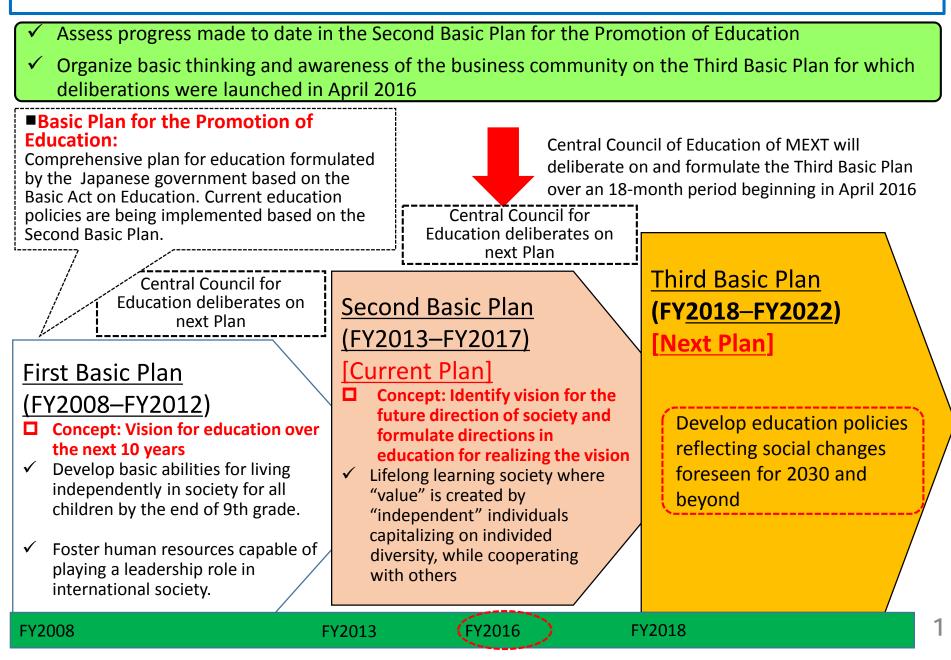


Basic Thinking on Education Reform -Formulating the Third Basic Plan for the Promotion of Education-[Overview]

April 19, 2016 Keidanren

Introduction (Basic Thinking)



I. General Evaluation of Current Plan and Ideas for Next Plan

Positive Points	 Presents basic vision for the future direction of society, and identifies aptitudes and capabilities to be fostered as "achievement targets." Presents specific "achievement indicators" for the achievement of targets.
Points to Be Improved	 The relation between aptitudes and capabilities to be fostered as "achievement targets" and "achievement indicators" is difficult to understand. There are too many "achievement indicators." In the next Plan, both "achievement targets" and "achievement indicators" should be reduced to only the most important ones. The logic and processes leading to the achievement of targets should be clearly indicated to facilitate PDCA cycle for making needed improvements. The vision for future society and aptitudes and capabilities to be fostered in the next generation of human resources should be reexamined and redefined in the next Plan.

II. Aptitudes and Capabilities for the Next Generation of Human Resources

Changes in Japan's internal and external environments

- ✓ Diminishing working-age population due to declining birthrates and aging of society.
- ✓ Intense competition from emerging market economies.
- ✓ Rapid changes in social and industrial structure as represented by the so-called "fourth industrial revolution" (Internet of Things, robotics, artificial intelligence, big data, etc.) and "Society 5.0." etc.

The achievement of economic growth in an environment of rapid change and future uncertainty requires an open and high-quality education system that fosters human resources capable of responding proactively to change and able to remain active throughout life.

Aptitudes and capabilities needed for the future

- Individual ability to find and define problems and to seek out solutions independently; ability to present one's views logically; ability to communicate in foreign languages; liberal arts education; and, respect for diversity and the ability to collaborate with others in executing projects.
- Science and engineering majors with broad educational background that includes humanities and social sciences; and, humanities and social science majors with broad educational background that includes basic knowledge of advanced technologies and math and science.
- Ability to use information effectively, enabling individuals to gather and select high quality information, and to use information to solve problems.

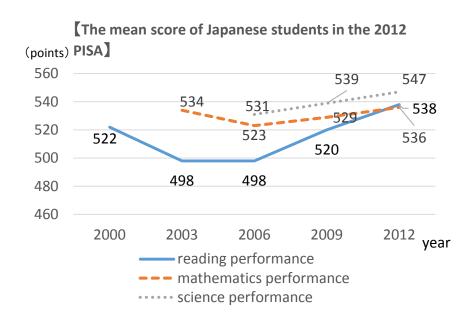
III. Required Education Reform

1.Content and Methods of Education to be reformed to Forster Needed Aptitudes and Capabilities

(1) Evaluation of Revised Curriculum Guidelines

- The Revised Guidelines can be positively evaluated for undertaking a fundamental review of curricula and methods of study and teaching from the three perspectives of: 1 What should students be able to do (necessary aptitudes and capabilities), 2 What should students study (review of courses and subjects), and 3 How should students learn (promoting active learning).
- ✓ While international surveys of academic achievement indicate that Japanese high school students have returned to the top level in the world, there are concerns of a polarization in academic aptitude. The National Assessment of Academic Ability* and other measures should be used to continuously monitor academic achievement levels and to ensure the attainment of minimum academic standards.

* Note: Government survey of the academic achievement levels of 6th and 9th graders aimed at determining and analyzing nationwide academic achievement levels of pupils and students.



	among the 34 OECD member	among the 65 coutries and economies participating in PISA
science performance	1st	<mark>4th</mark> (1st:Shanghai-China 2nd:Hong Kong-China)
mathematics performance	<mark>2nd</mark> (1st:Korea)	7th (1st:Shanghai-Chaina 2nd:Singapore)
readeing performance	1st	4th(1st:Shanghai-China2nd:Hong Kong-China)

Panking of Japan in the 2012 DISA

(note) PISA : OECD is carried out for 15 years old (in Japan a tenth grader) once in three years. 510,000 local students including OECD participation 34 countries in 65 countries participated in an investigation in 2012.

(2) Review of Educational Content (Subjects, Courses, and Curricula)

①Reforms for improving English ability

- English proficiency levels of Japanese students have not reached government targets, and efforts should be made to reach *the targets defined under the current Plan.
 *Expected English skills
 Lower secondary school: grade 3 of EIKEN Test which assesses practical English proficiency or above
 Upper secondary school: grade Pre-2 to 2 of EIKEN Test or above
 University: e.g..80 points on the TOEFL iBT
- ✓ The next Plan should include specific English proficiency targets for each school level. To ensure steady progress toward targets, mechanisms for verification and performance improvement should be devised for each school level.
- The Japan Exchange and Teaching (JET) Programe, which has proven to be successful, should be expanded. Measures should be taken for teaching "living English" to pupils and students, including the provision of special teaching certificates to external human resources.

2 Addition of new courses and subjects—New subjects for high school education

- ✓ "General History," "General Geography," and "Exploring Mathematics" (provisional titles) can serve as the foundation for liberal arts education needed in fostering global and innovative human resources.
- "Ability to use information" does not end with the skills to use ICT devices. The next Plan should clearly identify the specific capabilities that are needed, and emphasize the importance of acquiring these capabilities. Computer sciences related basic education should be reinforced beginning in primary and secondary education, including programing education.

(3) Reforming Study and Teaching Methods

①Promoting active learning to improve classes

- The next Plan can be positively evaluated for its proposed treatment of active learning, which is effective in fostering the aptitudes and capabilities needed for the future. Active learning has been given a central position in study and teaching methods, not only in university education but also throughout primary and secondary education.
- ✓ Successful cases of active learning, assessment methods for classwork (grading), and assessment methods in entrance examinations should be compiled for presentation to schools, and pupils, and students.

2 Promoting innovative education through use of ICT

- From the perspective of active learning, effective use of ICT devices is indispensable to carrying out dialogue and cooperative work, and independent learning through deep reflection and thought.
- As ICT serves as a foundation for public education, the government should play a lead role in developing ICT infrastructures and developing model cases for promoting the proliferation and adoption of ICT. As the first step, *the targets of the current Plan must be achieved.
- ✓ For this purpose, the government should once again strongly urge local governments to steadily utilize local fiscal measures for promoting the use of ICT in education.

*Government target for informatization of education and preparing ICT environment at school

-local fiscal measures; total of 671,200 million yen for 4 yeas-

Target of The Second Basic Plan for the Promotion of Education	present situation (2014)
3.6persons/ PC	national average 6.4persons/ PC
one for one class/ 100%	national average / 9 %
100%	national average / 20%
	Promotion of Education 3.6persons/ PC one for one class/ 100%

[Source: MEXT materials :2015

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2. Innovate to Foster Human Resources Capable of Success on the Global Stage

(1) Promoting Education that Sustains Innovation and Responds to Globalization

[Primary and Secondary Education]

 "Super Global High Schools" and the International Baccalaureate (IB) program are effective methods for fostering the aptitudes and capabilities needed for global human resources. The government goal for widespread adoption of the IB program should be achieved.

[Higher Education]

 To increase international competitiveness, universities must realize the achievement indicators of the current Plan and institute further reforms (governance reform, pursuing education partnerships with overseas universities, increasing the mobility of teaching staff and researchers, etc.).

Examples of the current Plan's achievement indicators for university reform:

(1)Within 10 years, double the number of research universities that are competitive on the global level. (2)Improve the international standing of Japanese universities

-Number of Japanese universities ranked in the world's top 100 universities remains flat or is decreasing-

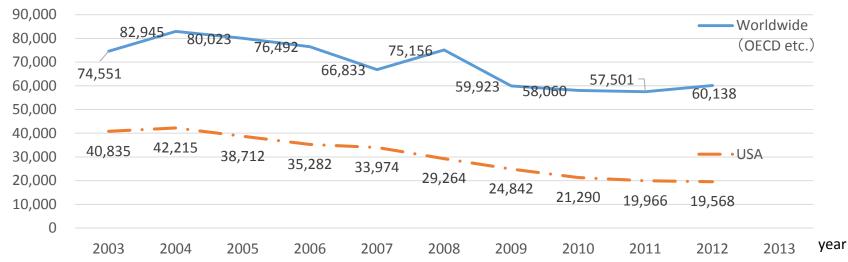


[Source:

TH: Times Higher Education World University Ranking(GB) QS: Quacquarelli Symonds World University Ranking(GB) Shanghai Jiao Tong University World University Ranking(CHN)]

(2) Promoting Bidirectional International Exchange of Students

- While the number of Japanese exchange students increased slightly in fiscal year 2012 from the previous fiscal year, policies for promoting the achievement of related *government targets should be continued.
 - *Government target is to increase the number of Japanese students studying aboard and international students studying in Japan.
 - Dubling the number of Japanese students studying aboard by 2020(University students:60,000 to 120,000;Upper secondary school students:30,000 to 60,000)
 - Realizing the "300,000 International Students Plan"
- Although the number of international exchange students in Japanese universities and other institutions is also increasing at a mild pace, policies for strategic admission of exchange students should be implemented to achieve further increases.

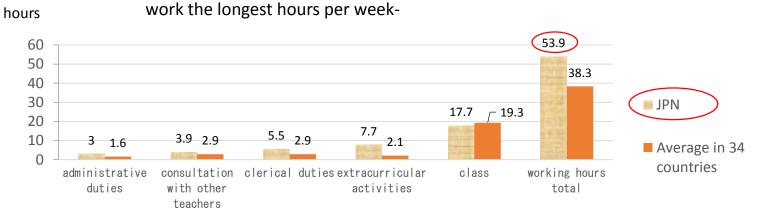


-Downward trend in Japanese exchange students has given way to slight increase-

[Source:OECD(Education at a Glance), IIE(Institute for International Education)]

3. Initiatives for Recruiting and Training Teachers Capable of Coping with New Challenges in Education

- ✓ To respond to new challenges in education (active learning, English education, ICT based innovation in education, etc.), teacher training programs and teacher hiring and selection methods should be fundamentally reviewed.
- ✓ To attract outstanding human resources to the teaching profession, place greater emphasis on the quality of teachers rather than their numbers.
- ✓ As Japanese schoolteachers are said to be the busiest in the world, promote "team-supported schools" to allow teachers to concentrate on teaching activities.
- Increase diversity on the frontlines of education by encouraging teachers to accumulate diverse experiences through overseas study and working in private businesses, and by recruiting individuals with necessary aptitudes and capabilities who have been granted special teaching licenses.



-Among 34 OECD countries, Japanese schoolteachers

[Souce:OECD Teaching and Learning International Survey (TALIS), 2013]

4. Revitalizing Local Communities through Community-School-Business Partnership and Cooperation

- ✓ Promoting "community schools" is an effective way to revitalize local communities with schools at the core.
- The current Plan calls for an increase in the number of community schools to 10 percent of all existing elementary and junior high schools. To achieve this goal, necessary reviews of institutions and systems must be carried forward. (Community schools currently account for 6 percent of a total of 2,389 elementary and junior high schools nationwide.)

"community schools":

The school where a "School Management Council System" is set up, and a parents and local residents participate in school management with certain responsibility and authority

- Role of the School Management Council-

①Approve the basic policy of the school management that the school principal formulates
 ②Make input of their views to the principal, the Board of Education regarding school management
 ③Express an opinion about the appointment of the teachers and staff of a school to the Board of Education

-The institutional review that is considered-

(1)Make it compulsory to exert efforts to set up the school management council for the Board of Education (2)Clarify the supporting role of the school management council to school

5. Integrated Reform of High School, University Entrance Exams, and University Education

- Promote integrated and mutually consistent reform of high school education, university entrance examination system, and university education under a unified framework.
- ✓ To assure the quality of high school education, "High School Academic Attainment Test" should be used in university admissions based on AO process and recommendation-based admissions.
- "Scholastic Assessment Test for Applicants" should comprehensively measure abilities to think, decide, and express oneself.
- University education should be reformed under leadership of university president in line with three core policies. To
 assure quality of university education, stricter exit management should be adopted based on diploma policy.

[Three Core Policies in University Education]

(1) Admissions policy (policy on student admissions), (2) Curriculum policy (policy on curriculum structure and implementation), (3) Diploma policy (policy on granting of degrees)

High School Education Reform

(1) Promote active learning

(2) Adopt "High School Academic

Attainment Test" to ensure and improve high school education quality

- Monitor basic academic attainment at high school level to improve learning and teaching
- Central Council for Education discussions indicate this test will not be used in university admissions process for now

University Entrance Exam Reform

(1) Replace "National Center Test for University Admissions" with "Scholastic Assessment Test for Applicants"

 Shift to comprehensive assessment of abilities to think, decide, and express oneself

(2) Reforms by individual universities

 Shift from over-emphasizing knowledge to comprehensive and multifaceted assessment of diverse high school experiences, motivation, and capabilities

University Education Reform:

 Education management based on three core policies and implemented under university president's leadership

- Promote active learning to expand on capabilities acquired in high school.
- Assure the quality of university education through diploma policy.

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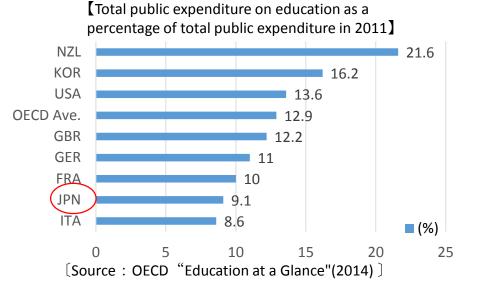
[Source: Compiled from MEXT materials]

6. Fiscal Resources and Investment in Education

- As a precondition to investing in education, the objectives of major educational policies should be clarified, their relation to budgetary expenditures should be verified based on objective data, and PDCA cycles should be implemented based on solid evidence.
- To realize these objectives: [A] Education data needed for verification should be continuously accumulated and published after making necessary adjustment for protecting personal information. [B] Government policies should be assessed by third-party organizations that are independent of the government.

[Claim of Ministry of Education, Culture, Sports, Science and Technology and Ministry of Finance over the education budget]

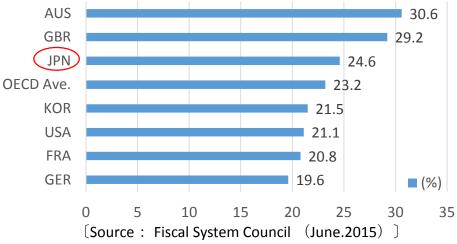
Ministry of Education, Culture, Sports, Sciense and Technology: The ratio of education expenditure among the Japanese general government total expenditure is the second from the bottom in the existing OECD member nations of data in 9.1%



numbers of people of the child among the population the expense per child, student of the OECD countries is above the average 2 The education expenditure does not decrease while declining birthrate advances

Ministry of Finance : (1)By the reflection of there being few

[Expenditure on educational as a percentage per person of GDP, by primary and secondary education in 2011]



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IV. Expected Role of Businesses

- ✓ Further promote business support for educational activities in elementary schools, junior high schools, high schools, universities, and other institutions.
- Develop working environment as well as personnel affairs and assessment systems that are conducive to the participation of diverse human resources, including foreign exchange students, women, senior citizens, and persons with disabilities.

