EDUCATION POLICY OUTLOOK

This policy profile on education in Japan is part of the Education Policy Outlook series, which presents comparative analysis of education policies and reforms across OECD countries. Building on the OECD's substantial comparative and sectorial policy knowledge base, the series offers a comparative outlook on education policy by providing analysis of individual countries’ educational context, challenges and policies (education policy profiles), analysis of international trends, and insight into policies and reforms on selected topics. In addition to country-specific profiles, the series also includes a recurring publication. The first volume, Education Policy Outlook 2015: Making Reforms Happen, was released in January, 2015.

Designed for policy makers, analysts and practitioners who seek information and analysis of education policy taking into account the importance of national context, the country policy profiles offer constructive analysis of education policy in a comparative format. Each profile reviews the current context and situation of a country’s education system and examines its challenges and policy responses, according to six policy levers that support improvement:

- Students: How to raise outcomes for all in terms of 1) equity and quality and 2) preparing students for the future
- Institutions: How to raise quality through 3) school improvement and 4) evaluation and assessment
- System: How the system is organised to deliver education policy in terms of 5) governance and 6) funding.

Some country policy profiles contain spotlight boxes on selected policy issues. They are meant to draw attention to specific policies that are promising or showing positive results and may be relevant for other countries.

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Most of the figures quoted in the different sections refer to Annex B, which presents a table of the main indicators for the different sources used throughout the country profile. Hyperlinks to the reference publications are included throughout the text for ease of reading, and also in the References and further reading section, which lists both OECD and non-OECD sources.

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Japan’s educational context

**Students:** Japan is among the top PISA 2012 performers in mathematics, science and reading, with improvements in reading and science across PISA cycles and unchanged performance in mathematics. The impact of socio-economic background on student performance is below the average across OECD countries. Primary education usually starts at age 3, and the number of 3-4 year-olds enrolled is above the OECD average, although enrolment is mainly in private institutions. In compulsory education (from age 6 to age 15) school choice is limited, with tracking starting at age 15 and no grade repetition. Japan has an above-average attainment rate in upper secondary education, although fewer students than the OECD average are enrolled in upper secondary vocational education and training (VET). While policy has aimed to reduce competitive pressures, particularly for entrance to university, privately-run juku (private after-hours tutoring schools) remain an important feature of the education system. Unemployment remains below the OECD average. According to the Survey of Adult Skills, adults (16-65 year-olds) have high literacy and numeracy skills compared to other countries, and literacy skills are even higher among 16-24 year-olds.

**Institutions:** In 2011, Japan increased the total number of study hours in primary and lower secondary education, in order to reduce dependence on private education resources. Japanese schools have the highest level of autonomy among OECD countries regarding curriculum and student assessment policies. Access to the teaching profession in Japan is well-regulated. Lower secondary teachers are generally required to follow a pre-service teacher training programme of four years at a university, including a mandatory teaching practicum. They must then pass a competitive examination to become teachers and, later, complete an induction process. Class size is above the OECD average in primary and lower secondary schools, and Japanese lower secondary teachers have one of the longest working hours among countries participating in TALIS (including teaching and other work-related tasks). A lower proportion of teachers in Japan than the TALIS average consider that the teaching profession is valued in society and would choose to work as teachers if they could decide again. School evaluation is conducted by each school, according to criteria set out in a national framework.

**System:** Central and local authorities are responsible for decision-making in Japan’s education system. The Ministry of Education, Culture, Sports, and Science and Technology (MEXT) is the main body in charge of education. Most schooling decisions in lower secondary education are taken by regional and local governments and schools. The share of GDP devoted to educational institutions (all education levels combined) is below the OECD average, with a higher share of private funding than the OECD average. With more students entering higher education in Japan, the country is experiencing an increasing demand for scholarship loans.

**Key policy issues**

Despite recent policy measures, competitive pressures remain strong in Japan. Education outcomes are good by international standards, but Japan faces challenges facilitating the transition from school to work in a context of globalisation and a decreasing working-age population. Measures to increase participation of women in the labour market (including increasing childcare and after-school care) should improve the utilisation of high quality human capital. Other challenges include ensuring that the increase in study hours for students at schools does not weaken the overall quality of the teaching provided. To deliver quality teaching, teachers need opportunities to improve professionally. Engaging local communities in children’s education is also a high priority. Japan aims to maintain equal opportunities and ensure standards of quality education for all beyond compulsory education, as well as to secure funds to achieve the targets established by the government.

**Recent policy responses**

The *Second Basic Plan for the Promotion of Education* (第2期教育振興基本計画) (2013-17), adopted upon Cabinet decision, is a comprehensive plan for education formulated by the national government based on the Basic Act on Education (教育基本法). The Courses of Study, which serves as fundamental standards for the school curriculum from primary to upper secondary levels, was revised in 2008/09. Central to the revised guidelines is the idea of nurturing a *zest for life* in students. The new standards enrich the content of education and increase the number of classes, with an emphasis on the balance between acquiring basic and fundamental knowledge and skills and fostering the ability to think, make decisions, and express oneself. After the earthquake in 2011, the *OECD Tohoku School project* (OECD 東北スクール) was created to support local innovation and foster resilience, creativity and 21st century skills in 100 students from the Tohoku region.
Japan is among the top performers in reading, mathematics and science in PISA 2012 and is the top performer in literacy and numeracy in PIAAC. The impact of socio-economic status on student performance (9.8%) is lower than the OECD average (14.8%) (Figure 1).

Figure 1. Performance of 15-year-olds in mathematics, relationship between student performance and economic, social and cultural status (ESCS) (PISA 2012) and performance of adults in literacy (PIAAC)

Tertiary education attainment of 25-34 year-olds in Japan is lower than the OECD average: in 2014, 37% have attained tertiary education (compared to the OECD average of 41%) (Figure 2).

Figure 2. Tertiary attainment of 25-34 year-olds (2014)

Note: “Min”/”Max” refer to OECD countries with the lowest/highest values.

EQUITY AND QUALITY: HIGH PERFORMANCE AND EQUITABLE ACCESS, SOME CHALLENGES AT SCHOOL LEVEL

Japan has positive equity indicators, with top performance of 15-year-olds (generally in their first year of upper secondary education) in mathematics, science and reading in PISA 2012, and improvements in reading and science and unchanged performance in mathematics across PISA cycles. In mathematics, Japan has decreased the already low proportion of students performing below Level 2 from 13.3% in 2003 (compared to the OECD average of 21.5%) to 11.1% in 2012 (compared to the OECD average of 22.2%). The percentage of Japanese top performers in mathematics has remained higher than the OECD average, with 23.7% in 2012, compared to the OECD average of 13.1% (Figure 3). A higher share of Japanese students (93%) felt responsible for their success in mathematics than their peers in other OECD countries (83%). At the same time, Japanese students are less motivated to learn mathematics than the OECD average. Only 38% of Japanese students reported that they were interested in learning mathematics, compared to 53% of students in other OECD countries.

Japan does better than some other OECD countries in providing equitable learning opportunities to 15-year-old students, while private out-of-school tutoring has gained importance in recent years. Japan has high enrolment rates in early childhood education and care (ECEC), with 81% of 3-year-olds and 95% of 4-year-olds enrolled in 2013, mainly in private institutions (above the OECD average of 74% for 3-year-olds and 88% for 4-year-olds). In PISA 2012, Japanese students reported no grade repetition, compared to the OECD average of 12%. The first age of selection in the Japanese education system is 15 (above the OECD average of age 14). Compulsory education lasts from age 6 to age 15, covering primary to lower secondary level, and 90.3% of upper secondary students attend schools that compete for students with at least one other school (compared to the OECD average of 80.8%). About 10% of the variation in student performance in mathematics in PISA 2012 can be attributed to differences in socio-economic status (compared to the OECD average of 15%). While policy has aimed to reduce competitive pressures, particularly for entrance to university, privately-run out-of-school academic tutoring remains an important feature of the education system. It is often delivered at private after-hours tutoring schools (juku学習塾). Participation in private academic tutoring increased from 16% in 1985 to 26% in 2007 at the primary school level, and from 44% to 53% at the lower secondary level.

Although a higher share of Japanese socio-economically disadvantaged students achieved top performance in PISA 2012 (11.3%, compared to the OECD average of 6.4%), further steps need to be taken to support students with other disadvantages. Japanese students from single-parent families face a higher risk of low performance than in other OECD countries. At the same time, a higher share of Japanese students attending disadvantaged schools have low achievement in mathematics (23.7%) than students in disadvantaged schools in other OECD countries (18.1%). The performance difference between schools across socio-economic groups is the highest among all OECD countries and has increased since 2003 (the difference between advantaged and disadvantaged schools rose from 121 score points to 150 score points).

The challenge: Further improving equal opportunity to learn for students from low-income or single-parent families and disadvantaged schools, in a competitive context for progression in education.

Recent policies and practices

The Second Basic Plan for the Promotion of Education (第2期教育振興基本計画) (2013-17), is a comprehensive plan for education formulated by the national government, derived from the Basic Act on Education (教育基本法). The Plan sets four main policy directions:

1) Developing social competencies for survival: Active abilities for independence and collaboration in a diversified and rapidly changing society.

2) Developing human resources for a brighter future: Human resources to initiate and create changes and new values through leadership in various fields in society.

3) Building safety nets for learning: A wide range of learning opportunities accessible to everyone.

4) Building bonds and establishing vibrant communities: A virtuous cycle where society nurtures people and people create society.

The plan also aims to reduce the burden for families of educational costs in early childhood education (see Spotlight 1).
Spotlight 1. Incremental introduction of free tuition in early childhood education

The Second Basic Plan for the Promotion of Education (第2期教育振興基本計画) (2013-17) stipulates the introduction of free-of-charge and universal early childhood education and care for all children. The government is examining potential revenue sources to fund this new initiative. In addition, at a conference to discuss implementation of the new policy, the government and the ruling parties set the main policy objectives:

- eliminate tuition fees so that every child can access high-quality early childhood education
- start providing free early childhood education to 5-year-olds incrementally as of 2014
- introduce free-of-charge early childhood education at kindergarten for children whose parents are welfare recipients and alleviate financial obligations for large families starting in 2014
- increase financial support for children whose parents get municipal tax exemption starting in 2015.
Labour market perspectives can play an important role in the educational and employment decisions of individuals, as can the capacity of the system to maximise the use of skills available. Among countries participating in the 2012 OECD Survey of Adult Skills, Japanese 16-65 year-olds are top performers for literacy and numeracy. Japanese 25-64 year-olds also had lower unemployment rates in 2014 (3.5%) than the OECD average (7.3%). Compared to their peers in other OECD countries, youth in Japan seem to do better. In 2014, about 6.6% of 15-29 year-olds were not in education and not employed (NEET), below the OECD average of 15.5%. Japanese women ranked highest internationally in both literacy and numeracy proficiency in the Survey of Adults Skills, compared to their female peers in other participating countries. However, only 64% of 25-64 year-old women are employed, compared to 88% of men in the same age range. This employment gap by gender indicates an untapped supply of high-quality human capital in the Japanese labour market.

In Japan, about half of 25-64 year-old adults in 2012 have attained upper secondary education (52%, above the OECD average of 39%). According to government data, the enrolment rate in upper secondary school is high (98.4%) and the dropout rate is low (1.7%). A higher share of students were enrolled in general upper secondary (77%) than the OECD average (54%). Primarily due to severe competition to enter the country’s top universities, 60% of students follow some sort of out-of-school private academic tutoring starting at lower secondary level. Some regions are offering school-based, after-hours tutoring support, or collaborating directly with tutoring firms to provide services more broadly at a lower cost. The government has implemented policy changes, such as creating stronger links between high school and university education and modifying university entrance requirements to include a broader portfolio of entrance criteria, rather than relying on a single test score.

Vocational education and training (VET) in Japan is provided at the upper secondary and tertiary levels. At upper secondary level, fewer students in Japan attended vocational or pre-vocational studies in 2012 than across other OECD countries (23%, compared to the OECD average of 46%). Following recommendations from the Central Council of Education, Japan aims to improve the quality of VET education by introducing guidelines to enhance VET provision at different levels of the education system.

Tertiary education attainment (excluding short-cycle tertiary education for Japan) is below the OECD average, at 28% for 25-64 year-olds (compared to the OECD average of 33%). Attainment is higher among 30-34 year-olds (37%), but remains below the OECD average (41%). It is less common for Japanese students to study abroad than for students in other OECD countries (1% of Japanese students, compared to the OECD average of 2%). When moving forward in the educational pathway, the proportion of females in education decreases for graduates in bachelor’s (45%), master’s (33%) and doctoral programmes (30%), below the OECD average of 58% for bachelor’s programmes, 56% for master’s programmes and 47% for doctoral programmes.

The challenge: Providing adequate structures and incentives to further activate women’s skills for the labour market.

Recent policies and practices

The Japanese government developed the Japan Revitalization Strategy (revised in 2014) - Japan's challenge for the future (日本再興戦略「日本再興戦略」改訂 2014 - 未来への挑戦 - ). One of the key elements of this strategy is to promote a more active participation of women in society and economic life and to increase women’s employment rate from 70% in 2013 to 73% by 2020. These policies include:

- adding 600 000 available places in early childhood education and care and reducing the number of children on waiting lists by the end of 2017
- increasing the benefits women can receive during childcare leave to pay 67% of their salary for six months
- increasing the proportion of women in managerial positions in large private companies by up to 30% by 2020, as well as requiring private companies to report the proportion of women in posts at this level in their financial statements starting in 2015.

Japan is also working to provide a more international approach to its education system (see Spotlight 2).
Figure 4. Percentage of 15-29 year-olds in education and not in education, by educational attainment and work status (2012)

Note: The data for Japan refer to 15-24 year-olds.

Spotlight 2. Developing global human resources

Anticipating the year 2020 (when Japan will be hosting the Olympic Games), the Ministry of Education, Culture, Sports, Science and Technology is implementing the following policies to develop global human resources:

Primary and secondary education
- An action plan, English Education Reform Plan corresponding to Globalization, to strengthen English learning from primary to upper secondary education levels starting in 2014.
- Foreign language teaching from Grades 5 to 6, introduced in the last revision of the national curriculum, and implemented in 2011. MEXT is considering increasing the number of hours allocated to foreign language learning and also offering it starting in Grade 3.

Tertiary education
- As part of the Japan Revitalization Strategy (2014), Japan aims to double the number of Japanese students overseas by 2020 (from 60 000 students to 120 000 students). MEXT doubled the number of scholarship recipients to study abroad (reaching more than 22 270 students in 2015) and established a new scholarship programme supported by private resources starting in 2014. The new programme aims to send 10 000 students abroad between 2014 and 2020.
- MEXT started the Top Global University Project (Super Global Daigaku Sosei Sien, スーパーグローバル大学創生支援) to support 37 universities that are taking part in the reform process towards internationalisation. Each university sets its own targets regarding internationalisation, governance, and educational reform.
SCHOOL IMPROVEMENT: SUPPORTING TEACHERS

Developing positive learning environments for school leaders and teachers to succeed is essential to raise achievement in schools. According to Japanese students in PISA 2012, student truancy is low (8.9%, compared to the OECD average of 35.3%), and conduciveess to learning in classrooms (disciplinary climate) is above the OECD average. In 2011, Japan increased the total number of study hours per year in order to decrease dependence on juku schools. This increase was by about 300 hours in primary education and, starting in 2012/13, by about 100 hours in lower secondary education. In 2014, the total number of hours of compulsory instruction in Japan reached 4 575 hours per year in primary education (above the OECD average of 4 614 hours) and 2 684 hours in lower secondary education (below the OECD average of 2 957 hours).

The role of school leaders has changed over the past decade, with more school autonomy and higher demands for accountability. PISA 2012 shows that schools in Japan have less autonomy in resource allocation than other OECD countries, but the highest level of autonomy is in curriculum and assessment. Japanese school principals scored below the OECD average in the index of instructional leadership (Figure 5). In Japan, teachers must take an examination to become school leaders in public schools. This selection process is conducted by prefectural boards of education. In TALIS 2013, Japanese school leaders reported spending about 25% of their working time on curriculum and teaching-related tasks and meetings (above the average of 21%).

Teachers in Japan must comply with several prerequisites to start teaching. They work more hours than teachers in other countries, but feel less prepared to perform their tasks. Prospective teachers must complete initial teacher education, which is similar to programmes offered in other countries in terms of selection criteria, duration and content. Initial teacher training for all levels of education lasts primarily four years, with a compulsory teaching practicum. In addition, aspiring teaching candidates in Japan need to pass a competitive examination and acquire a teaching licence after completing initial teacher education. They also follow formal induction programmes when entering the profession. Teachers in Japan have among the highest total statutory working time in OECD countries, with 1 899 hours per year (compared to the OECD average of 1 603 hours). Their work covers a wide variety of school activities, including eight hours for extracurricular activities per week, well above the TALIS average* of two hours. Teachers in Japan are also largely responsible for how the curriculum is taught, and have authority over instruction and actual classroom practice. While about 75% of Japanese teachers reported receiving feedback from their school leader (above the average of 54%), they also reported lower-than-average levels of self-efficacy in some domains. For example, around 16% of teachers in Japan reported feeling capable of helping their students to think critically (compared to the average of 80%). In addition, about one-quarter (24%) of Japanese teachers reported in TALIS that they do not feel prepared to teach the content, pedagogy and practical components of the subjects they teach (above the average of 7%). Japanese teachers also reported most often that work schedule conflicts were a barrier to participation in professional development activities (86.4%, compared to the average of 50.6%). A lower proportion of teachers in Japan (28.1%) than the average (30.9%) believe that the teaching profession is valued in society, and only 58.1% of Japanese teachers would choose to work as teachers if they could decide again (compared to the average of 77.6%).

The challenge: Ensuring that increased study hours for students at schools come with quality teaching, and giving teachers opportunities to improve professionally and deliver better teaching.

Recent policies and practices

The fundamental standards for school curricula from primary to upper secondary levels (Courses of Study) were revised in 2008/09 with the goal of fostering a zest for life in students. The current Courses of Study aim to develop in students solid fundamental knowledge and skills, the ability to think, make decisions and express themselves in order to solve problems using these knowledge and skills, and the attitude to learn proactively. Their objectives include strengthening the curriculum in such subjects as languages, mathematics and science, and increasing study hours in class.

Japan introduced the Teacher License Renewal System in 2009. Under this system, teachers must renew their teaching licences by participating in at least 30 hours of professional development programmes every 10 years to improve their knowledge and practices.

Starting in 2015, the National Center for Teachers’ Development is working to develop new teacher training programmes to help strengthen problem-solving and collaborative work among teachers.

After the earthquake in 2011, the OECD Tohoku School project (OECD 東北スクール) was created to support local innovations to foster resilience, creativity and 21st century skills in 100 students from the affected region. The project is managed by Fukushima University, with the support of the OECD. The project is seen as a good example of transforming education by project-based learning on a real-life issue, with bottom-up initiatives, leadership and ownership. The project aims to scale up and explore how local innovations can be developed around the world to find solutions for challenges in the world of 2030.

The Project for Promoting Educational Activities through Co-operation among Schools, Families and Communities (2007) provides educational activities thanks to volunteers with rich social experience.

* All remaining averages in this paragraph refer to the TALIS average.
Figure 5. The learning environment, PISA 2012

EVALUATION AND ASSESSMENT TO IMPROVE STUDENT OUTCOMES: EVALUATION AT DIFFERENT LEVELS

The central government, local boards of education and schools conduct evaluation and assessment. In addition, prefectures, municipalities and schools have autonomy to implement evaluations and assessments. Overall, student assessments are used less than in other OECD countries to monitor schools’ progress from year to year, but more than the OECD average to make decisions about student promotion and teacher effectiveness (Figure 6).

System evaluations are carried out by the boards of education of each local government. According to the Act on the Organisation and Operation of Local Education, the boards of education should evaluate provision of education services in their jurisdiction every year, reporting the results to their assembly and publishing them. The national government and local governments formulate their education promotion plans every five years, covering basic principles and other requirements set out in the revised Basic Act on Education (2006). These education promotion plans are used to evaluate their policies. MEXT evaluates its policies based on the Government Policy Evaluation Act.

School evaluation in Japan is conducted by each school according to a national framework of school evaluation established in 2007, based on the School Education Act. Many prefectural boards of education also develop their own guidelines. Schools carry out self-evaluations every year. Parents and communities then conduct external evaluations using the results of these self-evaluations. Most schools report the results of these evaluations in their school newsletters and on their websites.

Teacher appraisal at public schools is regulated under the Local Public Service Law. Many boards of education have been developing systems of management by objectives as a form of teacher appraisal. Direct links between the results and teacher salaries are not common. TALIS 2013 results show that Japanese teachers receive feedback on their work from multiple actors within their schools: more than 50% of teachers in Japan report receiving feedback from at least three sources, higher than the TALIS average (around 30%). The feedback tends to be used effectively, as about 89% of Japanese teachers report that the feedback they received led to positive changes in their teaching practices (above the TALIS average of 62%).

Regular student assessments take place at school and classroom levels. MEXT has been conducting the National Assessment of Academic Ability since 2007. It covers assessments on student achievement (practical use of knowledge and skills) and student learning (subject knowledge) at Grades 6 and 9 every year. Student learning assessments aim to measure knowledge in mathematics and Japanese every year and, in 2015, science was added for a three-year cycle. These assessments of student achievement and student learning are intended only for monitoring purposes. Schools are expected to use them to improve their education practices. As part of the process, questionnaires are completed by students, parents and schools to provide a broader view of the relationship between student performance, learning environments, student life-styles and teaching practices. In addition to school, Japanese students prepare intensively to pass a highly competitive, national standardised assessment to enter university. The exam is administered by universities.

The challenge: Making better use of evaluation and assessment results to promote better student achievement across the system, particularly at school level.

Recent policies and practices

The National Institute for Educational Policy Research (NIER) collects and analyses academic research data, which are used to plan and design educational policies. NIER has the following missions as its mid-term goals:

- To conduct scientific surveys and analysis and to make forecasts on the domestic and international situation around education. NIER also contributes to planning and formulation of strategic educational policies from a mid/long-term perspective.
- To collect and organise education-based information, data, and literature, and provide them to stakeholders inside and outside Japan.
- To promote exchanges of information drawn from educational research with institutions in Japan and in other countries by conducting joint research, holding conferences and carrying out co-operative activities.
Figure 6. Percentage of students in schools where the principal reported the following uses for student assessment, PISA 2012

GOVERNANCE: A COMPREHENSIVE AND DIVERSIFIED SYSTEM

According to the Basic Act on Education (教育基本法), the national government comprehensively formulates and implements educational measures in order to provide equal opportunities in education and to maintain and increase educational standards. The act also requires local governments (47 prefectures and their respective municipalities) to formulate and implement educational measures corresponding to their regional context. Among the main bodies that help shape national education policies:

- The Ministry of Education, Culture, Sports, and Science and Technology (MEXT) is responsible for the education system from ECEC to upper secondary education levels (e.g. setting national curriculum standards, teacher certification programmes and official requirements for setting up schools). The Ministry of Health, Labour and Welfare is in charge of vocational education and training.
- The Central Education Council, composed of education experts and various stakeholders (e.g. parents and representatives from different fields, such as economy, sports, culture and media), prepares reports on education issues at the request of the Minister of Education.
- The 1 719 municipalities are responsible for compulsory education schools. A board of education in each municipality is in charge of establishing and managing public compulsory schools. The municipality mayor is responsible for the education budget.
- The 47 prefectures are responsible for upper secondary education. The prefecture governor is also responsible for the education budget and private education from ECEC to upper secondary education.
- MEXT is also responsible for higher education. National universities are established by national university corporations, but most students attend private institutions.
- Other education stakeholders include teacher unions, the juku institutions, and civil society.

Prefectures and municipalities make most education decisions about school management and allocation of teachers to schools. The population of Japanese municipalities is diverse, with many villages and towns located in rural areas and on small islands. These rural municipalities sometimes do not have sufficient financial resources to hire teachers and may struggle to attract them to their schools. In such cases, the national law transfers the authority for teacher affairs in compulsory education from smaller municipalities to prefectures (through the prefectural boards). The prefectural boards of education have the authority to recruit teachers, allocate them to schools based on municipalities’ reports and principals’ opinions, and train them. The boards of education in each municipality supervise issues related to everyday delivery of teacher public services. The share of decisions taken at prefecture level in public lower secondary education in Japan is 31%, higher than the OECD average of 5% (Figure 7). Prefectures take 65% of decisions in resource management and 58% of decisions in personnel management (compared to the OECD average of 8% for both).

Decision-making in higher education is shared between the government and higher education institutions. MEXT sets 6-year mid-term objectives for each of the national university corporations, which then set their respective mid-term plans based on these objectives. MEXT regulates the standards for establishing universities. Public and private universities are required to conduct self-evaluations and undergo accreditation processes by evaluation and accreditation organisations certified by the Minister of Education, Culture, Sports, Science and Technology every seven or fewer years. In addition, professional graduate schools are required to undergo accreditation processes every five or fewer years by certified evaluation and accreditation organisations.

**The challenge: Reforming local education administration to reflect the voice of citizens in education.**

**Recent policies and practices**

In 2014, Japan amended the Act on the Organization and Operation of Local Educational Administration that regulates the boards of education in each local government. This law, originally passed in 1956, was revised to increase representation of local stakeholders’ views in the design of local education policies. Two key points:

- With the agreement of the local assembly, the local government head designates a superintendent to lead the board of education.
- The local government head organises education meetings with board of education members to discuss basic education policies to improve their local education system.
Figure 7. Percentage of decisions taken in public lower secondary schools at each level of government (2011)

Japan’s investment in educational institutions (public and private combined) is below the OECD average (5.0% of GDP, compared to the OECD average of 5.3%) (Figure 8). Since 2000, the percentage of Japan’s investment in educational institutions has remained almost unchanged (0.1 percentage point increase, compared to the OECD average increase of 0.4 percentage points). In Japan, the share of public investment on educational institutions is lower than the OECD average (70.1%, compared to the OECD average of 83.5%). Japan’s public expenditure on educational institutions as a percentage of GDP is also lower than the OECD average (3.5% of GDP in Japan, compared to the OECD average of 4.7% of GDP). Private expenditure is highest in tertiary education.

Japan’s total public and private annual expenditure per student across the different levels of education is relatively high: annual expenditure per student from primary to tertiary education is USD 11 671, above the 2012 OECD average of USD 10 220.

Funding for schools varies depending on whether the school is public or private. Prefectures and municipalities provide resources for the public schools they establish. Nine-year compulsory education (primary and lower secondary level) is free to students in public schools, although families may have to pay for school supplies. Prefectures fund two-thirds of the cost of teachers’ salaries in public compulsory education, and the government subsidises the remaining one-third of the teachers’ salaries. Japan prioritises the quality of teachers in its distribution of resources. Advantaged schools in Japan have the same share of qualified teachers as disadvantaged schools, but more students per teacher (13, compared to 10 in disadvantaged schools).

The government has primary responsibility for funding of national higher education institutions. The government subsidises private education institutions, including universities, which enrol about 75% of university students. The share of private expenditure on tertiary educational institutions is 66%, more than twice the OECD average of 30%. In addition to scholarship loans, private and public universities offer reduction of tuition fees to students from low-income families, through subsidies from the government.

To redistribute funding at upper secondary level, where private education is more prevalent, starting in 2014, the government introduced an income limit in the High School Tuition Support Fund System. Families that earn above the new threshold have to pay tuition fees. The revenue that this new policy produces is used to provide additional financial support to upper secondary education students from low income families (see below).

### The challenge: Defining where priority investment is needed to revitalise Japanese education.

**Recent policies and practices**

- The Second Basic Plan for the Promotion of Education (第2期教育振興基本計画) (2013-17) sets directions for future educational investments. Using OECD benchmarks for education public expenditures, the plan outlines measures to secure educational investments for reaching achievement targets and implementing basic measures.

- MEXT enhanced the scholarship loan programme for students in higher education and introduced an interest-free scholarship loan with an income-contingent repayment policy (2012) to improve access to higher education. Students are not required to make payments until their annual income reaches JPY 3 million (around EUR 20 000) after they graduate.

- Japan passed the Act on Free Tuition Fee at Public High Schools and High School Enrollment Support Fund (2010) to ease family educational expenses and contribute to equal opportunity in upper secondary education. The government further amended this measure to improve support for low-income families and correct the gap in educational costs between public and private school. Under the original design of this policy in 2010, those who were already exempt from paying tuition for public and private upper secondary schools were not covered by this free tuition programme. This left low-income families still facing significant educational costs, including private upper secondary school fees. To rectify this, in 2014 the government introduced a revised system that includes an income limit to improve the support. Through these modifications, the government aims to increase financial support to students from low-income families in private upper secondary schools. It also introduced new scholarship programmes for students from low-income families to alleviate some financial obligations other than tuition costs, such as school trips and textbooks.
Figure 8. Expenditure on educational institutions as a percentage of GDP, by level of education (2012)

Annex A: Structure of Japan’s Education System

## ANNEX B: STATISTICS

### List of key indicators

<table>
<thead>
<tr>
<th>#</th>
<th>Political context</th>
<th>Japan</th>
<th>Average or total</th>
<th>Min OECD</th>
<th>Max OECD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Public expenditure on education as a percentage of GDP, 2012 (EAG 2015)</td>
<td>3.7%</td>
<td>4.8%</td>
<td>3.5%</td>
<td>7.7%</td>
</tr>
<tr>
<td>2</td>
<td>GDP per capita, 2012, in equivalent USD converted using PPPs (EAG 2015)</td>
<td>35 695</td>
<td>n/a</td>
<td>16 767</td>
<td>91 754</td>
</tr>
<tr>
<td>3</td>
<td>GDP growth 2013 (OECD National Accounts)</td>
<td>1.6%</td>
<td>1.2%</td>
<td>-3.2%</td>
<td>4.3%</td>
</tr>
<tr>
<td>4</td>
<td>Population density, inhab/km², 2014 (OECD Statistics)</td>
<td>340.8</td>
<td>142</td>
<td>3.1</td>
<td>507</td>
</tr>
<tr>
<td>5</td>
<td>Population aged less than 15 as a percentage of total population, 2010 (OECD Factbook 2014)</td>
<td>13.1%</td>
<td>18.6%</td>
<td>13.1%</td>
<td>29.6%</td>
</tr>
<tr>
<td>6</td>
<td>Foreign-born population as a percentage of total population, 2011 or latest available year (OECD Factbook 2014)</td>
<td>1%</td>
<td>0%</td>
<td>0.3%</td>
<td>42.1%</td>
</tr>
</tbody>
</table>

### Education outcomes

<table>
<thead>
<tr>
<th>#</th>
<th>Mean performance in mathematics (PISA 2012)</th>
<th>536</th>
<th>494</th>
<th>413</th>
<th>554</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Annualised change in mathematics performance across PISA assessments (PISA 2012)</td>
<td>0.4</td>
<td>-0.3</td>
<td>-3.3</td>
<td>4.2</td>
</tr>
<tr>
<td>9</td>
<td>Annualised change in reading performance across PISA assessments (PISA 2012)</td>
<td>1.5</td>
<td>0.3</td>
<td>-2.8</td>
<td>4.1</td>
</tr>
<tr>
<td>10</td>
<td>Annualised change in science performance across PISA assessments (PISA 2012)</td>
<td>2.6</td>
<td>0.5</td>
<td>-3.1</td>
<td>6.4</td>
</tr>
<tr>
<td>11</td>
<td>Enrolment rates of 3-4 year-olds in early childhood education and primary education as a percentage of the population of the same age group, 2013 (EAG 2015)</td>
<td>88%</td>
<td>81%</td>
<td>22%</td>
<td>100%</td>
</tr>
<tr>
<td>12</td>
<td>% of 25-64 year-olds whose highest level of attainment is lower secondary, post-secondary non-tertiary education or below, 2014 (EAG 2015)</td>
<td>m</td>
<td>15%</td>
<td>0%</td>
<td>33%</td>
</tr>
<tr>
<td>13</td>
<td>% of 25-34 year-olds whose highest level of attainment is at least upper secondary education, 2014 (EAG 2015)</td>
<td>m</td>
<td>83%</td>
<td>46%</td>
<td>98%</td>
</tr>
<tr>
<td>14</td>
<td>% of 25-34 year-olds whose highest level of attainment is tertiary education, 2014 (EAG 2015)</td>
<td>37%</td>
<td>41%</td>
<td>24%</td>
<td>68%</td>
</tr>
<tr>
<td>15</td>
<td>% of 25-64 year-olds whose highest level of attainment is vocational upper-secondary or post-secondary non-tertiary education, 2014 (EAG 2015)</td>
<td>0%</td>
<td>26%</td>
<td>6%</td>
<td>67%</td>
</tr>
</tbody>
</table>

### Unemployment rates of 25-34 year-olds by educational attainment, 2014 (EAG 2015)

| Below upper secondary | m | 19.1% | 4.7% | 55.9% |
| Upper secondary and post-secondary non-tertiary | m | 10.2% | 3.7% | 36%   |
| Tertiary education | m | 7.5%  | 2.9% | 32.5% |

### Students: Raising outcomes

<table>
<thead>
<tr>
<th>Policy lever: Equity and quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 First age of selection in the education system (PISA 2012)</td>
</tr>
<tr>
<td><strong>Students performing at the highest or lowest levels in mathematics (%)</strong>, (PISA 2012)</td>
</tr>
<tr>
<td>Students performing below Level 2</td>
</tr>
<tr>
<td>Students performing at Level 5 or above</td>
</tr>
<tr>
<td><strong>Variance in mathematics performance between schools and within schools as a percentage of the OECD average variance in mathematics performance (PISA 2012)</strong></td>
</tr>
<tr>
<td>Between-schools percentage of variance</td>
</tr>
<tr>
<td>Within-schools percentage of variance</td>
</tr>
<tr>
<td><strong>% of students reporting that they have repeated at least a grade in primary, lower secondary or upper secondary schools (PISA 2012)</strong></td>
</tr>
</tbody>
</table>
### List of key indicators

<table>
<thead>
<tr>
<th>#</th>
<th>List of key indicators</th>
<th>Japan</th>
<th>Average or total</th>
<th>Min OECD</th>
<th>Max OECD</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Percentage of variance in mathematics performance in PISA test explained by ESCS (PISA 2012) (^1)</td>
<td>9.8%</td>
<td>14.8%</td>
<td>7.4%</td>
<td>24.6%</td>
</tr>
<tr>
<td>22</td>
<td>Score difference in mathematics performance in PISA between non-immigrant and immigrant students AFTER adjusting for socio-economic status (PISA 2012) (^4)</td>
<td>m</td>
<td>21</td>
<td>-29</td>
<td>66</td>
</tr>
<tr>
<td>23</td>
<td>Score differences between boys and girls in mathematics (PISA 2012) (^4)</td>
<td>18</td>
<td>11</td>
<td>-6</td>
<td>25</td>
</tr>
</tbody>
</table>

#### Policy lever 2: Preparing students for the future

**Adjusted mean proficiency in literacy among adults on a scale of 500 (Survey of Adult Skills, 2012)**

- Among 16-65 year-olds (adjusted) 293.6 270.7 249.4 293.6
- Among 16-24 year-olds (adjusted) 296.5 278.0 260.0 287.0

**Upper secondary graduation rates in % by programme of orientation, 2013 (EAG 2015)**

- General programmes 75% 52% 19% 82%
- Pre-vocational/vocational programmes 22% 47% 0% 0%

**First-time graduation rates, by tertiary ISCED level, 2013 (EAG 2015)**

- Short tertiary (2-3 years), ISCED 5 25% 11% 0% 28%
- Bachelor’s or equivalent, ISCED 6 45% 36% 9% 61%
- Master’s or equivalent, ISCED 7 8% 17% 3% 40%
- Doctorate or equivalent, ISCED 8 1.2% 1.7% 0.2% 3.6%

#### Policy lever 3: School improvement

**% of teachers above the age of 50 by education level, 2013 (EAG 2015)**

- Primary education 31% 31% 16% 57%
- Lower secondary education 27% 34% 17% 63%
- Upper secondary education 34% 38% 26% 73%

**Number of teaching hours per year in public institutions by education level, 2013 (EAG 2015)**

- Primary education 736 772 569 1 129
- Lower secondary education, general programmes 608 694 415 1 129
- Upper secondary education, general programmes 513 643 369 1 129

**Ratio of actual teachers’ salaries to earnings for full-time, full-year adult workers similarly educated, 2013 (EAG 2015)**

- Primary education m 0.78 0.52 1.09
- Lower secondary education, general programmes m 0.80 0.52 1.24
- Upper secondary education, general programmes m 0.82 0.48 1.24


- Primary education -6% 2% -32% 31%

**% of lower secondary education teachers who report a "moderate" or "large" positive change on their knowledge and understanding of their main subject field(s) (TALIS 2013)**

- Primary education 86.2% 53.5% 26.7% 86.2%
### List of key indicators

#### Japan Average or total

<table>
<thead>
<tr>
<th>#</th>
<th>Indicator</th>
<th>Japan</th>
<th>Average or total</th>
<th>Min OECD</th>
<th>Max OECD</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Percentage of lower secondary education principals who report that they use student performance and student evaluation results (including national/international assessments) to develop the school’s educational goals and programmes (TALIS 2013)</td>
<td>93%</td>
<td>88.8%</td>
<td>58.5%</td>
<td>99.5%</td>
</tr>
<tr>
<td>36</td>
<td><strong>% of students whose school principals reported that assessments are used for the following purposes (PISA 2012)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To make decisions about students’ retention or promotion</td>
<td>90%</td>
<td>77%</td>
<td>1%</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td>To monitor the school’s progress from year to year</td>
<td>52%</td>
<td>81%</td>
<td>48%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>To make judgements about teachers’ effectiveness</td>
<td>76%</td>
<td>50%</td>
<td>14%</td>
<td>88%</td>
</tr>
<tr>
<td></td>
<td>To identify aspects of instruction or the curriculum that could be improved</td>
<td>79%</td>
<td>80%</td>
<td>49%</td>
<td>99%</td>
</tr>
<tr>
<td>37</td>
<td><strong>% of lower secondary education teachers reporting appraisal/feedback from the school principal on their work with this frequency (TALIS 2013)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Once every two years or less</td>
<td>6.8%</td>
<td>33.9%</td>
<td>3.2%</td>
<td>88.8%</td>
</tr>
<tr>
<td></td>
<td>Once per year</td>
<td>51.0%</td>
<td>41.5%</td>
<td>9.5%</td>
<td>82.1%</td>
</tr>
<tr>
<td></td>
<td>Twice or more per year</td>
<td>42.2%</td>
<td>24.7%</td>
<td>1.0%</td>
<td>49.6%</td>
</tr>
</tbody>
</table>

#### Systems: Organising the system

<table>
<thead>
<tr>
<th>#</th>
<th>Indicator</th>
<th>Japan</th>
<th>Average or total</th>
<th>Min OECD</th>
<th>Max OECD</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td><strong>% of decisions taken at each level of government in public lower secondary education, 2011 (EAG 2012)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Central or state government</td>
<td>13%</td>
<td>36%</td>
<td>0%</td>
<td>87%</td>
</tr>
<tr>
<td></td>
<td>Regional or sub-regional government</td>
<td>31%</td>
<td>6%</td>
<td>0%</td>
<td>36%</td>
</tr>
<tr>
<td></td>
<td>Local government</td>
<td>35%</td>
<td>17%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>School government</td>
<td>21%</td>
<td>41%</td>
<td>5%</td>
<td>86%</td>
</tr>
</tbody>
</table>

#### Policy lever 6: Funding

<table>
<thead>
<tr>
<th>#</th>
<th>Indicator</th>
<th>Japan</th>
<th>Average or total</th>
<th>Min OECD</th>
<th>Max OECD</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td><strong>Annual expenditure per student by educational institutions, for all services, in equivalent USD converted using PPPs for GDP, 2012 (EAG 2015)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-primary education</td>
<td>5 872</td>
<td>7 612</td>
<td>3 416</td>
<td>19 719</td>
</tr>
<tr>
<td></td>
<td>Primary education</td>
<td>8 595</td>
<td>8 247</td>
<td>2 577</td>
<td>20 020</td>
</tr>
<tr>
<td></td>
<td>Secondary education</td>
<td>10 170</td>
<td>9 518</td>
<td>2 904</td>
<td>20 617</td>
</tr>
<tr>
<td></td>
<td>Tertiary education</td>
<td>16 872</td>
<td>15 028</td>
<td>7 779</td>
<td>32 876</td>
</tr>
<tr>
<td>40</td>
<td><strong>Relative proportions of public and private expenditure on educational institutions, 2012 (EAG 2015)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public sources</td>
<td>70%</td>
<td>83%</td>
<td>60%</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td>All private sources</td>
<td>30%</td>
<td>17%</td>
<td>2%</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>Index of change in expenditure on educational institutions, public sources, (constant prices, 2005=100)</td>
<td>110</td>
<td>114</td>
<td>75</td>
<td>165</td>
</tr>
<tr>
<td></td>
<td>Index of change in expenditure on educational institutions, all private sources, (constant prices, 2005=100)</td>
<td>76</td>
<td>137</td>
<td>76</td>
<td>538</td>
</tr>
</tbody>
</table>

#### Notes

1. The average, total, minimums and maximums refer to OECD countries except in TALIS and the Survey of Adult Skills, where they refer to participating countries.
2. "m": included when data is not available.
3. "NP": included if the country is not participating in the study.
4. Statistically significant values of the indicator are shown in bold (PISA 2012 only)
5. The annualised change is the average annual change in PISA score points from a country’s/economy’s earliest participation in PISA to PISA 2012. It is calculated taking into account all of a country’s/economy’s participation in PISA.
6. "n/a": included when the category is not applicable.
7. Data for Japan refer to 15-24 year-olds.
REFERENCES AND FURTHER READING


