

Japanese School System and the Role of Universities in the Knowledge Society

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Introduction

For several decades after the World War II, Japan enjoyed economic growth driven by well-configured Industry-Government-Education collaboration. The mission and role of education, being regarded as a vital factor in achieving the general aims of society, were as a rule defined to serve to society in this framework.

The framework came to an end in the period following the fall of the Berlin Wall in 1989. In 1990, the “bubble economy” collapsed and the Japanese economy has been stagnant ever since. The recession forced structural changes to industry, followed by governmental administrative reform up to ministerial level.

From a world-wide perspective, this period corresponded with the advent of the knowledge society and lifelong learning. As Donald J. Johnston, secretary-general of the OECD (Organisation for Economic Co-operation and Development), declared in an article entitled “Lifelong learning for all”¹, we entered the era of the knowledge society in the 1990s. In January 1996 the OECD education ministers agreed to develop strategies for “lifelong learning for all”.

Under such circumstances, as the key to progress, it is increasingly demanded that universities should contribute to society – education of students with skills, development of mission-oriented research, participation in joint research projects with industry and government, etc. University reform progressed rapidly in the 1990s in order to better respond to societal needs.

On the other hand, Japan is an ageing country. Japanese society will experience a decrease in the number of its younger population, which is supposed to cause divers problems including notably the lack of workforce and the reorganisation of the pension scheme. For universities, students' enrolment number is expected to plunge over the next decade, and they will be faced with enhanced competition to attract increasingly diversified students.

I Education system in Japan

1. Development of the modern education system

Throughout its history, Japan has attached great importance to education. Even before the Meiji² era (1868-1912), under the feudal régime (the Edo period), Japan had number

1 OECD Observer No. 214 October/November 1998.

2 From the name of the reigning Emperor Meiji. The Meiji era began with a revolution called the Meiji Restoration which marked opening of the modernisation of Japanese society.

of schools called *Terakoya*, open to children of commoners and *samurai* (warriors). At the end of the Edo period, there were around ten thousand *terakoya*, and according to an estimation, the literacy rate was 40 %.

The Japanese modern education system was introduced immediately after the Meiji Restoration. In 1872, the Government promulgated the Education System Order (*Gakusei*) with the objective of generalisation of school education and others. Since then, first elementary schools, then secondary schools were rapidly set up throughout the country, generally based on the existing system. At the beginning of the twentieth century, elementary education became universal both for boys and girls (Figure 1).

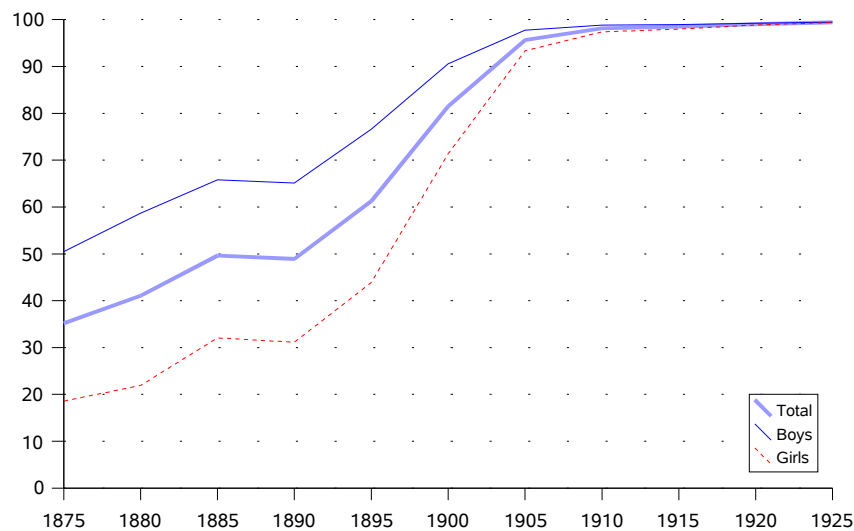


Figure 1 Percentage of children in full time elementary education between 1875 and 1925

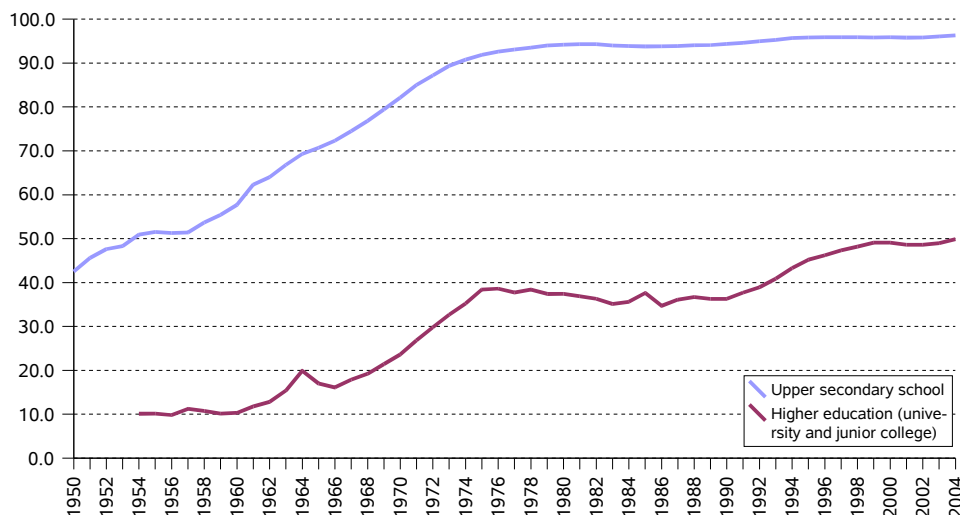


Figure 2 Percentage of students enrolling in upper secondary schools and higher education institutions (universities and junior colleges)

Nowadays, with very few exceptions, all school-aged children (from 6 to 15 years) attend elementary and lower secondary schools (junior high schools) which are compulsory; and almost all the lower secondary school graduates attend upper secondary schools (senior high schools). In 2004, the upper high school attendance rate was

97.5% of the lower secondary school graduates and 96.3% of the age cohort. Slightly less than half of the age cohort goes to higher education institutions (excluding non-university institutions). In 2004, the percentage of students enrolling in universities or junior colleges rose to 49.9%.

2. Organisation of the school system

Since the introduction of a modern educational system through the promulgation of the Education System Order in 1872, the Japanese school system has undergone a number of amendments and revisions. Ultimately, the pre-war school system was characterised by a relatively short period of compulsory education, common to all, and also by a multiple track system after that period. The track leading to universities was very limited, and only a few people could study there. During wartime, under extraordinary circumstances, the school system became very complicated (Figure 3).

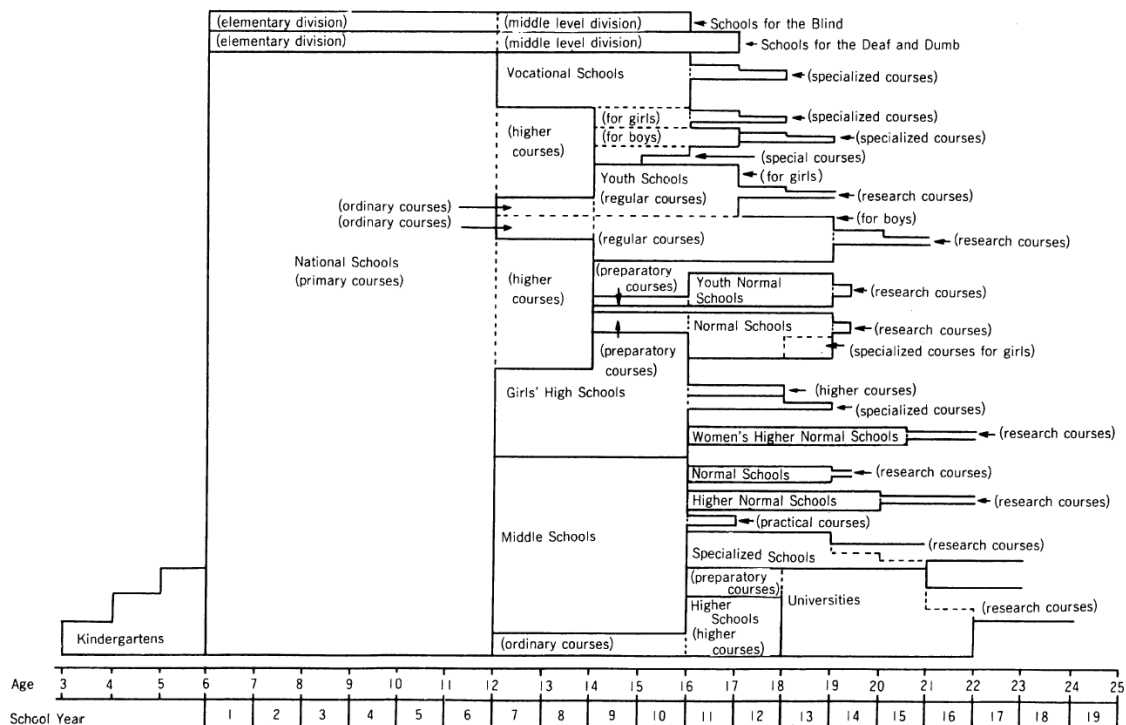


Figure 3 Organisation of the school system in 1944

Source : Ministry of Education, 1989

After World War II, the Japanese education system was entirely revised under the occupation. The school system, from kindergartens to universities, was structurally rationalised and unified into a single track format. The duration of compulsory education was extended from six years to nine years. The varying types of higher educational institutions were consolidated into a single four-year university system³ constituting the last part the new 6-3-3-4 education system. Under the new system, any graduate of an upper secondary school was entitled to apply for entrance to a university. The doors of the

3 Although the junior college system offering two-year higher education was set up alongside universities, the system was considered as provisional at that time. After its perpetuation in 1964 by a revision of the School Education Law, it would considerably develop throughout the country.

universities were opened much wider than in the pre-war period.

As a rule, the school system established in the post-war period has been maintained until today, although some new structures were created, including colleges of technology (1961), special training schools (1975) and secondary education schools (1998).

Under the post-war education system, Japanese primary and secondary schools displayed a very good performance. According to a survey by the OECD in 2000 (PISA 2000), which assessed 15 year old students in 43 countries in the world concerning their attainments in mathematics, science and reading, Japan was classed in the first group for mathematics and science and the second group for reading. However, since educational programmes in schools, from pre-school level to higher education, have been gradually diversified and are now offering a range of options, it is becoming more difficult to assess students' academic ability with an achievement test⁴.

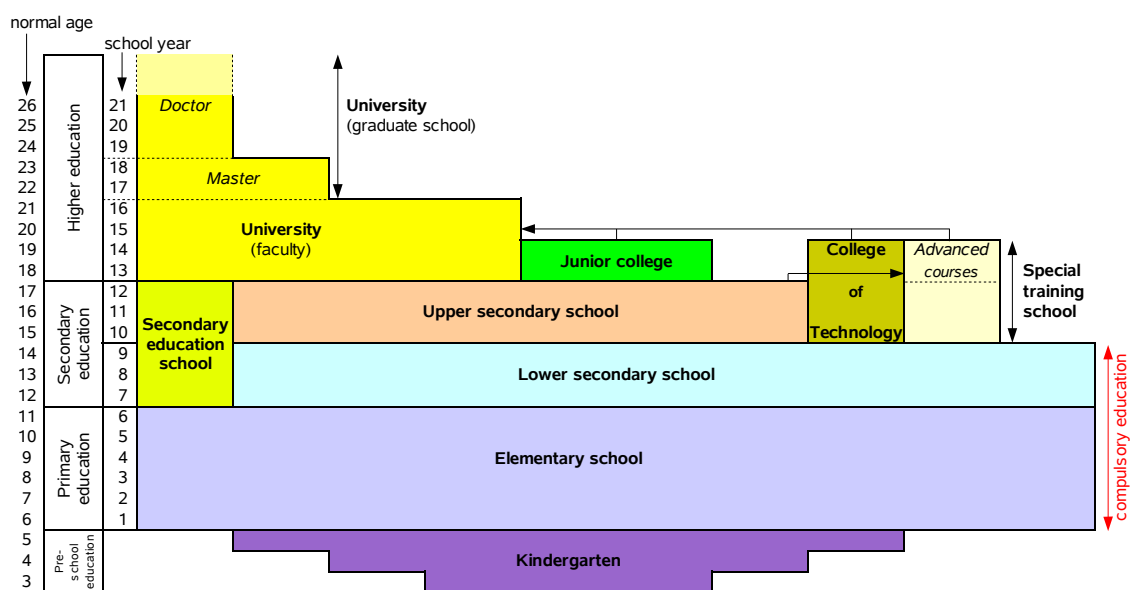


Figure 4 Organisation of the present school system

Table 1 Schools in Japan as of 1st May 2004

	<i>Number of schools</i>	<i>Number of students</i>	<i>Number of teachers*</i>
Kindergarten	14,061	1,753,396	109,853
Elementary school	23,420	7,200,929	414,887
Lower secondary school	11,102	3,663,512	249,801
Upper secondary school	5,429	3,719,048	255,629
Secondary education school	18	6,051	470
Special education schools (for handicapped children)	999	98,796	62,255
College of technology	63	58,681	4,474

4 In fact, according to the results from PISA 2003 which had assessed the attainments in reading and mathematics as well as the problem-solving ability, Japan lowered its ranking in terms of reading literacy and mathematics in comparison with the PISA 2000 ranking.

	<i>Number of schools</i>	<i>Number of students</i>	<i>Number of teachers*</i>
Junior college	508	233,749	12,740
University	709	2,809,323	158,756
Special training school	3,443	791,540	40,675
Miscellaneous schools	1,878	178,115	11,267

* Full-time only.

3. Advent of the lifelong learning society

Lifelong learning is one of the most important elements in the the knowledge society. In Japan, recognising its importance, the National Council on Educational Reform (*Rin-jikyoikushingikai*), established in 1984 as an advisory body to the Prime Minister, urged reorganising the educational system from one centred on schools to one that would acknowledge the importance of lifelong learning and allow people to study by choosing educational opportunities at any time during their lives.

Under such concept, the Government has been improving the system to promote lifelong learning through implementing policies for the enlightenment and provision of information concerning lifelong learning; providing various opportunities for learning through school education, social education, culture and sports; and implementing measures such as the utilisation and evaluation of learning achievements.

In the course of constructing a lifelong learning society, there have been increasing demands for higher education to provide an upgrade to an individual's career. In recent years, demand for graduate level education has increased, instead of undergraduate education.

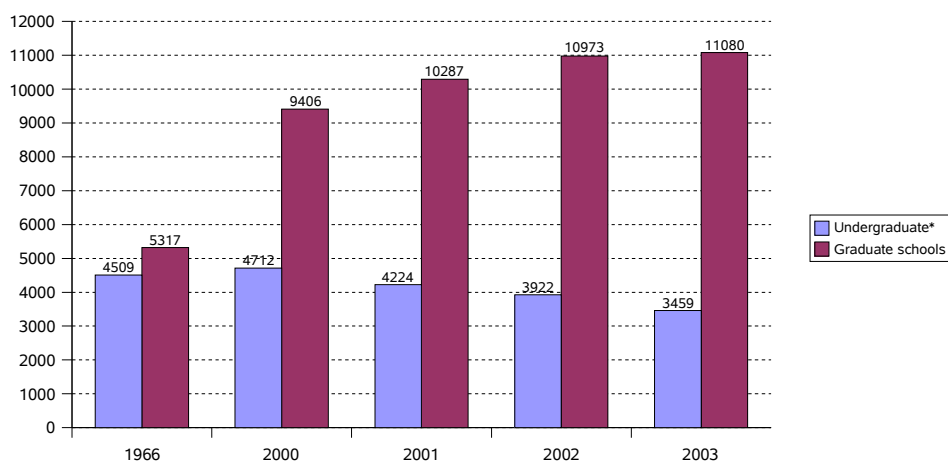


Figure 5 Number of adult students in universities

* Number of students under the special selection procedures for adults only.

II Higher education in Japan

1. Foundation of modern higher education institutions

The modern higher education system began in the late 19th century in Japan when the

University of Tokyo (later Tokyo Imperial University) was founded in 1887 by the Meiji government through the merger of two existing higher education institutions. Other imperial universities were subsequently established in several major cities in Japan, resulting in a total of 7 imperial universities (Tokyo, Kyoto, Tohoku, Kyushu, Hokkaido, Osaka and Nagoya), apart from those located in overseas territories. All these were comprehensive universities and were organised on the continental European model (especially Germanic), which led to a bureaucratic system with quasi-autonomous academic units (faculties).

Apart from the imperial universities, a number of governmental, local public and private higher education institutions were founded in the same period. In 1903, the Government enacted the Specialised School Order to codify the establishment and activities of institutions previously classed as miscellaneous schools. Specialised schools increased remarkably since then. They were later given, with single-faculty institutions in special cases, the opportunity to seek the status of university by the promulgation of the University Order in 1918 (implemented the following year).

The pre-war Japanese higher education system was thus characterised (but not exhaustively so) by the well-organised bureaucratic administration system in governmental institutions and also by the coexistence of the three sectors of higher education institutions – governmental (national), local public and private, with massive investment in the national sector by the Government. Although they were not many in number (Table 2), governmental institutions, especially the imperial universities, enjoyed the prerogative of acquiring abundant staff, facilities and prioritisation in other parts of budget distribution in comparison with institutions of the other sectors.

Table 2 Number of higher education institutions by type and sector as of 1943

	<i>Universities</i> [imperial universities]	<i>Specialised Schools</i>	<i>Total</i>
Governmental (national)	19 [7]	58	77
Local public	2	24	26
Private	28	134	162
Total	49 [7]	216	275

After the war, in 1949, 70 institutions opened their doors as national universities. A number of national universities started either from old normal schools or as branch schools responsible for two-year courses. The imperial universities and other governmental universities were integrated into the newly created university system without difference in terms of legal status. However, in contrast to the former imperial universities and other former governmental universities, these new national universities would remain weak for a long time in terms of prestige, staffing, facilities, budget allocation and management ability. In addition, 17 local public universities and 81 private universities also began teaching in 1949. Some of the older specialised schools reopened as junior colleges.

2. The expansion of higher education and its decline

After the reorganisation during the occupation period, the 1960s and early 1970s witnessed the most rapid growth of the higher education system. Numerically, whereas

there had been 245 universities and 280 junior colleges in 1960, there came to be 420 universities (Figure 6) and 513 junior colleges by 1975 (Figure 7). In terms of student numbers, by 1975 the population attending universities (including graduate schools) increased to 1,734,082, or 2.77 times the 1960 student population (Figure 8), and in junior colleges to 348,922, or 4.28 times the 1960 figure. The percentage of school students continuing to university or junior college by 1975 increased from 10.3% to 38.4% of the corresponding age group (Figure 9).

During the growth period, it was private universities that developed very rapidly. Its development was well illustrated by the sharp increase in the percentage of their enrolled students out of the total student population : students enrolment in private universities and junior colleges rose from 64.4% for universities and 78.7% for junior colleges in 1960 to 76.4% for universities and 91.2% for junior colleges in 1975.

The second rapid expansion of higher education occurred in the 1980s and early 1990s. The number of universities increased from 446 (93 national, 34 public and 319 private) in 1980 to 565 (98 national, 52 public and 415 private) in 1995, and 709 (87 national, 80 public and 542 private) in 2004. However, the number of 18-year-olds reached its peak in 1992, and has been decreasing ever since. Although the number of universities is still increasing, the number of junior colleges reached its peak (596 in number) in 1996 and is now gradually decreasing (Figure 7). In addition, the proportion of the age group advancing to universities and junior colleges reached 49.1% in 1999, and has been stagnant at around 49% since then (Figure 9).

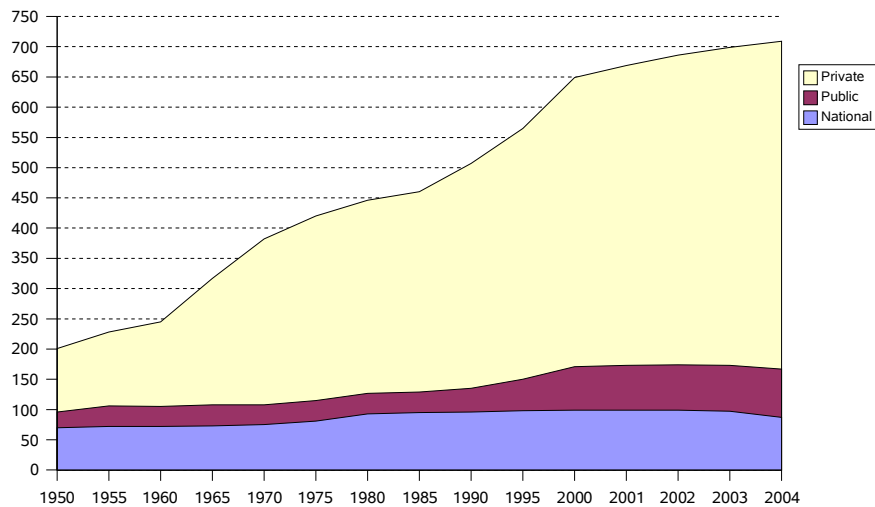


Figure 6 Number of universities by sector

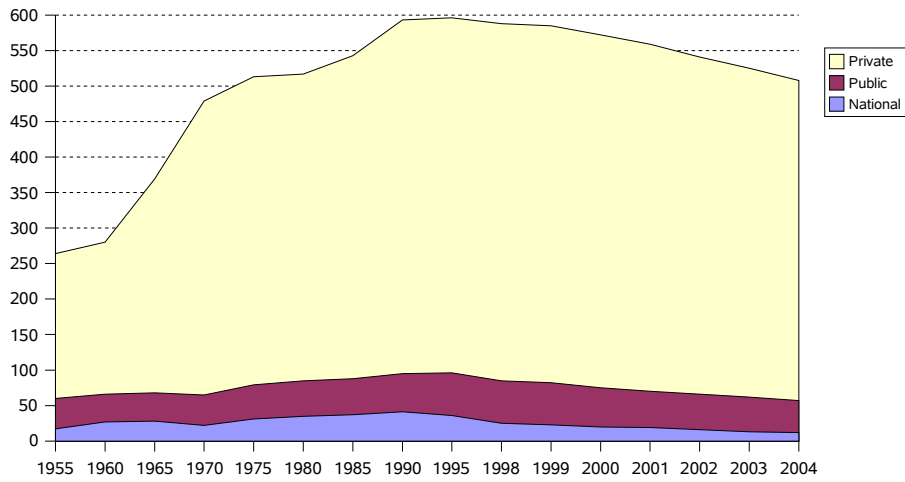


Figure 7 Number of junior colleges by sector

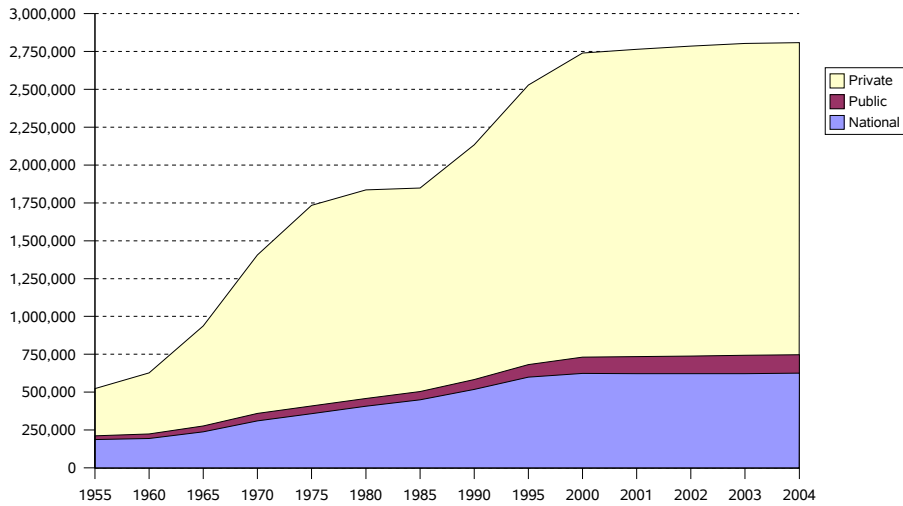


Figure 8 Student enrolment in universities (including graduate students) by sector

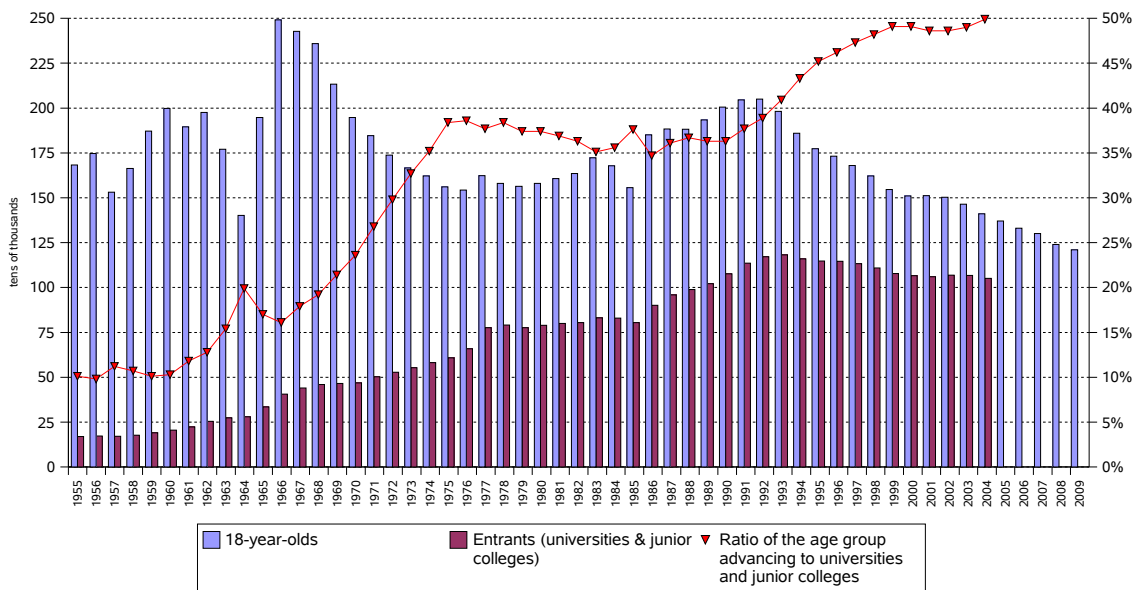


Figure 9 Trends in 18-year-old population and access to higher education

3. Internationalisation of higher education

In 1983, the Government planned to raise the number of international students from just over 10,000 at that time to 100,000 by the beginning of the 21st century (Nakasone⁵ Plan). Ever since, the number of international students has grown, particularly from 1999 after a slowdown for a few years (Figure 10). The goal was estimated to have been reached in 2002-2003, and the number of international students rose to 109,508 on 1st May 2003.

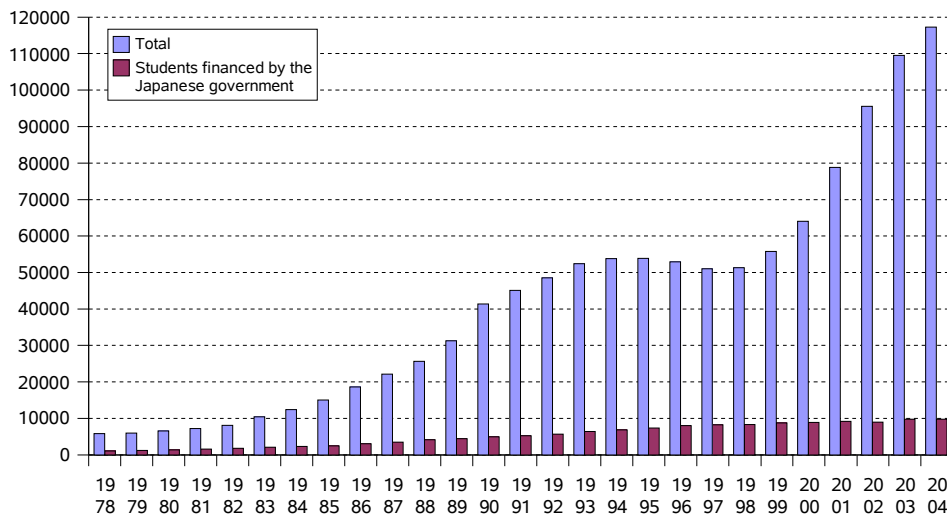


Figure 10 Number of international students in Japanese higher education institutions

As seen in the figure above, most of international students are self-financed (90% in 2004). The number of international students financed by the Japanese government have gradually grown, but very limited. As of 1st May 2004, there were 117,302 international students in Japanese higher education institutions. The great majority (109,520 / 93.4%) come from Asian countries. Chinese students alone account for 77,713 (66.3%), followed by South Korean students (15,533 / 13.2%) and Taiwanese students (4,096 / 3.5%) (Figure 11)

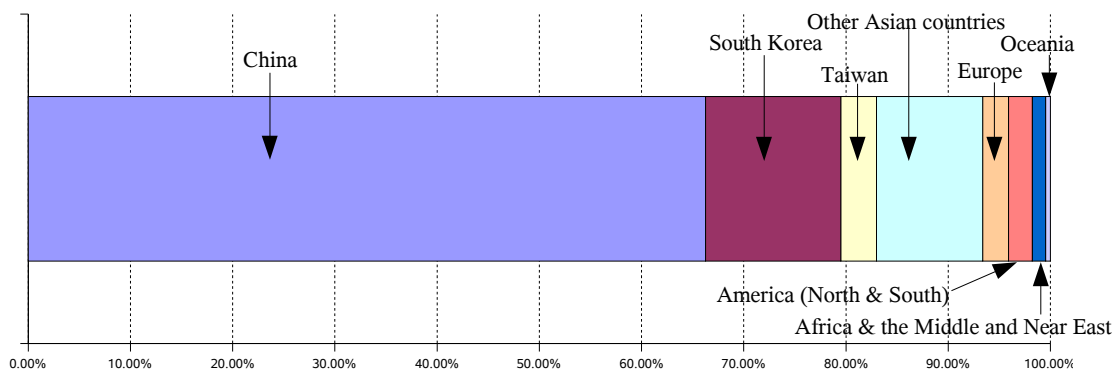


Figure 11 Breakdown of the international students by their region of origin (2004)

5 Prime Minister from 1982 to 1987. He set up the National Council on Educational Reform in 1984 and had it study a full-scale revision of the nation's educational system.

In answer to this increase, a number of universities opened branch offices in foreign countries, particularly in China.

On the other hand, in 2004, the Government revised the legislation governing the recognition of foreign universities on the territory. Graduates of branch schools of foreign universities recognised by the MEXT will be entitled to apply for Japanese graduate schools.

4. University financing – poor public expenditure on higher education

a. The spiral of tuition fees

In the FY2003, whereas 97 national universities (including junior colleges) and other national educational institutions received 1,525,606⁶ million yen, 989⁷ private institutions received only 321,750 million yen for current expenditures. Private universities have long questioned this financial gap between both sectors, while the private sector assuming three-fourths students, and have demanded the revision of the Government policy on higher education financing in favour of private institutions.

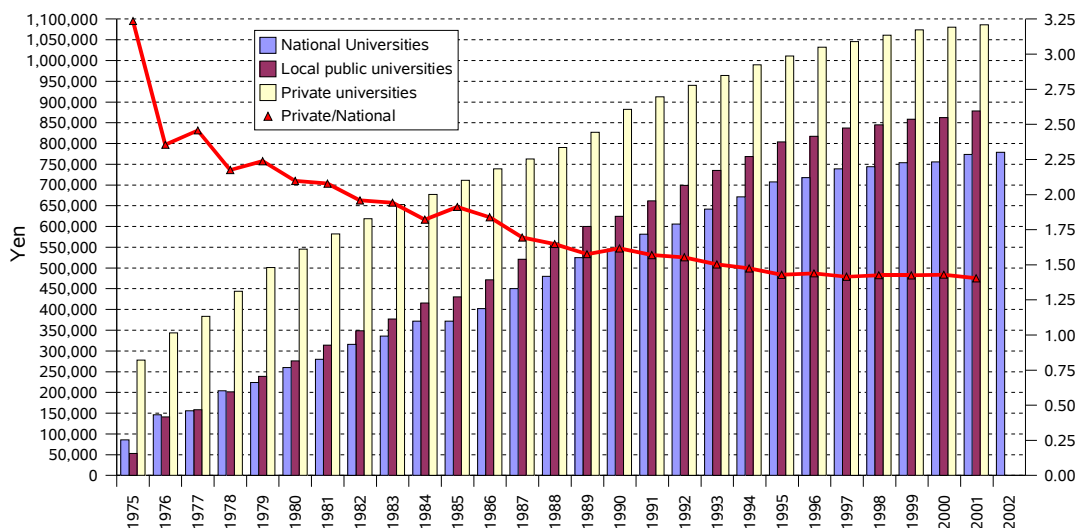


Figure 12 Tuition fees (entrance fees included) by sector

(note) The amount of private universities' tuition fees is the mean value of all the private universities' tuition fees. The amount of local public universities' tuition fees is the mean value of all the local public universities' tuition fees applied to entrants from outside the prefecture.

The questioning by private universities has resulted in a sharp rise in the tuition fees (including entrance fees) in national universities, but has never worked towards the reduction of the gap of fees of both sectors, since the tuition fees of private universities have paralleled the progress of the tuition fees of national universities (Figure 12). The ratio of tuition fees of private universities to those of national universities decreased

6 This amount is equal to the transfers from the general account budget to the Special Account for National Educational Institutions (therefore it includes the budget for non-university institutions such as inter-university research institutes). As for the Special Account for National Educational Institutions, refer to Oba (2003).

7 This number includes all the private universities and junior colleges comprising those not receiving national subsidies.

from 3.24 in 1975 to 1.40 in 2001⁸.

b. Poor public expenditure on higher education

With the aid of the questioning by private institutions on the one hand, and due to the stringent financial situation of the Government on the other, the Ministry of Finance has pressed the Ministry of Education to raise the tuition fees of national universities. In November 2003, the Financial System Council reported to the Minister of Finance and recommended the adoption of a system that would enable each national university to revise tuition fees, in light of the gap between national and private universities and thorough implementation of the beneficiary-payment principle. This recommendation was confirmed by the council's recommendation to the Minister of Finance on 17 May 2004 concerning the orientation of the FY2005 budget-making, which reiterated the application of the benefit principle to higher education.

As a result of the stagnation of the subsidies to private institutions and of the rise in tuition fees of national universities, the share of the costs of higher education borne by governments (national and local) is obviously low in comparison with other OECD countries (Figure 13), which signifies that the cost of higher education is largely borne by students or their family.

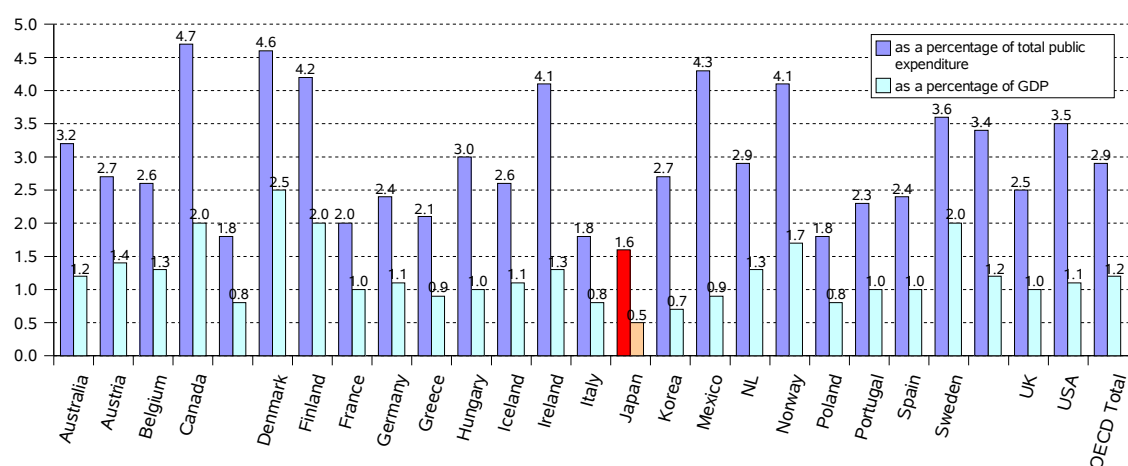


Figure 13 Public expenditure on higher education (2000) in OECD countries

Source : OECD 2003, p. 227

III The role of universities in the knowledge society

1. The University Council and higher education reform

a. The University Council and its recommendations

The National Council on Educational Reform submitted reports on a wide range of issues, including the improvement and individualisation of university education, the enhancement of graduate schools, fiscal policies relating to higher education, the organisation and management of universities, and the establishment of a “University Council”,

⁸ In general, apart from tuition fees, private universities collect extra charges such as a charge for facilities.

which would be inaugurated in 1987⁹ as an advisory body for the Minister of Education to deliberate on basic aspects of higher education in Japan. Immediately after its inauguration, the council was asked to study specific measures for university reform in the light of the following social change.

1. Progress in scientific research and changes in human resources;
2. Rise in the percentage of students continuing to higher education and diversification of students; and
3. Growing need for lifelong learning and rising social expectations of universities.

Ever since the establishment of the council, measures such as quantitative and qualitative improvement of graduate schools as well as deregulation and improvement of university administration have been taking place. One of the most important recommendations was the abolition of subject areas to enable universities to structure curricula reflecting their own educational ideals and objectives, which resulted in 1991 amendment of the Standards for the Establishment of Universities. It was decided that there should be no definition of subject areas, such as general education and specialised education. It was also decided to discontinue the practice of requiring students to obtain a certain number of credits in each subject area as a prerequisite for graduation and to make the acquisition of a minimum total number of credits the only requirement. Another most important recommendation was the qualitative and quantitative improvements of graduate schools.

In 1998, the University Council submitted a report, *A Vision for the University of the 21st Century and Future Reform Measures : Distinctive Universities in a Competitive Environment*, which built upon the progress of university reform at that time. The report presented the basic policies of university reform in the perspective of the 21st century as follows :

1. Improve the quality of education and research with the purpose of nurturing the ability to investigate issues;
2. Secure university autonomy by making the educational and research system structure more flexible;
3. Establish university administration and management with responsible decision-making and implementation; and
4. Individualise universities and continuously improve their education and research by establishing multiple evaluation systems.

In 2002, the School Education Law was revised and provided more flexibility to institutions for a reorganisation of faculties and departments, while a continual third-party evaluation system was introduced. Under the revised law, only notification to the ministry is required of the institution in cases of reorganisation without change in the kinds and fields of degrees awarded by that institution, and ministerial authorisation itself is no longer necessary.

b. Diversification of higher education institutions and their programmes

Towards the end of 20th century, one could finally conclude that Japanese higher educa-

⁹ The council existed until the governmental reorganisation in 2001 (mentioned before) and was integrated into the Central Council for Education (the Subdivision on Universities).

tion reached the universal phase when the enrolment ratio of the age cohort of 18 years attained 49.1% in 1999. If the non-university sector is included, the enrolment ratio had already reached over 50% in 1987. According to Trow's model¹⁰, with a much more diversified student body, universities and other higher education institutions of universal access¹¹ should now offer courses that are less structured and more vocational or problem solution oriented in diversified components.

The 1998 report of the University Council (mentioned before) recommended the definite abandonment of the planned higher education policy and the acceleration of diversification of higher education institutions, in order to respond to increasingly changing societal needs and a more diverse student body's demands. The deregulation on the curriculum organisation in 1991 and the incorporation of national universities in 2004 were both decided in accordance with the policy towards the diversification of higher education, although the latter was achieved in the process of governmental administrative reform.

c. Incorporation of national universities¹²

National universities were until March 2004 a part of the national government, and are directly operated by the latter. By acquiring the status of “national university corporations”, they were given a legal personality and became more autonomous from the government. This reform was regarded as one of the most significant reforms of Japanese university since the Meiji era.

(1) Goals/plan and evaluation

Each national university was individually given a legal personality and became a national university corporation¹³. This policy – individually incorporating national universities – aimed at extending individuality by enhancing the institutional autonomy of each institution.

The budget is now being allotted by the Government to each university as a lump sum (operational grant) without earmarking, based on the medium-term plan prepared by each university according to its medium-term goals and approved by the MEXT. The medium-term goals are presented by the MEXT, which are elaborated on the basis of the views of each university. The duration of medium-term goals/plan is six years. In addition, the allocation of the budget for the next period will come to vary according to the results of the evaluation.

10 According to M. Trow (Trow, 1974), a higher education system that enrolls under 15% of the relevant age group of young people is considered an elite system, and if the transition is made successfully, the system is then able to develop institutions that can grow without being transformed until the enrolment ratio reaches 50% of the age grade.

11 It should be noted that Trow did not mean that the forms of the prior phase would disappear after the transition from one phase to another but that each phase would survive in some institutions.

12 As for the details of the incorporation of national universities, refer to Oba (2003).

13 More precisely, each national university was founded by a national university corporation.

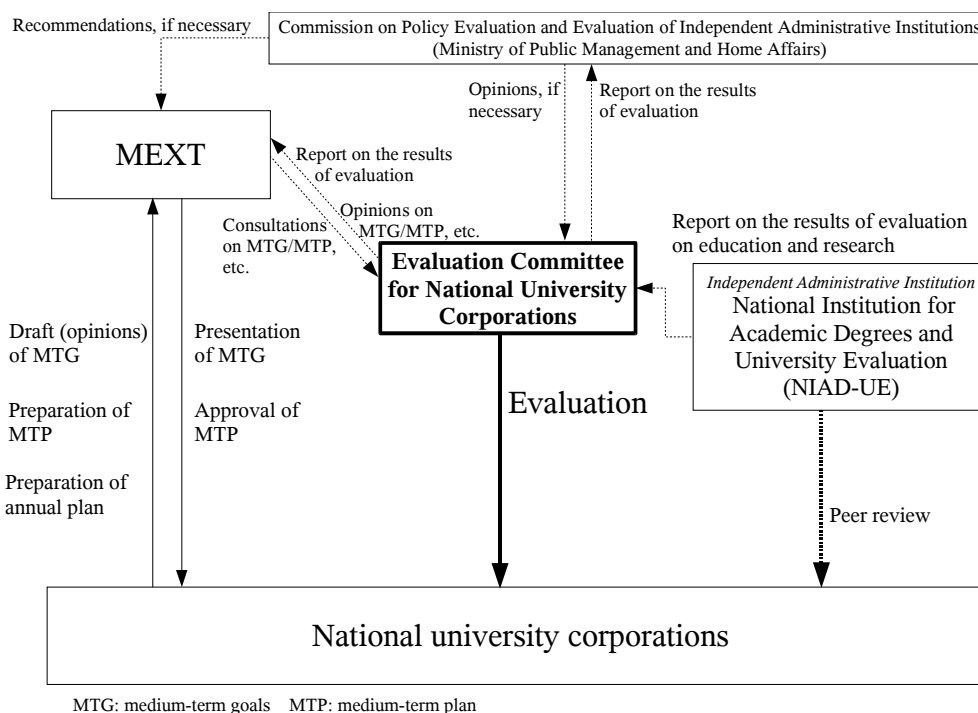


Figure 14 Evaluation system of national university corporations

Prior to the definition of the medium-term goals by the MEXT, the Ministry should consult the Evaluation Committee for National University Corporations (hereafter referred to as the “evaluation committee”). With respect to matters essentially related to education and research, the evaluation committee is to receive a report from the National Institution for Academic Degrees and University Evaluation (NIAD-UE), in order to respect the specialised nature of the education and research of universities. The evaluation committee was, prior to the foundation of national university corporations, set up on 1st October 2003. It held its first general meeting on 31 October, and selected Ryoji Noyori (2001 Nobel laureate in chemistry) as its chairman.

(2) Governance and management

Each national university corporation has the president of the university and executives in its governing body. In contrast to the former national universities having the sole deliberative organisation (council), three deliberative organisations are set up in each corporation : (1) board of directors, the highest deliberative organisation before the final decision by the president, (2) administrative council, to deliberate on important matters concerning the administration of the national university corporation, and (3) education and research council, to deliberate on important matters concerning education and research. The governance is shared by these three organisations. In addition, the structure of the secretariat is now at the discretion of each university.

The president of the university are appointed by the Minister of Education based on the proposal by the relevant national university corporation. The aforesaid proposal is elaborated on by a president selection committee consisting of members both from the administrative council and from the education and research council. Both groups of members from the two councils are equal in number.

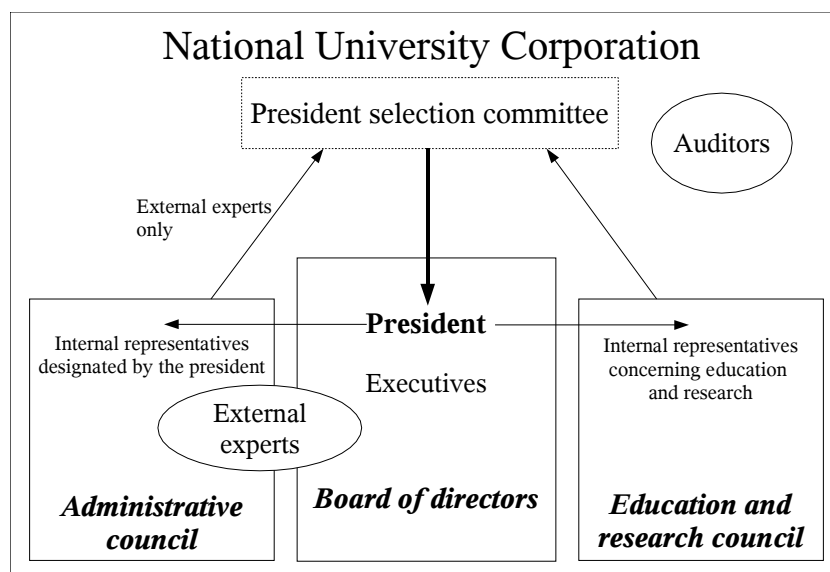


Figure 15 Governing bodies of national university corporations

In order to ensure the accountability and the responsiveness to society of national universities, people from outside the university participate in their management. At least one of executives, who compose the board of directors, should be a person from outside the university. In addition, not less than half of the total members of the administrative council should be appointed from outside.

(3) Personnel

National university teachers and other staff members are no longer public servants. The non-public servant status was adopted in order to allow new national universities to practise more flexible forms of recruitment, salary structures and other conditions concerning personnel affairs. Differences between both types are shown in the Table 3.

Table 3 Public servant type and non-public servant type

	<i>Public servant type</i>	<i>Non-public servant type</i>
<i>Guarantee of status</i>	Stipulated by law	Stipulated by rules of employment of each corporation
<i>Rights of labour</i>	Disputes are prohibited.	Disputes are not prohibited.
<i>Recruitment of administrative staff</i>	Selection among successful candidates in the national public service examination	According to the criteria defined by each corporation
<i>Dual employment, side business, and political activities</i>	Restricted by the National Public Service Law	Stipulated in the employment rules of each corporation
<i>Foreigners</i>	Impossible to appoint them to management positions	Possible to appoint them to management positions
<i>Salaries and working hours</i>	Determined by each corporation	(idem)
<i>Medical insurance and pensions</i>	Similar to the national public servants	(idem)

	<i>Public servant type</i>	<i>Non-public servant type</i>
<i>Provisions of the penal code such as bribes</i>	Similar to the national public servants	(idem)

(4) Students' payment

Each national university corporation is allowed to raise tuition and entrance fees by up to 10% from the standards set by the MEXT. All the national universities set fees of the same amount as the standards for the fiscal 2004. For the fiscal year 2004, the standards are the same as the amounts of tuition and entrance fees of the previous year, which are 520,800 yen and 282,000 yen respectively.

In December 2004, the MEXT revised the standard of tuition fees for the FY2005 and raised it from 520,800 yen to 535,800 yen. It is now up to each national university whether to revise or not its tuition fees.

d. Increase in competitive funds open to public and private institutions

The Government has concentrated its budget allocation for universities on competitive funds, which have been likely to be indifferently open to public and private institutions, whereas such programmes used to be limited to national universities.

For example, in 2002, the MEXT initiated a new funding scheme called “The 21st Century COE Programme”. It subsidises programmes proposed by universities (not limited to national universities) to found world-class research/education centres, of which the proposals are to be screened by a committee composed of specialists from various disciplines. Besides national universities’ projects, a certain number of private and public universities’ projects were also selected for this programme (Figure 16).

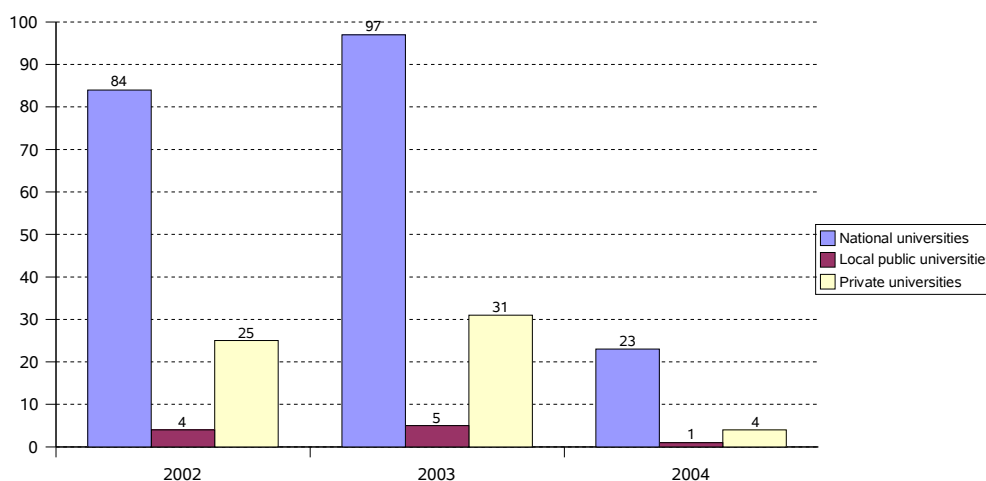


Figure 16 Number of COE projects adopted by the MEXT, by sector

Nowadays, some private universities compete fully with national universities for research funds provided by the Government (Figure 17). Furthermore, in 2003, the Government decided to open up the Grants-in-Aid for Scientific Research, which accounted for about 50% of the Government competitive research funds, to research institutes belonging to private companies (including for-profit ones).

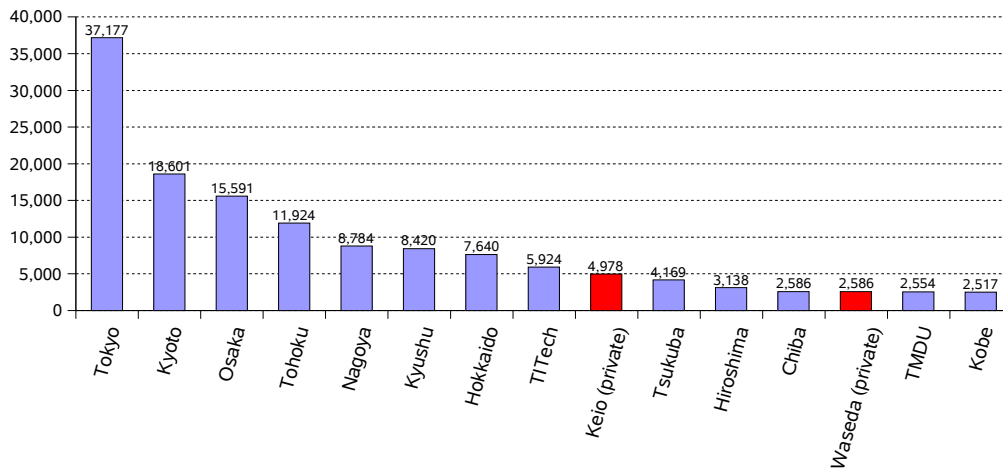


Figure 17 Top 15 universities ranked by the amount of competitive research funds awarded by the Government in 2002 (million yen)

Source : Council for Science and Technology Policy

(note) TITech : Tokyo Institute of Technology / TMDU : Tokyo Medical and Dental University.

2. Development of human resources in the knowledge society

a. Changes in the demand for human resources and research

Due to the unprecedented advancement of science and technology in recent years, Japan has witnessed important changes in the demand for human resources. In particular, an increasingly borderless economy and progression of information technology have brought about a fundamental change in the abilities that employers are seeking in their human resources (Figure 18, Figure 19). The apparition of new vocational courses in universities are principally due to such a shift in the employment market.

From a research perspective, industry-academia co-operation has become a very important issue. Universities are increasingly required to engage in full-fledged co-operation with industry. The number of co-operative research cases by national universities and that of TLO (technology licensing office) have rapidly increased in recent years (Figure 20). The incorporation of national universities is expected to boost such co-operation.

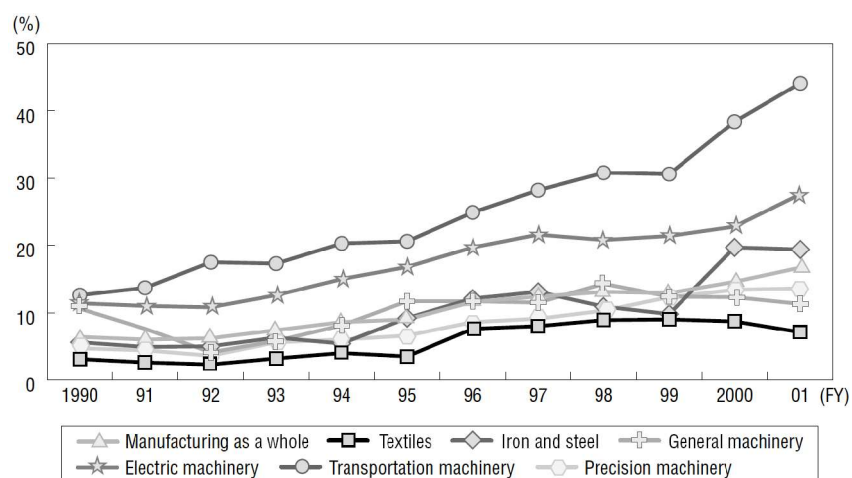


Figure 18 Japan's foreign production ratio by industry

Source : Ministry of Education, 2004

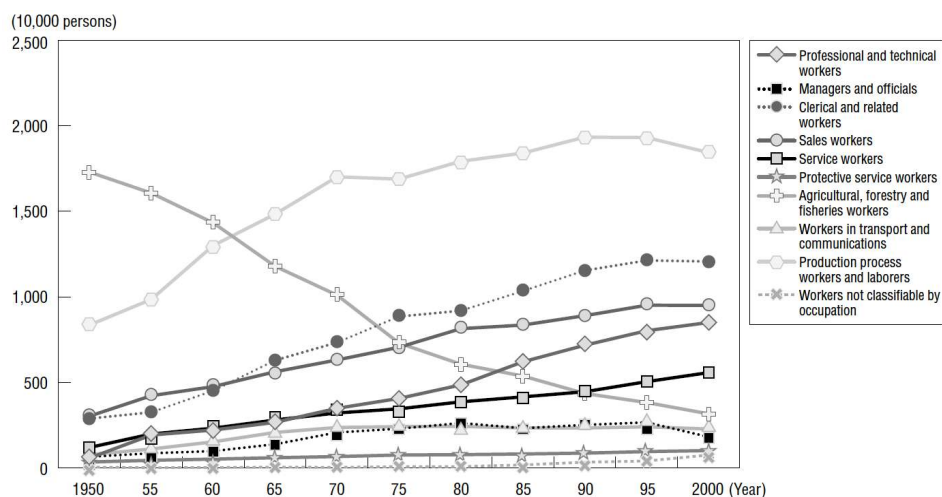


Figure 19 Number of employees by occupational classification
 Source : Ministry of Education, 2004

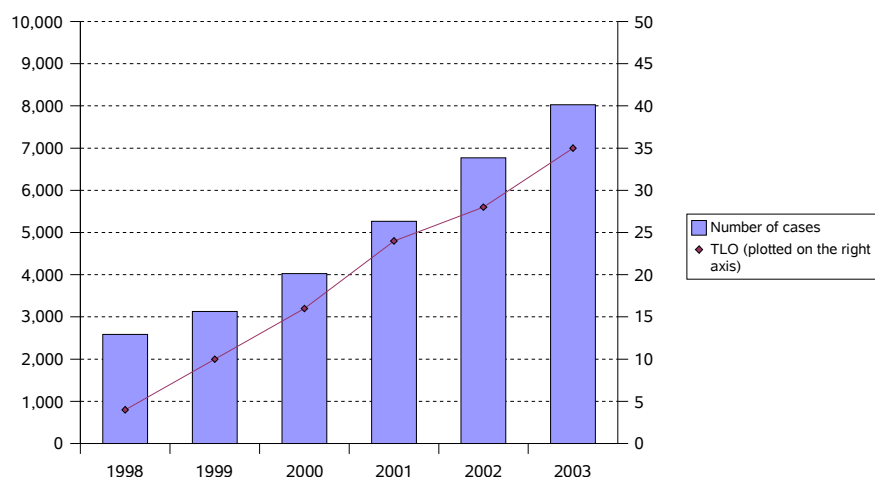


Figure 20 Number of cases of co-operative research implemented between national universities and the industry / Number of TLO recognised by the Government

b. Improvement of university education

(1) Amendment of the Standards for the Establishment of Universities in 1991

At universities, particularly at undergraduate level, the student body has been diversifying due to reasons including a rise in the percentage of students proceeding to universities, a diversification in upper secondary education and an increase in adult and international students. Furthermore, as seen above, due to the advent of the knowledge society, social demands on universities are undergoing important changes.

Before the amendment of the Standards for the Establishment of Universities in 1991, class subjects in universities had to be classified as “general education subjects”, “specialised education subjects”, “foreign language subjects” or “health and physical education subjects”, and the number of credits required for each subject before graduation was stipulated. However, in order to allow individual universities to respond appropriately to societal demands and to develop more distinctive education, these stipulations were abolished and the two stipulations below were established. Consequently, it was decided that rather than requiring a set number of credits in each subject to graduate,

students would be required to obtain a defined number of credits stipulated by the university above a total of 124.

- 1) Universities shall establish class subjects necessary to achieve their educational aims, and shall formulate curricula systematically.
- 2) Universities, when formulating curricula, shall, in addition to teaching the specialised arts and sciences of faculties, etc., develop wide ranging and deep general education as well as general decision-making ability for students and appropriately take into account the cultivation of a rich humanity.

(2) Curriculum reform at universities

Since the deregulation of 1991, curriculum reform has been implemented in almost all universities (Figure 21). Various types of curriculum reform have been attempted (Figure 22). Most of these reforms, in principle, placed importance on general education and aimed to realise a systematic study of a subject over four years (Ministry of Education, 2004), often to the detriment of the former however. In 2002, the Central Council for Education presented a recommendation on liberal education and urged universities to enhance their general education curricula. Subjects of general education implemented in universities are shown in the Figure 23.

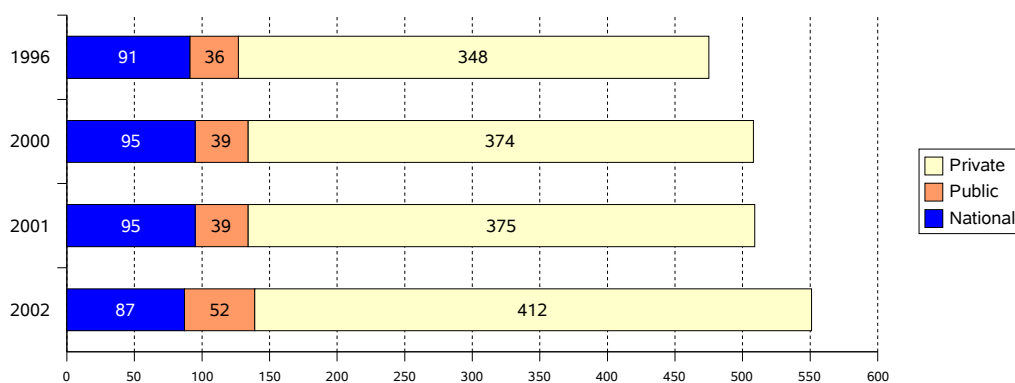


Figure 21 Number of universities that implemented curriculum reform

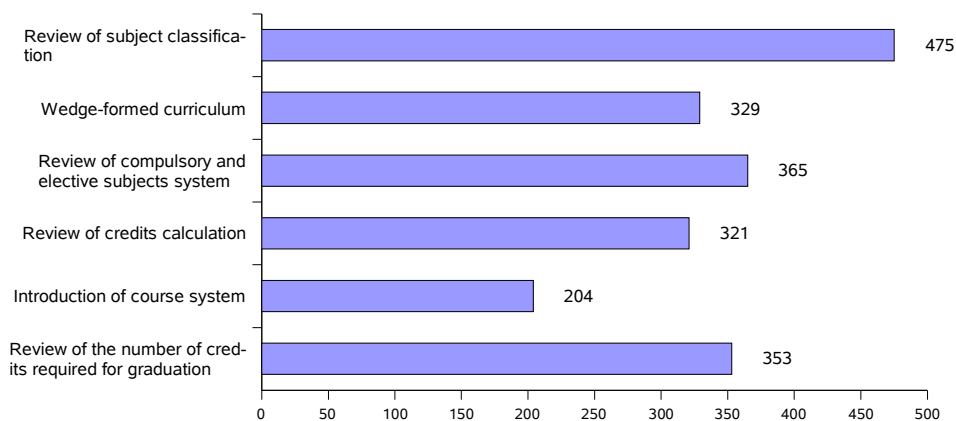


Figure 22 Implementation of curriculum reform in universities (2001)

(Note) “Wedge-formed curriculum” refers to curricula under which specialised and general education can be studied over four years.

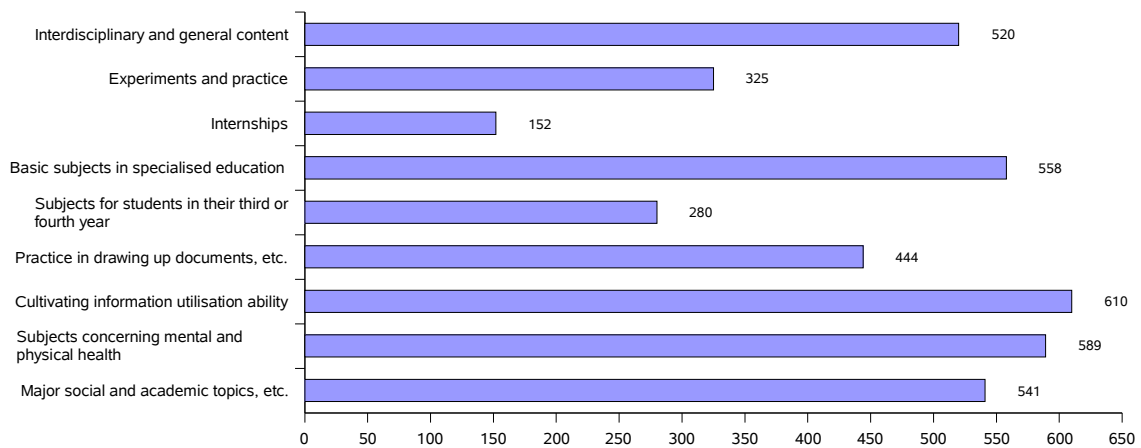


Figure 23 Established subjects concerning general education (2002)

(3) Development of educational methods

Alongside the curriculum reform, universities have made various efforts aiming at guaranteeing the quality of graduating students. These efforts include “responsible class management”, strict assessment for academic achievement, utilisation of information technology, faculty development, adoption of a semester system, credit transfer system, and others. In addition, classes taught in foreign language have been increasing (Figure 27).

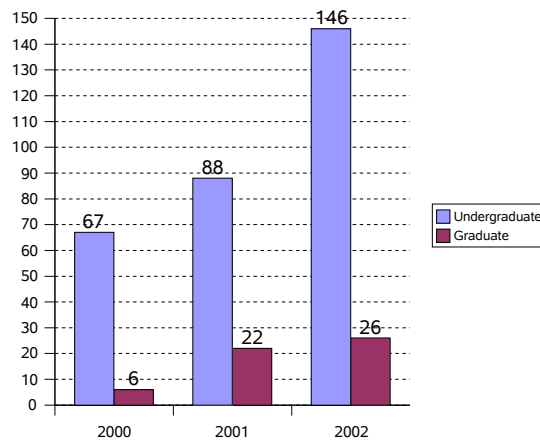


Figure 24 Number of universities that have introduced the GPA system

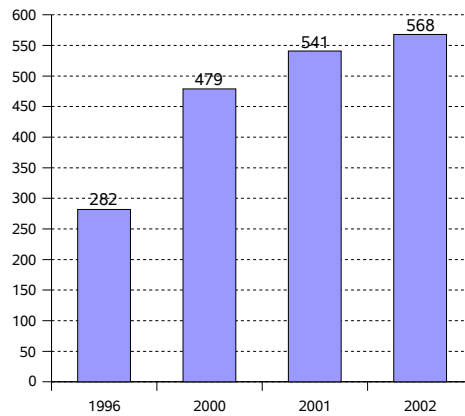


Figure 25 Number of universities that have adopted the semester system

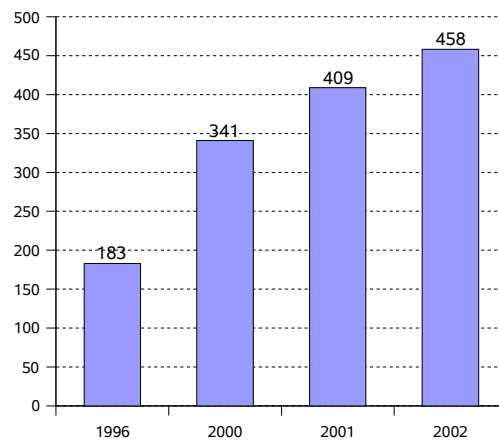


Figure 26 Number of universities implemented faculty development

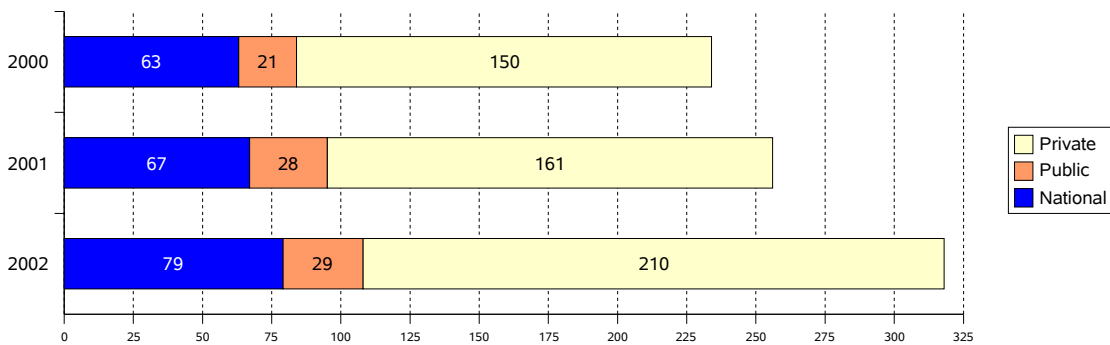


Figure 27 Number of universities that open classes taught in foreign language

c. Role of universities in career development of adults

Against the backdrop of recent economic globalisation and technological innovation, there has been an increasing demand of adults for advanced and sophisticated techniques and abilities throughout their lives. Moreover, in order to respond to the industrial structural change, the re-education of adults to secure high quality human resources has become an agenda for the whole of society. As a result, there have been increasing expectations as to the roles played by higher education institutions, particularly universities.

In universities, in order to respond such expectations, various measures have been taken,

including a special admission of working adults, evening or day/evening courses; satellite classrooms in the centre city, professional schools at the graduate level, one-year master's degree courses and prolonged study courses, which are to facilitate adults' access to universities. In addition, the University of the Air has been open to the public since 1985, to provide learning opportunities to all people, and nowadays, many universities are offering classes through Internet, often on an on-demand basis.

Table 4 Measures to promote the acceptance of adults to universities

<i>System</i>	<i>Outline</i>
Evening, day/evening programmes	Offer of lectures in the evenings to facilitate adults' attendance
Special selection of working adults	Selection of entrants based mainly on essays and interviews, targeted adults
Correspondence with undergraduate and graduate schools	University departments and graduate school master's programmes offering correspondence education
Special student system	Adults can take only the relevant part of a regular university courses and obtain a full credit
Professional schools at graduate level	Master's programme at graduate schools offering practical education to train highly specialised professionals
One year master's degree programme, prolonged study courses	Courses that allow graduate schools more flexibility in setting shorter or longer study duration periods for master's courses
Satellite classrooms	Offering of lectures at places more convenient for commuting than universities' own campus

Source : Ministry of Education, 2001

IV Closing remarks

Japan has implemented higher education reform for long time. Various factors have underlined the necessity for higher education reform. Among them, three major factors should be noted (Ministry of Education, 2004). The first is the diversification in students, due to popularisation of higher education, increase in adult and international students, etc. The second is changes in the demand for human resources, due to the advent of the knowledge-based society in particular. And the third is the increased reliance of industry on academic research activities. All of these factors led to deregulation of higher education, followed by diversification of institutions and their increased autonomy.

However, reform in preparation for the knowledge society is still halfway, and much should be done in order to overcome current economic and societal difficulties. For Japan, it is critical to prepare well-educated citizens with talents and abilities, by producing and transmitting knowledge in an excellent environment. Such a condition will be realised only through continual university reform initiated by people in universities.

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The author's papers cited above are available on his Web site (home.hiroshima-u.ac.jp/oba/index-e.html).

¹⁴ In the references list, for simplification purpose, the term “Ministry of Education” has been employed to designate the ministry in charge of education policy.