either or both international faculty members and students. For the ratio of faculty members, as Table 1 shows, UC Berkeley and Yale have approximately 30%, and Harvard, Cambridge and Oxford have approximately 40%. However, an average Japanese university has a ratio of about only 5%. In terms of international students, Japanese universities have a ratio of only 3.2%, whereas Harvard and Yale have around 20% and MIT, Cambridge and Oxford have around 30% (see Table 2)<sup>2</sup>.

**Table 1: Ratio of International Faculty Members**

	Japan total	UC Berkeley	MIT	Harvard	Yale	Cambridge	Oxford
<b>Total facult[y]</b>	352,514	1,772	1,522	2,902	2,902	4,090	4,553
<b>International facult[y]</b>	17,600	528	112	1,119	899	1,699	1,775
<b>Ratio</b>	5.0%	29.8%	7.4%	38.6%	31.0%	41.5%	39.0%

(THE-QS 2009)

**Table 2: Ratio of International Students**

	Japan total	UC Berkeley	MIT	Harvard	Yale	Cambridge	Oxford
<b>Total students</b>	3,652,189	33,933	10,253	18,318	11,358	17,481	17,953
<b>International students</b>	118,498	2,521	2,789	3,615	1,747	4,667	5,133
<b>Ratio</b>	3.2%	7.4%	27.2%	19.7%	15.4%	26.7%	28.6%

(University of Tokyo 2007 and Japan Student Services Organization 2007)

Traditionally in Japan, the main strategy chosen for internationalization has been to promote recruitment and to increase the number of international students. But, as is visible from these figures, it is obvious that Japanese universities are quite behind those of other countries. This applies to international faculty members as well. While the current focus in Japan is on increasing the number of international faculty members and international students, Japanese universities are struggling with the dilemma of a declining domestic student population and a prolonged economic recession. For instance, the number of Japanese students studying overseas hit a peak of 82,945 in 2004 but has been falling ever since (MEXT 2012)<sup>3</sup>. However, if each and every one of the recruited international students could produce high quality output, then this would be a positive force for the

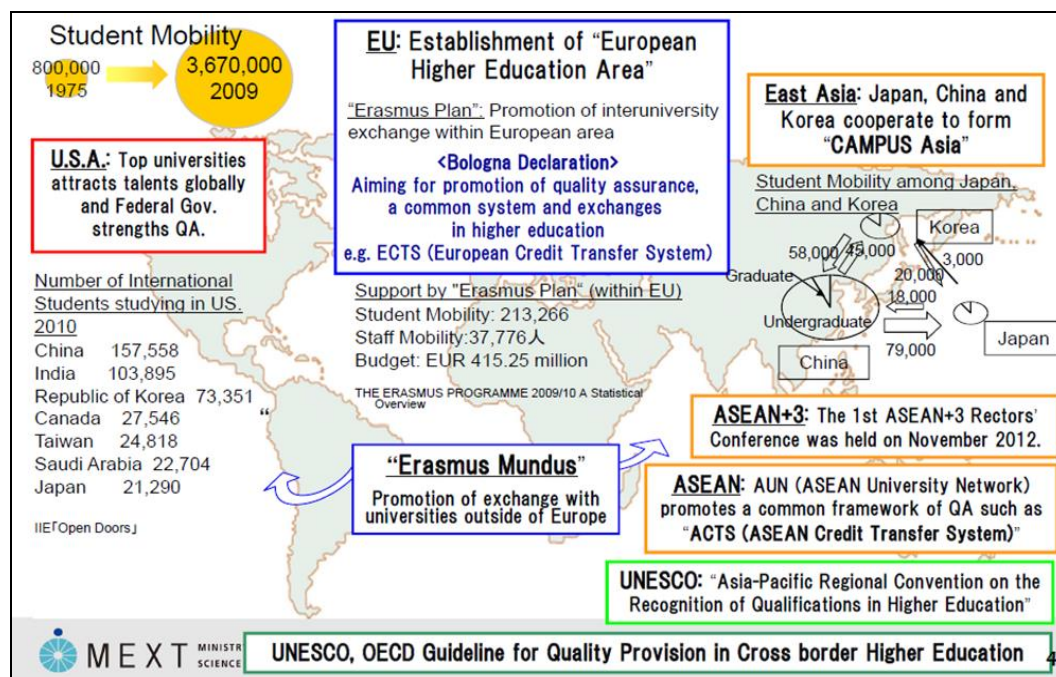
universities. As such, UNESCO/OECD guidelines for Quality Provision in Cross-border Higher Education (2005)<sup>4</sup> clearly states and supports the development of practices and principles to address this aspect. Furthermore, this would stimulate high synergy with local students causing positive momentum for the concerned university's research and education.

As Figure 1 illustrates, an increase in numbers of international students and faculty members is a trend at the international level. As is visible from the following chart, it is evident that each region (United States, European Union (EU) and East Asia) is increasing the number of international students. Many top ranking universities in the United States already have substantial numbers, but the federal government is supporting even more continued growth.

The EU is establishing university networks, not only across Europe, but also between Europe and other regions of the industrialized world. As seen from the various projects that have been launched, from the Erasmus Program (The European Community Action Scheme for the Mobility of University Students) to the Bologna Declaration, and now the Erasmus Mundus program, the EU is achieving high interrelation between universities.

In East Asia, CAMPUS Asia (Collective Action for the Mobility Program of University Students in Asia) was launched in 2011 in Japan, China and Korea, and started trilateral exchange programs for double degrees, semester exchange and short-term exchange programs, while maintaining a high standard and improving commonality of credit-transfer and grade evaluation.

Considering the circumstances mentioned above, internationalization is one of the important issues in higher education worldwide. As Wood (1991) mentions, global education can no longer be viewed as a secondary consideration; we must recognize that it is central to the development of graduates who can cope creatively with the modern, interdependent world.



(MEXT 2012)

**Fig. 1: Global Trend of Regionalization in Higher Education**

### 3. Action taken by the University of Tsukuba

This section will examine how the University of Tsukuba is trying to promote internationalization by providing high quality education and an environment that allows both Japanese and international students to freely stimulate communication and to collaborate with one another. The University of Tsukuba, located in Tsukuba Science City, 60 kilometers (36 miles) North-East of Tokyo, has approximately 140 years of history. It is recognized as one of Japan's oldest and most prestigious universities. It is consistently ranked in Japan's top ten universities and in the top 200 universities worldwide (QS world university rankings). Good examples of programs which promote internationalization in order to stay ahead in the global race in higher education currently offered at the University of Tsukuba are the G30 project and the TRANS program.

### **3.1. G30 Project**

The G30 project was launched in 2009 by MEXT with thirteen selected universities functioning as core universities for hosting and educating international students. To attract international students to study in Japan, the government and the core universities offered courses taught in English. The University of Tsukuba was selected as one of the core universities. The main concept put forward by the University of Tsukuba was its ‘open university concept’, which aimed to develop human resources capable of working in harmony with people throughout the world, and to establish a global center of education and research fitting for the twenty first century. To ensure a global level quality of education, both Japanese and international faculty members were involved from an educational point of view in planning the curricula, in defining course standards and evaluations, and so on.

The University of Tsukuba currently offers: three international undergraduate programs in Life and Environmental Sciences, International Social Sciences, and Medical Science; eighteen Masters in Life and Environmental Sciences, Humanities and Social Sciences, Comprehensive Human Sciences, Pure and Applied Sciences, Systems and Information Engineering, Business Sciences, Life and Environmental Sciences, and Library Information and Media Studies; and six Doctoral programs in Life and Environmental Sciences, and Comprehensive Human Sciences.

All G30 programs are taught entirely in English and provide comprehensive student support such as Japanese language training and a wide range of scholarships. The number of international students in the G30 program alone reached 348 in the 2012 academic year. In 2008, the total number of international students studying at the University of Tsukuba was 1,481, but just four years after the introduction of the G30 program, the total number of international students had risen to approximately 2,000 students. Visibly, this program is having a positive influence in stimulating the internationalized learning environment.



### **3.2. TRANS Europe-East Asia Education Program for Global Development in the Humanities and Social Sciences**

This project was chosen by MEXT under its Re-Inventing Japan Project and was launched in 2011. It aims to:

[S]trengthen the global expansion of Japanese universities through building a higher education network across Asia, the United States and other countries and to strive for quality assurance in higher education within an international framework in order to foster human resources capable of working in a global society as well as strategically accepting international students and laying emphasis on financial aid for projects conducting exchanges through cooperative education between Japanese students and international students.

(Waseda University 2012:1; MEXT 2012)

The uniqueness of the TRANS program<sup>5</sup> is the integration of undergraduate, masters and doctoral programs. The theme is to explore the capabilities and strengths of an international community which is founded on its different cultures, and by jointly establishing cooperation between East Asian and European countries, the program aims to educate a future generation of leaders with an understanding of the true fundamentals of internationalization. The TRANS program not only pursues an increase in numbers of international students but also allows students from the University of Tsukuba to study abroad at partner universities. The program, as offered at the University of Tsukuba, gives the participating students the opportunity to actively engage with and be constantly receptive to knowledge, culture and situations other than their own. This is effectively carried out through the three programs within TRANS: JLCC<sup>6</sup>; TEACH<sup>7</sup>; and COMPUS-CJS<sup>8</sup>. The main strength of the TRANS program is the feature which stimulates the flow of internationalization inbound and outbound both by supporting a student's education and by insuring quality is maintained between the participating Universities. The TRANS program has created a system whereby university credit transfer is made possible between the University of Tsukuba and its partner universities. This credit transfer is a good example of universities sharing the same quality standard of education. Furthermore, as this program implements technological support using Internet and video-conferencing

systems to connect the participating universities, students have the advantage of continuing their research even after they return to their home universities and of continuing to present their research across the various universities. Thus, a good impetus is maintained between all students involved. In a sense, the output and the goals of these programs portray what Knight (2004) calls cross-border education.<sup>9</sup>

#### **4. Conclusion and upcoming theme in pursuing true internationalization**

In discussing internationalization, each university seems to value the pursuit of a higher rank in the charts set out by THE-QS. An important aspect of internationalization in higher education is not solely about the credits given, nor the fame of the university, but the quality and the recognized contents offered by each university. The TRANS program offered at the University of Tsukuba is a good example of the quality of education received by each student involved being assured across all the participating universities.

There is a beginning for everything. The TRANS program started just a few years ago, but as can be seen in the examples of the programs offered at the University of Tsukuba in which inter-cultural relationships are increasing, there is a great potential for growth to the benefit of not only the students but of the universities involved as well. The TRANS program allows participating students to study at partner universities abroad, to strengthen and internationalize their communication skills and their research skills, and to have the opportunity to work alongside partner international students, all of which results in a mutual synergy of the partner universities.

The true goal is not to gather together more international faculty members and students, but instead to raise the quality level of each and everyone who participates. If a university has a clear vision of where it wants to go, if it sets the strategies and goals it wants to achieve, then each and every member of the international faculty and student body will create a strong force within that university. This will lead to the university being recognized and valued by the outside world and to it being recognized and valued for its output, which incidentally will also result in a higher world ranking.

## Internationalization of Higher Education in Japan The Aim and Challenge at the University of Tsukuba

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- <sup>1</sup> The focal point of the discussion is on internationalization and its effect on universities. As the criteria used by SJT primarily base results on academic achievement, it will not be used as a comparison to the criteria used by THE-QS. Criteria used by SJT are as follows:
- Alumni of an institution winning Nobel Prizes and Fields Medals (10%)
  - Faculty of an institution winning Nobel Prizes and Fields Medals (20%)
  - Highly cited researchers in 21 broad subject categories (20%)
  - Research Output Papers published in Nature and Science (20%)
  - Papers indexed in Science Citation Index-expanded and Social Science Citation Index (20%)
  - Per capita academic performance of an institution (10 %)
- <sup>2</sup> cf. Australia has a 33.4% ratio of international students, UK 27%, both Germany and France 12%, and United States 6.1% (Agawa 2011).
- <sup>3</sup> The result of a questionnaire by the Japan Association of National Universities shows the main reasons for the fall in the number of students studying abroad are: i. Disadvantage in job-hunting activities; ii. Financial reasons; iii. Lack of support at the universities (MEXT 2012). The number of students studying abroad reached its highest in 2004, but the trend is showing a down curve since then. But when the ratio is considered in the number of 18-year old students studying abroad, no significant fluctuation is seen because Japan's population itself is decreasing.
- <sup>4</sup> The four main policy objectives for the UNESCO/OECD guidelines on "Quality provision in cross-border higher education" are as follows: i) 'Students/ learners protection' from the risks of misinformation, low-quality provision and qualifications of limited validity; ii) Qualifications should be readable and transparent in order to increase their international validity and portability. Reliable and user-friendly information sources should facilitate this; iii) Recognition procedures should be transparent, coherent, fair and reliable and impose as little burden as possible to mobile professionals; iv) National quality assurance and accreditation agencies need to intensify international cooperation in order to increase mutual understanding.
- <sup>5</sup> The objective of TRANS is to construct a TRANS Europe-East Asia education program integrating education from the undergraduate level to doctoral degree level programs, which comprehensively develops a participant's ability to effectively take action in involving themselves in the international society, and which equips them with the ability to collaborate on the global stage where East Asia and Europe jointly address and tackle the resolution of problems, it also develops a participant's ability to possess the ability to lead by bringing together differing values and to communicate the role of Japan within the international community (University of Tsukuba 2013).
- <sup>6</sup> JLCC (Japanese Language and Culture Communications Training Program) <<http://trans.hass.tsukuba.ac.jp/jlcc/ja/>> A significant feature of the JLCC program is the joint practical study sessions with emphasis on dialogue and collaboration between the students at the University of Tsukuba and the students of partner universities. This particular educational environment is designed to foster students' ability to analyze, make decisions and communicate, all of which are necessary skills for cultural communicators. The three main program features are as follows: i. Inter-university joint study sessions: special intensive lectures, video-conferences, e-learning and course lectures conducted in English by faculty members from the various partner universities; ii. Joint research projects: joint research projects carried out by the students across the partnering universities with the support and guidance given by faculty members and staff. Students work in pairs, one student from the University of Tsukuba with another from a partnering university. Over a one-year period, a common topic for research is selected which concludes with a final presentation and the submission of a final research report; iii. Practical experience in international cooperation and collaboration: the students participate in an internship at institutions such as international associations and high schools to experience international cooperation and collaboration. Students who successfully complete the program obtain a Certificate along with their bachelor's degree.
- <sup>7</sup> TEACH (Transnational European and East Asian Culture and History): A joint degree Masters program administered by the three partner universities from Japan, Germany and Korea <<http://trans.hass.tsukuba.ac.jp/teach/ja/>> The students participating in the TEACH program take classes at their home university during the first semester, and the subsequent three semesters are spent traveling amongst the partnering three universities. Students from the three universities meet in one venue each semester and take classes on the same campus. Finally, students submit two theses in two different languages within a period of two years. This grants two Masters degrees (dual degree) upon graduation.
- <sup>8</sup> COMPUS-CJS (Comparative Study of Contemporary Japanese Society) <<http://trans.hass.tsukuba.ac.jp/compuscjs/ja/>> COMPUS-CJS program offers trans-disciplinary education from the perspective of international comparison and specialized knowledge under a cooperative system with collaborating universities in Europe and East Asia. The students complete the curriculum of 30 ETCS (the European Credit Transfer System, which is equivalent to 20 credits at the University of Tsukuba) offered by COMPUS-CJS, preparing for a highly specialized doctorate thesis and obtain a Certificate of Completion of Comparative Study of Contemporary Japanese Society along with their doctoral degree.

<sup>9</sup> Cross-border education is often mistakenly confused with the term internationalization. Cross-border education refers to the movement of people, programs, providers, knowledge, ideas, projects and services across national boundaries (Knight 2006:18). It is important to understand that cross-border education is only one part of the complex process of internationalization. As such, the TRANS program is offering and actually performing the two pillars of internationalization: “at home” or campus based, and abroad/ cross-border education.

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