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Higher Education in Japan
- The past, the present and the future -

Research Institute for Higher Education (RIHE)

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III Higher education reform in Japan – Towards the future

1. The University Council and the deregulation in higher education
2. Diversification of higher education institutions and their programmes
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4. Internationalisation of higher education
I Education system in Japan

1. Development of the modern education system

- Development of *Terakoya* in the Edo period
- Introduction of a modern education system after the Meiji Restoration (1868) - Education System Order (*Gakusei*)
- Generalisation of elementary education for boys and girls at the beginning of the 20th century
Percentage of children in full time elementary education between 1875 and 1925
Percentage of students enrolling in upper secondary schools and higher education institutions (universities and junior colleges)
2. Organisation of the school system

• A number of amendments and revisions to the system under the *Gakusei* (School System Order)

• Characteristics of the pre-war school system:
  – a relatively short period of compulsory education, common to all;
  – a multiple track system after that period
Organisation of the school system in 1944
After World War II

- Entire revision under the occupation
- Nine-year compulsory education
- Unified into a single track system
  - universities being open to every graduate of an upper-secondary school
  - abolition of distinction among higher education institutions
Organisation of the present school system

- **Pre-school education**
  - Kindergarten
- **Primary education**
  - Elementary school
- **Secondary education**
  - Lower secondary school
  - Upper secondary school
  - Secondary education school
- **Higher education**
  - University (faculty)
  - Master
  - Doctor
  - University (graduate school)
  - Junior college
- **Special training school**
  - College of Technology
  - Advanced courses

**Normal age and school year**

- Kindergarten: 3 years
- Primary education: 1-6 years
- Secondary education school: 7-10 years
- Lower secondary school: 11-12 years
- Upper secondary school: 13-14 years
- Secondary education: 15-16 years
- University (faculty): 17-18 years
- Master: 19-20 years
- Doctor: 21-26 years
Number of schools, students and teachers as of 1st May 2004

<table>
<thead>
<tr>
<th>Kindergarten</th>
<th>Number of schools (private)</th>
<th>Number of students (private)</th>
<th>Number of teachers* (private)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14,061 (8,363)</td>
<td>1,753,396 (1,390,001)</td>
<td>109,853 (83,789)</td>
</tr>
<tr>
<td>Elementary school</td>
<td>23,420 (187)</td>
<td>7,200,929 (69,300)</td>
<td>414,887 (3,480)</td>
</tr>
<tr>
<td>Lower secondary school</td>
<td>11,102 (709)</td>
<td>3,663,512 (236,006)</td>
<td>249,801 (12,840)</td>
</tr>
<tr>
<td>Upper secondary school</td>
<td>5,429 (1,329)</td>
<td>3,719,048 (569,454)</td>
<td>255,629 (60,107)</td>
</tr>
<tr>
<td>Secondary education school</td>
<td>18 (9)</td>
<td>6,051 (3,355)</td>
<td>470 (247)</td>
</tr>
<tr>
<td>Special education schools (for handicapped children)</td>
<td>999 (12)</td>
<td>98,796 (815)</td>
<td>62,255 (259)</td>
</tr>
</tbody>
</table>

* full-time only
<table>
<thead>
<tr>
<th></th>
<th>Number of schools (private)</th>
<th>Number of students (private)</th>
<th>Number of teachers* (private)</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of technology</td>
<td>63 (3)</td>
<td>58,681 (2,296)</td>
<td>4,474 (158)</td>
</tr>
<tr>
<td>Junior college</td>
<td>508 (451)</td>
<td>233,749 (214,264)</td>
<td>12,740 (11,082)</td>
</tr>
<tr>
<td>University</td>
<td>709 (542)</td>
<td>2,809,323 (2,062,065)</td>
<td>158,756 (86,683)</td>
</tr>
<tr>
<td>Special training school</td>
<td>3,443 (3,228)</td>
<td>791,540 (761,735)</td>
<td>40,675 (37,902)</td>
</tr>
</tbody>
</table>

* full-time only
A very good performance in primary and secondary education

• Ranking in the OECD's PISA 2000
  – first group for mathematics and science
  – second group for reading

• PISA 2003
  – still in the same groups as the PISA 2000
  – Japan slightly lowered its ranking by country.
# PISA 2000: Top 10

<table>
<thead>
<tr>
<th>Reading</th>
<th>Mathematics</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Finland</td>
<td>Japan</td>
<td>South Korea</td>
</tr>
<tr>
<td>2 Canada</td>
<td>South Korea</td>
<td>Japan</td>
</tr>
<tr>
<td>3 New Zealand</td>
<td>New Zealand</td>
<td>Finland</td>
</tr>
<tr>
<td>4 Australia</td>
<td>Finland</td>
<td>UK</td>
</tr>
<tr>
<td>5 Ireland</td>
<td>Australia</td>
<td>Canada</td>
</tr>
<tr>
<td>6 South Korea</td>
<td>Canada</td>
<td>New Zealand</td>
</tr>
<tr>
<td>7 UK</td>
<td>Switzerland</td>
<td>Australia</td>
</tr>
<tr>
<td>8 Japan</td>
<td>UK</td>
<td>Austria</td>
</tr>
<tr>
<td>9 Sweden</td>
<td>Belgium</td>
<td>Ireland</td>
</tr>
<tr>
<td>10 Austria</td>
<td>France</td>
<td>Sweden</td>
</tr>
</tbody>
</table>
# PISA 2003: Top 10 and Japan

<table>
<thead>
<tr>
<th>Reading</th>
<th>Mathematics</th>
<th>Problem-solving</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Finland</td>
<td>Finland</td>
<td>South Korea</td>
</tr>
<tr>
<td>2 South Korea</td>
<td>Japan</td>
<td>Hong Kong</td>
</tr>
<tr>
<td>3 Canada</td>
<td>Hong Kong</td>
<td>Finland</td>
</tr>
<tr>
<td>4 Australia</td>
<td>South Korea</td>
<td>Japan</td>
</tr>
<tr>
<td>5 Lichtenstein</td>
<td>Lichtenstein</td>
<td>New Zealand</td>
</tr>
<tr>
<td>6 New Zealand</td>
<td>Australia</td>
<td>Macao</td>
</tr>
<tr>
<td>7 Ireland</td>
<td>Macao</td>
<td>Australia</td>
</tr>
<tr>
<td>8 Sweden</td>
<td>Holland</td>
<td>Lichtenstein</td>
</tr>
<tr>
<td>9 Holland</td>
<td>Czech Republic</td>
<td>Canada</td>
</tr>
<tr>
<td>10 Hong Kong</td>
<td>New Zealand</td>
<td>Belgium</td>
</tr>
</tbody>
</table>

14 Japan
II Higher education in Japan - History
1. Foundation of modern higher education institutions

- Establishment of the University of Tokyo (later Imperial University, then Tokyo Imperial University) by the government in 1887
- Other imperial universities in major cities
• Characteristics of these institutions
  – Governmental institutions
  – Organised on the continental European model (especially Germanic)
  – Bureaucratic system with quasi-autonomous academic units (faculties)
• Other institutions
  – Governmental institutions other than imperial universities
  – Local public institutions
  – Private institutions
• Specialised School Order in 1903
• University Order in 1918
  – acknowledgement of the university status to non-governmental institutions
Number of higher education institutions as of 1943

<table>
<thead>
<tr>
<th></th>
<th>Universities</th>
<th>Specialised Schools</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[imperial universities]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governmental (national)</td>
<td>19 [7]</td>
<td>58</td>
<td>77</td>
</tr>
<tr>
<td>Local public</td>
<td>2</td>
<td>24</td>
<td>26</td>
</tr>
<tr>
<td>Private</td>
<td>28</td>
<td>134</td>
<td>162</td>
</tr>
<tr>
<td>Total</td>
<td>49 [7]</td>
<td>216</td>
<td>275</td>
</tr>
</tbody>
</table>
Characteristics of pre-war higher education

- Well-organised bureaucratic administration system in governmental institutions
- Coexistence of the three sectors of higher education institutions – governmental (national), local public and private
- Absolute priority to the national institutions, especially the imperial universities
After the war (as of 1949)

- 70 national universities without difference in legal status among them
- 17 local public universities
- 81 private universities
- Junior colleges (regarded as provisional)
2. The expansion of higher education and its decline

• Rapid growth of higher education in the 1960s and early 1970s

• Number of institutions
  – 1960: 245 universities and 280 junior colleges
  – 1975: 420 universities and 513 junior colleges

• Multiplication of students from 1960 to 1975
  – Universities: 2.77 times
  – Junior colleges: 4.28 times
• Enrolment ratio (of the age cohort)
  – 10.3% in 1960
  – 38.4% in 1975
Number of universities by sector
Number of junior colleges by sector
Students enrolment in universities
Second expansion in the 1980s and early 1990s

• Number of universities
  - 1980: **446 universities** (93 national, 34 public and 319 private)
  - 1995: **565 universities** (98 national, 52 public and 415 private)
  - 2004: **709 universities** (87 national, 80 public and 542 private)
Trends in 18-year-old population and access to higher education
III Higher education reform in Japan – Towards the future
1. The University Council and the de-regulation in higher education

- Discussion at the National Council on Educational Reform (*Rinjikyoikushingikai*)
- Establishment of the University Council in 1987
• Progress in scientific research and changes in human resources;
• Rise in the percentage of students continuing to higher education and diversification of students;
• Growing need for lifelong learning and rising social expectations of universities.
• Abolition of subject areas
  – structure curricula reflecting their own educational ideals and objectives
  – no definition of subject areas, such as general education and specialised education
  – no requirement on obtaining a certain number of credits in each subject area (acquisition of a minimum total number of credits only)

- Improve the quality of education and research with the purpose of nurturing the ability to investigate issues;
- Secure university autonomy by making the educational and research system structure more flexible;
- Establish university administration and management with responsible decision-making and implementation; and
- Individualise universities and continuously improve their education and research by establishing multiple evaluation systems.
2002 revision of the School Education Law

- More flexibility for a reorganisation of faculties and departments
- Introduction of a continual third-party evaluation system
2. Diversification of higher education institutions and their programmes

- Universal phase
  - Enrolment ratio: 49.1% in 1999
  - Over 50% in 1987, if non-university sector included

cf. Three phases of higher education system defined by M. Trow

<table>
<thead>
<tr>
<th></th>
<th>Elite</th>
<th>Mass</th>
<th>Universal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolment ratio</td>
<td>Under 15%</td>
<td>Between 15 and 50%</td>
<td>Over 50%</td>
</tr>
<tr>
<td>Attitude towards access</td>
<td>Privilege</td>
<td>Right</td>
<td>Obligation</td>
</tr>
</tbody>
</table>
• Definite abandonment of the planned higher education policy
• Acceleration of diversification of higher education institutions
Incorporation of national universities in 2004

- Change in the status of the governmental institutions
- Legal personality and more autonomy
- Non-public servant status for staff
- Participation of external people in university administration
Number of universities that implemented curriculum reform

<table>
<thead>
<tr>
<th>Year</th>
<th>Private</th>
<th>Public</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>348</td>
<td>36</td>
<td>91</td>
</tr>
<tr>
<td>2000</td>
<td>374</td>
<td>39</td>
<td>95</td>
</tr>
<tr>
<td>2001</td>
<td>375</td>
<td>39</td>
<td>95</td>
</tr>
<tr>
<td>2002</td>
<td>412</td>
<td>52</td>
<td>87</td>
</tr>
</tbody>
</table>
## Implementation of curriculum reform in universities (2001)

<table>
<thead>
<tr>
<th>Area</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review of subject classification</td>
<td>475</td>
</tr>
<tr>
<td>Wedge-formed curriculum</td>
<td>329</td>
</tr>
<tr>
<td>Review of compulsory and elective subjects</td>
<td>365</td>
</tr>
<tr>
<td>Review of credits calculation</td>
<td>321</td>
</tr>
<tr>
<td>Introduction of course system</td>
<td>204</td>
</tr>
<tr>
<td>Review of the number of credits required for graduation</td>
<td>353</td>
</tr>
</tbody>
</table>
Number of universities that open classes taught in foreign language

- **2000**: 63 Private, 21 Public, 150 National
- **2001**: 67 Private, 28 Public, 161 National
- **2002**: 79 Private, 29 Public, 210 National
3. Development of human resources in knowledge society

- Knowledge: key to the development
- Lifelong learning
- Adult students
Japan's foreign production ratio by industry
Number of employees by occupational classification
Factors regarded as most important by employers for recruitment

Factors contributing to employment as percentage

Communication ability: 12.8%
Qualifications: 11.8%
Basic scholastic ability: 10.8%
Power of action/ability to act: 8.4%
Specialised knowledge: 7.0%
Positiveness/extroversion: 6.7%
Business manner: 6.5%
Professionalism/attitude toward work: 6.3%
Flexibility/adaptability to environment: 6.3%
Problem-finding ability: 4.7%
Aspiration/inquiring mind: 3.7%
Ability of presentation: 3.6%
Other factors: 3.5%
Remaining factors (from left to right): 7.9%

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

![Chart showing the number of cases and TLO recognised over years 1998 to 2003.]
4. Internationalisation of higher education

• Nakasone Plan in 1987
  – More than 100,000 international students in Japan before 21st century
Number of international students in Japanese higher education institutions

Total
Students financed by the Japanese government
Breakdown of the international students by their region of origin (2004)
• Revision of the legislation concerning the foreign universities in Japan
  – Temple University Japan (USA)
Closing remarks

- Three major factors for HE reform
  - diversification in students
  - changes in the demand for human resources
  - increased reliance of industry on academic research activities

- Deregulation of higher education
  - diversification of institution
  - increased autonomy
  - more responsiveness to society
• Differentiation of HE institutions
• Continual university reform by academics