

The Curriculum Journal



ISSN: 0958-5176 (Print) 1469-3704 (Online) Journal homepage: http://www.tandfonline.com/loi/rcjo20

School curriculum in Japan

Chie Nakayasu

To cite this article: Chie Nakayasu (2016) School curriculum in Japan, The Curriculum Journal, 27:1, 134-150, DOI: 10.1080/09585176.2016.1144518

To link to this article: http://dx.doi.org/10.1080/09585176.2016.1144518



Full Terms & Conditions of access and use can be found at http://www.tandfonline.com/action/journalInformation?journalCode=rcjo20



School curriculum in Japan

Chie Nakayasu

Ministry of Education, Culture, Sports, Science and Technology, Tokyo, Japan

ABSTRACT

This article examines Japanese education system especially relevant to school curriculum, which might support Japanese high performance in the OECD's Programme for International Student Assessment (PISA), mainly through Japanese policy documents. The Japanese education systems have been constructed by the local context of society and politics, and it is hard to analyse the reasons why Japan has seen better results in the previous PISA assessments than other OECD countries. However, the 2008–2009 revision of the Course of Study (the national curriculum in Japan) shows that the Japanese government was really concerned about the decline of Japan's ranking in the previous PISA assessments and revised the Course of Study in response to children's skills which the PISA aimed to measure (key competencies). The Japanese government has placed importance on the cultivation of human resources which are necessary to compete within the international community, and the PISA has had a large effect on the direction of Japanese education.

ARTICLE HISTORY

Received 26 October 2014 Accepted 13 January 2016

KEYWORDS

Education in Japan; curriculum; primary and secondary education; PISA; education reform; international instructional systems study

Introduction

This article will draw on Japanese education system especially relevant to the school curriculum, which might support Japanese high performance in the OECD's Programme for International Student Assessment (PISA). Japan was one of the high performing jurisdictions featured in the UCL Institute of Education research into comparative international instruction systems (Isaacs, Creese, & Gonzalez, 2015). In 2006, Japan had experienced its worst performance in the OECD's PISA (reading: 12th out of 30 OECD countries, mathematics: 6th out of 30 OECD countries, science: 3rd out of 30 OECD countries), but successfully raised its ranking in PISA 2012 (reading: 1st out of 34 OECD countries, mathematics: 2nd out of 34 OECD countries, science: 1st out of 34 OECD countries). This article reconsiders the findings in the UCL Institute of Education research described above through an in-depth look at the instructional system in Japan. Taking the aspects identified in the cross curricular analysis (Isaacs, Creese, & Gonzalez, 2015) as indicative pointers, Japanese performance in these key areas is re-analysed, mainly through Japanese policy documents. Those aspects are

- whether curriculum is common or differentiated,
- how centralised or decentralised management of the instructional system is,

- the goals or aims of the education system and how these are embodied in the curriculum,
- how key competencies are embedded in the curriculum,
- what compulsory and optional subjects are included in the programme of study in primary and secondary school levels,
- the clarity and content of curriculum for secondary vocational pathways,
- to what degree curriculum is organised by discipline or integrated across disciplines,
- principles and methods of accountability and their link to instructional systems,
- how assessments are created and what stakes they have and for whom.

As will be seen, the local context of society and politics in Japan plays a strong part in shaping the responses made by the government to contemporary, educational and economic challenges, but it is obvious that Japan has been particularly aware of its PISA results and have tried to improve its school education to have students acquire skills measured in PISA.

Whether curriculum is common or differentiated

Since the end of the Second World War, Japan has maintained the principle of equal opportunity in education. After the defeat in the Second World War, democratisation was introduced into Japanese society during the Allied occupation and a new constitution was promulgated in 1946 (Saito, 2011a). With regard to education, Paragraph 1, Article 26 of the *Constitution of Japan* provides for equality for all:

Paragraph 1, Article 26 of the Constitution of Japan All people shall have the right to receive an equal education correspondent to their ability, as provided by law. (Ministry of Justice, 2009, Chapter 3)

Based on the *Constitution of Japan*, the *Basic Act of Education*, which lays down the principles of Japanese education, prescribes the equal opportunity in education:

Article 4¹ of the Basic Act of Education

Citizens shall all be given equal opportunities to receive education according to their abilities, and shall not be subject to discrimination in education on account of race, creed, sex, social status, economic position, or family origin. (Ministry of Education, Culture, Sports, Science and Technology [MEXT], 2007a)

On the basis of those articles, schools have been expected to provide a uniform level of education at the compulsory level (primary and lower secondary education) anywhere in Japan (Ichikawa, 1991; MEXT, 2015a). The Ministry of Education, Science and Culture (hereinafter referred to as MOE) until 1999 and the Ministry of Education, Culture, Sports, Science and Technology (hereinafter referred to as MEXT) since 2000² have implemented various policies to attain educational equality all over the country: they have kept school facilities and equipment, teacher qualifications and salaries, and public expenditures per students almost the same throughout the country (Ichikawa, 1991). In terms of curriculum, relevant regulations regarding Japanese national curriculum, the *Enforcement Regulations for the School Education Law* and the Course of Study, have been established and improved. The *Enforcement Regulations for the School Education Law* is an ordinance of the MEXT, which regulates Japanese school education including basic issues of school curriculum: subjects which should be taught in schools, the number of hours spent on each

subject, etc. The Course of Study, a subordinate ordinance of the *Enforcement Regulations* for the School Education Law, is positioned as a national standard of Japanese school curriculum.

The first Course of Study was issued in 1947, and has been totally revised around once every ten years (in 1951, 1958–1960, 1968–1970, 1977–1978, 1989, 1998–1999 and 2008–2009) (MEXT, 2013a). When the Course of Study was revised in 1958–1960, the MOE specified that the Course of Study should be a minimum standard for all compulsory school education across the country (MEXT, 2008a, 2008b). Since then, the Course of Study has been established as a standard to maintain the level of compulsory education throughout Japan. In its white paper, the MEXT stated that 'the Courses of Study have been established as general curriculum standards for children at educational levels ranging from kindergartens to senior high schools, to make sure that they can receive a uniform level of education no matter where they might live in Japan' (MEXT, 2013b, Chapter 4).

Thus, the Course of Study defines a minimum standard of school education in Japan based on the principle of equal opportunity in education, and, therefore, this standard is common among all primary, lower secondary and upper secondary schools including private schools. Though Japanese schools education systems have been decentralised in recent years as will be discussed in the next section, the Course of Study is still a minimum standard of Japanese school curriculum to ensure equal opportunity in education and to maintain a uniform level of school education throughout Japan.

Centralisation of instructional systems management

Though the Course of Study has assured a uniform level of school education throughout Japan, the flexibility at school level has changed in line with moves towards decentralisation. As the end of the twentieth century approached, the Japanese government began to consider that its centralised systems had negative effects on the Japanese society as compared to other developed countries (MOE, 1999). With regard to school education, Japan had a structure in which the responsibilities for school education and education reforms were obscure: the MEXT and prefectural boards of education³ issued top-down instructions and orders to municipal boards of education and schools, which under normal conditions had to use their judgement about how to precede with each of the education reform issues. With regard to curriculum, for example, it was said that each school could not create its own curriculum flexibly in line with the actual conditions of the region where it was located (Hirahara, 2002), though schools and teachers had been allowed by the then Course of Study to make use of their originality and creativity when they created their curriculum. Therefore, it was deemed necessary to redefine the roles of the central government, prefectures, municipalities and schools, and to build new partnerships and cooperation among them (MOE, 1999).

In response to these concerns, the Japanese government has advanced administrative decentralisation since the 1993 Resolution on Promotion of Decentralization in both the Upper House and Lower House of Parliament. In 1999, the Law Concerning the Improvement of Relevant Laws for Achieving the Promotion of Decentralization revised 475 laws including 21 laws regarding school education, lifelong education, sports and culture (MOE, 1999). This resulted in a strengthening of the authority of municipalities and schools became

better able to promote uniform education with less interference from the central government and prefectural boards of education (MOE, 1999).

This trend of decentralisation affected the concept of the Courses of Study; the 1998 revision specified that the Course of Study was the minimum standard of school education and each school could teach additional content to students at the school's discretion (MOE, 1998a, 1998b). Also, the concept of 'unique education, unique school management by each school's originality and ingenuity' (MOE, 1998c, p. 1) was specified in the 1998—1999 revised Course of Study. On the basis of these directions, 'the Period for Integrated Studies' was established in the 1998—1999 revision (MOE, 1998a, 1998b). 'The Period for Integrated Studies' aims to enable students to think in their own way about life through cross-disciplinary studies and inquiry studies. Students are expected to acquire the abilities to learn and think on their own, to make proactive decisions, and to solve problems better. Each school is expected to develop and conduct 'the Period for Integrated Studies' in ways that best suited its students (MOE, 1998a, 1998b; MEXT 2008a, 2008b). For example, information education, environmental education, career education and international understanding are chosen as a theme for 'the Period for Integrated Studies'.

In addition, the *Special Zones for Structural Reform* were established in 2003 aiming to enhance nationwide regulatory reforms based on local government initiatives, and these zones were encouraged to attract new activities in the local areas (MEXT, 2004; Yashiro, 2005). Under this initiative, schools have been allowed to design a curriculum not on the basis of the Course of Study if permitted and 2960 schools (mainly primary and lower secondary schools⁴) have been permitted to provide education by 2015 as below

- teaching English in primary schools⁵,
- educational continuity from primary through lower secondary levels⁶
- establishment of a unique subject to develop students' language skills (because some municipalities recognised that Japanese children have poor reading skills as pointed out in PISA) (MEXT, 2015c).

Thus, the moves towards decentralisation in Japan affected Japanese school curriculum. It was specified that each school could teach additional content to students at the school's discretion in the 1998-1999 revision of the Course of Study, and 'the Period for Integrated Studies' was established in order to encourage each school to make use of their originality and creativity in implementing their curriculum. Also, each school has been able to apply for permission to provide education not based on the Course of Study since 2003.

The goals or aims of the education system and how these are embodied in the curriculum

The current Course of Study, which was revised in 2008–2009, aims to have students acquire 'Zest for Life', which is considered as a basic goal of current school education in Japan. This section discusses what 'Zest for Life' is, why this concept has been developed in Japan, and how this concept is embodied in the Course of Study.

Japan had been enjoying rapid economic growth and its gross national product (GNP) was second in the world in the 1960s. Then the MOE had focused on knowledge transmission in school education because knowledge was seen as the most important element for

students (MEXT, 2008a, 2008b). The MOE increased the amount of education content and the number of classes achieved for the purpose of teaching more knowledge to students in the 1968-1970 revision of the Course of Study (MEXT, 2008a, 2008b).

However, the MOE recognised that morality and physical health are as important as knowledge after Japan saw the end of the rapid economic growth in the early 1970s (MEXT, 2008a, 2008b). The 1977—1978 revision of the Course of Study provided some flexibility for schools and teachers in order to allow them to teach not only uniform knowledge but also morality and physical health in a well-balanced way (MEXT, 2008a, 2008b). Subsequently, the 1989 revision put a big focus on students' attitude of independent-minded and proactive learning as well as acquiring basic and fundamental knowledge because students were expected to open the way to the future independently, coping with social changes such as globalisation, computerisation, rapid aging and very low birth rate, etc. (MEXT, 2008a, 2008b).

The notions that academic ability indicated not only knowledge but also other skills like thinking, judging, leaning proactively, etc. and that the balance between academic ability, morality and physical health was important attracted more attention in the following 1998—1999 revision. The Central Education Council (hereinafter referred as to CEC), a consultative body to the Minister of Education, Culture, Sports, Science and Technology (the Minister of Education, Science and Culture until 1999) in Japan, and the MEXT placed importance on the concept of 'Zest for Life'. This concept was launched by the CEC for the first time in 1996. According to the 1996 CEC's 'Report on Education in Our Country with a View of the 21st Century', 'Zest for Life' is defined as (1) qualities and abilities to find and tackle challenges on their own by studying, thinking, judging and acting autonomously, (2) a rich humanity like self-discipline, cooperation with others, sympathy for others, etc., and (3) physical strength (CEC, 1996).

In face of the onset of a knowledge based society and globalisation, the CEC recognised that students should acquire not only basic and fundamental knowledge but also the ability to think, to make decisions, to express themselves and an attitude of independent-minded and proactive learning (MEXT, 2008a, 2008b). Also, the balance of academic ability, morality and physical health was continuously emphasised because students were expected to work together with others, coping with various social changes like computerisation, rapid aging and very low birth rate, etc. (MEXT, 2008a, 2008b).

In 2006, the *Basic Act of Education* (described above) was revised for the first time since it was enacted in 1947, reflecting the changing affairs of Japanese education between 1947 and 2006 including the development of the concept of 'Zest for Life'. This revision defined what children should acquire through school education based on 'Zest for Life' (Article 2 of the *Basic Act of Education*)

Article 2 of the Basic Act on Education

To realize the aforementioned aims, education shall be carried out in such a way as to achieve the following objectives, while respecting academic freedom:

(1) to foster an attitude to acquire wide-ranging knowledge and culture, and to seek the truth, cultivate a rich sensibility and sense of morality, while developing a healthy body, (2)—(5) (abbreviation).

(MEXT, 2007a, Chapter 1, underlined by the author)

Also, the School Education Law was also revised and it was defined what academic ability which students should acquire was.

Paragraph 2, Article 30 of the School Education Law

(...) school education should be committed to enhancing its instruction to enable pupils to solidly acquire <u>basic and fundamental knowledge and skills</u>, to foster the ability to think, to <u>make decisions</u>, to express themselves in ways that are necessary to solve problems by using acquired knowledge and skills, and to cultivate <u>an attitude of proactive learning</u>. (Translated and underlined by the author)

On the basis of these revisions of the *Basic Act on Education* and the School Education Law, the 2008–2009 Course of Study (the current version) placed more importance on 'Zest for Life'. Specifically, the 2008–2009 revision of the Course of Study aimed at the following improvement in order to embody the concept of 'Zest for Life' in school education:

Enhancement of verbal activities

For example, in addition to Japanese, the enhancement of record-keeping, explanation, critique, dissertation, and debate learning in various subjects (elementary/junior high/senior high)

• Enhancement of math and science education

For example, enhancement of guidance, observation/experimentation and assignments through repetition (spiral) teaching

• Enhancement of cultural/traditional education

For example, emphasis on abacus learning, Japanese musical instruments, choirs, art culture, and the handling of Japanese clothing and making martial arts compulsory

• Enhancement of moral education

For example, enhancing leadership through the use of teachers who promote moral education

• Enhancement of experiential learning activities

For example, promotion to provide rich experiences for students such as overnight school trips, experiential learning activities in nature, experiential workplace activities, based on the developmental stages of the students, etc.

• Enhancement of foreign language education

For example, introduction of foreign language activities in Grade 5/6

• Improvement of vocational education

For example, development of people who possess an understanding of social norms and ethics, who promote technology and who have consideration for the environment and energy and who are also an asset to regional industries as professionals.

(MEXT, 2011, p. 6-8)

As described, the current goal of Japanese school education is mainly to have students acquire 'Zest for Life'. This concept was launched in 1996 but the base of this concept started to appear in the 1970s, the end of the period of rapid economic growth. The concept of 'Zest for Life' is embodied in the current Course of Study as enhancement of verbal activities, math and science education, cultural/traditional education, moral education, experiential learning activities, foreign language education and vocational education.

How key competencies are embedded in the curriculum

This section discusses how new concepts of skills defined as necessary in the twenty-first century, or 'key competencies' as defined by the OECD are embedded in the Japanese Course of Study. Actually, the CEC and the MEXT analysed that the awareness of 'Zest for Life' was similar to key competencies, and they emphasised 'Zest for Life' and key competencies in the 2008–2009 revision of the Course of Study (CEC, 2008). One of the reasons

why the CEC and the MEXT placed importance on key competencies was that Japan did not possess large reserves of natural resources and human capital was considered as guite important in Japan. The CEC and the MEXT recognised that students should acquire key competencies in order to survive in knowledge-based society and globalisation (CEC, 2008).

However, Japan saw a gradual decline in PISA results from 2000 to 2006 and the MEXT feared any further decline in the PISA results. The CEC took account of the PISA results and produced the 2008 report 'Improvement of Curriculum in Kindergartens, Primary, Lower Secondary and Upper Secondary Schools, and Special Schools' (hereinafter referred as to 'the 2008 report'), on which the 2008 revision of Course of Study was based. The Manuals for the 2008 Course of Study contain the following sentences, which remind readers of the problems relating to Japanese education:

According to various surveys, however, there are some problems in Japanese children;

- (1) They are not good at reading comprehension and description because of the lack of the abilities to think, to make decisions, to express themselves. They are not good at using knowledge and skills, either.
- (2) Some children lack reading comprehension abilities because they have little or no desire to learn and do not have the right habits of study and life.
- (3) Children lack confidence, feel uncertain about their future, and have decreased physical strenath.

(MEXT, 2008a, p. 1, 2008b, p. 1, translated by the author)

Analysing the 2008 report and the Manuals for the 2008 Course of Study, it can be seen that the MEXT and the CEC recognised the following problems arising from the PISA results. First, that while a considerable number of students acquired basic and fundamental knowledge and skills, Japanese students had difficulty in making use of their knowledge and skills. The percentage of Japanese students who did not fill in anything on the answer sheets in the free-response type of questions of PISA was much higher than those of other countries, while Japanese students could achieve good results in statements that confirm whether students 'have' acquired knowledge and skills (CEC, 2008).

Second, the CEC and the MEXT sensed a crisis in the fact that the Japanese PISA results in reading were especially low. Japan had gradually slipped in reading skills (8th in PISA 2000, 14th in PISA 2003 and 15th in PISA 2006), and the actual score of reading skills had significantly slipped down (522 in PISA 2000, 498 in PISA 2003 and the same (498) in PISA 2006) (OECD, 2004, 2007). The MEXT feared that the reading skills that Japanese schools had taught to children were quite different from the reading skills measured in PISA; the OECD measures students' abilities to understand and make use of sentences, and discuss, sometimes critically, their understanding of the sentences, while Japanese schools had focused on the improvement of the abilities to retrieve information from sentences in home language (Japanese) classes (MEXT, 2007b).

The MEXT and other related organisations looked into the curricula of other high performing countries, especially Finland (MEXT, 2007b). After reflection the CEC argued that 'in order to nurture children's abilities to think, make decisions and express themselves, their language abilities should be raised through learning activities like writing a report and description in which children practice to make use of their knowledge and skills' (CEC, 2008, 52, translated by the author). On the basis of this proposition, the MEXT enhanced verbal activities to nurture children's abilities to think, make decisions and

express themselves not only in the curriculum of home language curriculum but also in those of other subjects, as noted in the previous section.

Once again we can see in this section that concerns over the future competitiveness of the Japanese workforce affected a change in educational approach.

Compulsory and optional subjects included in the programmes of study

Under the current system in Japan, all primary and lower secondary schools are obliged to provide instruction on subjects as regulated by the Enforcement Regulations for the School Education Law as set out below (see Tables 1 & 2). The Enforcement Regulations for the School Education Law also regulate the number of classes which should be provided for each subject in primary and lower secondary schools.

The curriculum in upper secondary schools strives to maintain balance between commonality to secure minimum knowledge and skills, and diversity to expand schools' discretion and the range of students' choices (CEC, 2008). The Enforcement Regulations for the School Education Law regulate diverse subjects as common among all upper secondary schools, although the number of compulsory subjects, which are considered as a minimum of study for upper secondary students, is more limited (see Table 3): because more than 98% of students go to upper secondary and the range of subjects offered to reflect students' ability, interest, etc. has been expanded, the number of credits which it is necessary to gain to graduate from upper secondary schools and the number of credits of compulsory subjects which students should take reduced in 1999 (CEC, 2008), and again in 2009 (MEXT, 2009). Now upper secondary school students need to gain 74 or more credits in order to graduate, and of these 31 credits should be from compulsory subjects. The proportion of time spent on compulsory subjects is around 30% depending on which compulsory subjects students take (MEXT, 2009).

Thus, there are different characteristics between the curriculum in compulsory school education (primary and lower secondary education) and in upper secondary education. The former places importance on a uniform education across the country on the basis of the notion of equal opportunity of education, while the latter gives ample opportunity for diversification for upper secondary students.

Γal	ol	e	1.	C	om	ıρι	ılsc	ry	pro	ovi	sio	n in	ı Ja	pai	nese	pr	ima	ry :	sch	ools	S .

Grade		First	Second	Third	Fourth	Fifth	Sixth
Number of classes of each subject	Japanese	306	315	245	245	175	175
	Social studies	_	_	70	90	100	105
	Arithmetic	136	175	175	175	175	175
	Science	_	_	90	105	105	105
	Living environment studies	102	105	_	_	_	_
	Music	68	70	60	60	50	50
	Art and handicraft	68	70	60	60	50	50
	Home economics	_	_	_	_	60	55
	Physical education	102	105	105	105	90	90
Moral education	•	34	35	35	35	35	35
Foreign language activities		_	_	_	_	35	35
Period for integrated studies		_	_	70	70	70	70
Special activities		34	35	35	35	35	35
Total number of classes		850	910	945	980	980	980

^{*}Classes are 45 minutes long.

Table 2. Compulsory provision in lower secondary schools*.

Grade		Seventh	Eighth	Ninth
Number of classes of each subject	Japanese	140	140	105
ŕ	Social studies	105	105	140
	Mathematics	140	140	140
	Science	105	140	140
	Music	45	35	35
	Art	45	35	35
	Health and physical education	105	105	105
	Technology and home economics	70	70	35
	Foreign languages	140	140	140
Moral education	3 3 3	35	35	35
Period for integrated studies		50	70	70
Special activities		35	35	35
Total number of classes		1015	1015	1015

^{*}Classes are 50 minutes long.

Table 3. Compulsory subjects in upper secondary schools.

Integrated Japanese language

Either world history A or world history B

One subject out of Japanese history A, Japanese history B, geography A and geography B

Contemporary society, or ethics, politics and economy

Mathematics I

Science and our daily life, and one subject out of basic physics, basic chemistry, basic biology and basic earth science or three subjects out of basic physics, basic chemistry, basic biology and basic earth science

Physical education and health

One subject out of music I, art and design I, crafts production I and calligraphy I

English communication I

One subject out of basic home economics, integrated home economics and design for living

One subject out of information study for participating community and information study by scientific approach

The clarity and content of curriculum for secondary vocational pathways

As previously noted, almost all students enter upper secondary education in Japan: 98.4% of 15 year-olds were enrolled in upper secondary schools in 2014 (MEXT, 2014a). At this level, students have the option of general (academic), specialised and integrated courses (MEXT, 2009). General courses are the most popular among students and 72.6% of upper secondary students were enrolled on general courses and study an academic curriculum in 2014 (MEXT, 2014a). The proportion of students enrolled in specialised courses accounted for 22.4% in 2014 (MEXT, 2014a). In specialised courses, students can major in agriculture, industry, commerce, fisheries, home economics, nursing, computer science, social service, science and mathematics, physical education, music, art or English, but especially upper secondary schools which provide agriculture, industry, commerce, fisheries, home economics, nursing, computer science, or social service education are seen as providing 'vocational education' (MEXT, 2015a). These courses (hereinafter referred to as vocational courses) provide educational opportunities for students who know that they want to work in a particular occupational area.

However, the differences between vocational courses and other courses are not entirely clear, and the content of the curricula does not vary widely with the type of course (Saito, 2011b), Japanese companies and factories have traditionally had their own in-company training systems, and they have tended to demand that graduates acquired basic and fundamental competencies subjects (Ichikawa, 1991; Saito, 2011b). So even in vocational courses, around half of the total teaching hours are allotted to academic subjects, and students' career options after graduation are diverse: in 2013, 20% of graduates of vocational courses went to universities, 24% went to two-year vocational institutions, and 51% gained employment after graduation of vocational courses in (MEXT, 2015a).

Currently, the Japanese government focuses on how to guarantee the cultivation of students' key competencies in upper secondary schools, and it cannot be said that it emphasises practical and specific vocational skills at this level (Abumiya, 2012). The onset of economic problems in the late 1990s changed the expectations of youth employment and young people can no longer expect the same long term and secure employment opportunities as previous generations. Recently the level of unemployment and irregular employment among young people has been viewed as serious problem: in 2014 the level of unemployment was 3.6%, but for 15–24 year olds was 6.3% (Statistic Bureau, Ministry of Internal Affairs and Communications, 2015). In response, the CEC decreed that students in upper secondary schools should acquire a 'career view' (CEC, 2011), rather than concentrate on practical vocational skills. The Japanese traditional culture of in-company training systems was assumed to fulfil this latter function more effectively.

Thus, the secondary vocational pathways are not clear in Japan. Almost all students go to upper secondary schools, despite very diverse backgrounds and ability, and Japanese upper secondary schools focus on having all students acquire key competencies and a career view rather than on practical vocational skills which can be used in their future workplaces.

Interdisciplinary provision

Traditionally, the Japanese school curricula were organised by discipline, but as far back as 1971 the CEC pointed out the importance of integrated instruction, especially in early primary school years (CEC, 1971), and the MEXT recommended that schools should promote integrated study especially in early primary school years in the Courses of Study revised in 1977 (MOE, 1977). In addition, the CEC proposed the establishment of a new subject, 'Living Environment Studies', which integrated Social Studies and Science. The CEC argued that it was more effective for first and second grade pupils to understand both social and natural phenomena through experiential learning activities (CEC, 1987).

The reasons for introducing 'the Period for Integrated Studies' were partly similar to those behind the introduction of 'Living Environment Studies'. As noted above, one of the aims of introducing 'the Period for Integrated Studies' was for each school to build curriculum flexibly on the basis of their creativity and the unique conditions around their school, but the importance for students to study through activities was also considered as is the case in 'Living Environment Studies' (MOE, 1998a, 1998b). Also the 2008 revision of the Course of Study recognised a need to foster greater enthusiasm for the resulting course of study aims to put more emphasis on experiential, problemsolving learning through observations, experiments and project studies, and interdisciplinary provision of school education was further promoted in order to achieve them (MEXT, 2008a, 2008b).

This is an area of policy-making that is very much in flux; currently, the CEC is discussing the next revision of the Course of Study. The CEC is consulted by the Minister of Education, Culture, Sports, Science and Technology to discuss the revision of the Course of Study from the perspective that children who will play a key role in the future, are expected to be able to set their own challenges, adapt to social change, to try to solve unanswered problems in a complicated world. It recognises that it will be more important for students to acquire the ability to make use of their knowledge and skills in real society and life (CEC, 2014a). Furthermore, in December 2014, the CEC published a report on the united reform of upper secondary school education, university education and university entrance exams, which aimed to introduce university entrance exams integrated across two or more subjects (CEC, 2014b). In light of this new direction, the discussion in the CEC is progressing toward more integrated studies in primary, lower secondary and upper secondary schools, and the CEC is to publish a final report on the next revision of the Course of Study by the end of 2016.

Principles and methods of accountability and their link to instructional systems

Japanese principles and methods of accountability for school education are different from other developed countries because of its own system of regional education administration. Though Japan had a centrally controlled educational administrative system in the pre-war period, the responsibility for school education was divided to some extent: compulsory education was a municipal responsibility, upper secondary education was a prefectural responsibility, and higher education was a national responsibility (Saito, 2012). After the Second World War, Japan introduced a local educational administration structure based on the US system of boards of education in order to proceed with democratisation and decentralisation of school education (Saito, 2012), but this did not lead to delegation of authority to each school.

In Japan, almost all of state primary and lower secondary schools are established by municipal boards of education, and, traditionally, municipal boards of education controlled their primary and lower secondary schools in terms of personnel affairs, budget, curriculum, and so on, and it was hard for each school to implement school education based on their own ideas and creativity, as well as to fulfil accountability about their education (CEC, 2005a). However, the CEC has pointed out how important it was for each school to have authority to organise itself independently and achieve accountability for parents and local residents since the latter half of the 1990s (CEC, 1998, 2005b). The MEXT introduced the School Evaluation System and has required each school to conduct selfassessment of its performance and to release the results since 2007 (MEXT, 2010).

Meanwhile, it seems that authority and accountability are still concentrated to some extent in the MEXT and the prefectural boards of education, especially with regard to compulsory education. The National Survey on Academic Ability and Learning Conditions of sixth and ninth grade students is a good example of Japanese centralised accountability. This survey was introduced in 2007 and aims to check achievements and problems with national educational policies through collecting and analysing students' academic skills and learning conditions. This is done largely for the purpose of maintaining a uniform level of education and improving the level of education, rather than to check achievements in each school (MEXT, 2014b). Therefore, the MEXT had prohibited each prefecture from releasing the survey results by school until 2013 because it was not the purpose of the survey to promote of the grading of schools (CEC, 2005a; MEXT, 2012).

Thus, the main goal of compulsory education policy by the MEXT is to propose a uniform level of education all over Japan and the MEXT has tried to establish various systems to achieve it. This has led to a system where individual schools are less accountable for results and achievement than in many other countries.

How assessments are created and what stakes they have and for whom

As noted above, the MEXT implements the National Survey on Academic Skills and Learning Conditions of sixth and ninth grade students every year. The assessments were administered to whole cohorts in 2007, 2008 and 2009, and then they were based on sampling in 2010, 2012 and 2013⁷, but they reverted to whole cohorts again in 2014 (MEXT, 2014b). In this survey, sixth and ninth grade students take tests in Japanese and mathematics every year, and science once every three years (MEXT, 2014b). Exam questions and questionnaires on learning conditions are created by the National Institute for Educational Policy Research, which is affiliated with the MEXT.

In fact, the MOE had implemented the national academic survey for eighth and ninth students between 1956 and 1965, but abandoned it in the face of fierce opposition from teachers and a court ruling that the survey was unconstitutional⁸ (Yonezawa, 2013). Therefore, the MEXT has expressed a certain amount of caution about the implementation of the national academic survey again, especially the public announcement of the survey results because of the danger of it leading to the grading of schools. The MEXT has published the results at national and prefectural level, but not at municipal and school level, and it had prohibited each prefecture and municipal from releasing the survey results by school until 2013 (MEXT, 2012).

However, the MEXT received criticism for this decision and it was proposed that prefectures and municipalities should be allowed to release the survey results for each jurisdiction because schools should be made accountable. The council of advisers to the MEXT agreed with this and is allowing prefectures and municipals to release the results by school to some extent (MEXT, 2013c). Therefore, since 2014 each prefecture can release the results by municipality or school (MEXT, 2013d), but there are only a few municipalities that show willingness to release the results by school, only 32 municipalities out of 1736 released the percentage of questions answered correctly by school in 2014 (MEXT, 2014c).

There is no national assessment of upper secondary school education in Japan, though the achievement of upper secondary school students can be measured by the National Centre Test for University, the examination taken by those who want to go to university. They take a common test, regardless of which university they want to go, though subjects which each university or faculty asks candidates to take are different. All national and state universities and some private universities use the National Centre Test for University for selection of enrolment, but other private universities do not.

However, given the perception of a decline in the academic skills of upper secondary students, the government is discussing the establishment of a new accountability system for upper secondary school education. The Council for Reform of the System of Upper Secondary School and University Education Connection published an interim report

in September 2015 and proposed the introduction of a test to measure skills of all upper secondary school students (Council for Reform of the System of Upper Secondary School and University Education Connection, 2015). The council expects that universities and employers can use the results of this test when they select students. The council will continue to discuss this issue in cooperation with the CEC, which is discussing the revision of the Course of Study at the time of this writing.

Final thoughts

This article aimed to draw on the Japanese school education system, which might be related to Japanese high performance in PISA. Though this article examined the Japanese school education, especially focusing on the curriculum, from various perspectives, it is guite hard to analyse which characteristics of Japanese school education led to this high performance in comparison to other countries, because aspects of Japanese school education need to be seen in the specific context of Japan. However, it is obvious that the Japanese government was really concerned about the decline of the ranking in PISA in the early twenty-first century because human capital was so important for the country; it is a key issue to cultivate human resources that can be competitive in the international community. Therefore, PISA has had a large effect on the direction of Japanese education, though the history and context of Japanese education systems were different from other Western countries. The MEXT tried to introduce various policies including the Course of Study in order to allow students acquire necessary skills in the future international community such as key competencies, and the more successful results of PISA 2012 might show that the introduction of these are starting to have an impact at school level. Further research is necessary to examine the outcomes of the current Japanese education system, especially the curriculum.

Notes

- 1. It had been Article 3 until the *Basic Act of Education* was revised in 2006.
- The MOE was established in 1871 and had been in charge of policies on education, academic promotion, culture and sports, but it became incorporated with the Science and Technology Agency as part of the reorganisation of cabinet-level ministries and agencies in 2000, and now the MEXT administers education policies in Japan.
- In Japan, all prefectures and municipalities have a public board of education independent of the local political leader. The board of education ordinarily has five members and they decide important matters and basic policy for education administration at meetings (MEXT, 2015a; Saito, 2012).
- There are 20,601 primary schools and 10,484 lower secondary schools in Japan in 2015 (MEXT, 2015b).
- 5. Before the Course of Study for primary schools was revised in 2008, the government did not announce any directions on how to teach English in primary schools in Japan, and many of primary schools dealt with English education in 'the Period for Integrated Studies' at their own initiative (CEC, 2008). However, it was necessary to apply for permission to teach English in a structured way in a primary school because such education was seen as not following the Enforcement Regulations for the School Education Law and the Course of Study.
- 6. The universal 6-3-3 system (six years of primary education, three of lower secondary and three of upper secondary) of education has broken down with some municipalities experimenting with 4-3-2, 5-4, 4-2-3, etc.

- 7. The National Survey on Academic Skills and Learning Conditions of 6th and 9th grade students was not implemented in 2011 because of the Great East Japan Earthquake which occurred in March 2011.
- 8. The Supreme Court finally ruled the national academic survey constitutional, though this survey was ruled unconstitutional in the first and second trials (Yonezawa, 2013).

Disclosure statement

No potential conflict of interest was reported by the author.

Notes on contributor

Chie Nakayasu is a government officer at the Ministry of Education, Culture, Sports, Science and Technology in Japan. Though she is currently in charge of promotion of university education in Japan as a unit chief, she was assigned to the Elementary and Secondary Education Bureau from April 2008 to June 2010, and was a member of project team to revise of the national curriculum for Japanese primary, lower secondary and upper secondary schools. She was dispatched to the UK by the central personnel agency of the Japanese government through the programme which was designed to enable young national government officers to study abroad in graduate schools from 2012 to 2014, and got master degrees in LSE (MSc in social policy (social policy and planning)) and UCL IOE (policy studies in education MA).

References

- Abumiya, M. (2012). 'Upper Secondary Education in Japan', in NIER (National Institute for Educational Policy Research). Education in Japan (Report). Retrieved from http://www.nier.go.jp/English/educationjapan/pdf/201209SE.pdf
- CEC (Central Education Council). (1971). Report on the fundamental policies for comprehensive expansion and development of the future school education [in Japanese]. Tokyo: CEC. Retrieved September 30, 2015, from http://www.mext.go.jp/b_menu/shingi/old_chukyo/old_chukyo_index/toushin/1309492. htm
- CEC (Central Education Council). (1987). Report on the improvement of national curriculum in Kindergartens, primary, lower secondary and upper secondary schools, and special schools [in Japanese]. Tokyo: CEC.
- CEC (Central Education Council). (1996). Report on education in our country with a view of the 21st century [in Japanese]. Tokyo: CEC. Retrieved September 30, 2015, from http://www.mext.go.jp/b_menu/shingi/old_chukyo/old_chukyo_index/toushin/1309579.htm
- CEC (Central Education Council). (1998). Report on the direction and perspective for local educational administration [in Japanese]. Tokyo: CEC. Retrieved September 30, 2015, from http://www.mext.go.jp/b_menu/shinqi/old_chukyo/old_chukyo_index/toushin/1309708.htm
- CEC (Central Education Council). (2005a). Report on the creation of compulsory education in the new era [in Japanese]. Tokyo: CEC. Retrieved September 30, 2015, from http://www.mext.go.jp/b_menu/shingi/chukyo/chukyo0/toushin/1212703.htm
- CEC (Central Education Council). (2005b). Report on the direction and perspective for the boards of education in the era of local decentralization [in Japanese]. Tokyo: CEC. Retrieved September 30, 2015, from http://www.mext.go.jp/b_menu/shingi/chukyo/chukyo0/toushin/05012701.htm
- CEC (Central Education Council). (2008). Report on the improvement of national curriculum in kindergartens, primary, lower secondary and upper secondary schools, and special schools [in Japanese]. Tokyo: CEC. Retrieved September 30, 2015, from http://www.mext.go.jp/component/a_menu/education/detail/__icsFiles/afieldfile/2010/11/29/20080117.pdf

- CEC (Central Education Council). (2011). Report on the future career and vocational education at schools [in Japanese]. Tokyo: CEC. Retrieved September 30, 2015, from http://www.mext.go.jp/b menu/shinqi/chukyo/chukyo0/toushin/1301877.htm
- CEC (Central Education Council). (2014a). Consultation document on the standard of curriculum in primary and secondary schools [in Japanese]. Tokyo: CEC. Retrieved September 30, 2015, from http://www.mext.go.jp/b_menu/shingi/chukyo/chukyo0/toushin/1353440.htm
- CEC (Central Education Council). (2014b), Report on the united reform of upper secondary school education, university education and university entrance exams for reform of upper secondary school and university education connection in the new era [in Japanese]. Tokyo: CEC. Retrieved September 30, 2015, from http://www.mext.go.jp/b_menu/shingi/chukyo/chukyo0/toushin/__icsFiles/afieldfile/2015/01/14/1354191.pdf
- Council for Reform of the System of Upper Secondary School and University Education Connection. (2015), Interim report [in Japanese]. Tokyo: Council for Reform of the System of Upper Secondary School and University Education Connection. Retrieved September 30, 2015, from http://www.mext.go.jp/b_menu/shingi/chousa/shougai/033/toushin/__icsFiles/afieldfile/2015/09/15/1362096_01_2_1.pdf
- Hirahara, H. (2002). Decentralisation in education and its possibility [in Japanese]. *Teikyo University Studies of Education*, *27*, 57–92.
- Ichikawa, S. (1991). Distinctive features of Japanese education. National Institute for Educational Research. Tokyo: National Institute for Educational Research (NIER).
- Isaacs, T., Creese, B., & Gonzales, A. (2015). Aligned instructional systems: Cross-jurisdiction benchmarking report. Center for International Education Benchmarking (CIEB). Washington, DC: Center for International Education Benchmarking (CIEB). Retrieved from http://www.ncee.org/wp-content/uploads/2015/09/AIS-Cross-Jurisdiction-Report.pdf
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2004). FY2003 white paper on education, culture, sports, science and technology [in Japanese]. Tokyo: National Printing Bureau.
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2007a). English translation of the original basic education act and the revised basic education act (draft proposal). Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/b_menu/kihon/data/07080117.htm
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2007b). *The programme to improve reading skills* [in Japanese]. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/a_menu/shotou/gakuryoku/siryo/05122201/014/005.pdf
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2008a). *Manuals for the 2008 course of study in primary schools* [in Japanese]. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/a_menu/shotou/new-cs/youryou/syokaisetsu/
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2008b). *Manuals for the 2008 course of study in lower secondary schools* [in Japanese]. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/a_menu/shotou/new-cs/youryou/chukaisetsu/
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2009). 2009 course of study in upper secondary school [in Japanese]. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/component/a_menu/education/micro_detail/__icsFiles/afieldfile/2011/03/30/1304427_002.pdf
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2010). *The guideline for school evaluation* [in Japanese]. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/component/a_menu/education/detail/__icsFiles/afieldfile/2012/07/12/1323515_2.pdf
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2011). *The revisions of the courses of study for elementary and secondary schools*. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/english/elsec/__icsFiles/afieldfile/2011/03/28/1303755_001.pdf
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2012). The implementation guidelines for the 2013 national survey on academic ability and learning conditions.

- Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/a_menu/shotou/gakur yoku-chousa/zenkoku/1328784.htm
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2013a). *The history of the course of study*. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/b_menu/shingi/chousa/shotou/095/shiryo/__icsFiles/afieldfile/2013/01/29/1330122_03.pdf. Accessed the 30th September 2015.
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2013b). FY2012 white paper on education, culture, sports, science and technology. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/b menu/hakusho/html/hpab201301/1360652.htm
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2013c). Conference note of the fourth round of the council of advisers on the national academic survey. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/b_menu/shingi/chousa/shotou/098/gijiroku/1343948.htm
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2013d). The implementation guidelines for the 2014 national survey on academic ability and learning conditions. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/a_menu/shotou/gakuryoku-chousa/1341965.htm
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2014a). 2014 school basic survey [in Japanese]. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/b_menu/toukei/chousa01/kihon/kekka/k_detail/1354124.htm
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2014b). *The outline of the national survey on academic ability and learning conditions* [in Japanese]. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/a_menu/shotou/gakuryoku-chousa/zenkoku/1344101.htm
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2014c). The survey finding on the release of the 2014 national survey on academic ability and learning conditions [in Japanese]. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/a_menu/sho tou/qakuryoku-chousa/detail/__icsFiles/afieldfile/2014/12/10/1353969_01.pdf
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2015a). FY2014 White paper on education, culture, sports, science and technology [in Japanese]. Tokyo: Nikkei Printing.
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2015b). *The preliminary results of the school basic survey 2015* [in Japanese]. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/component/b_menu/other/__icsFiles/afieldfile/2015/08/18/1360722_01_1_1.pdf
- MEXT (Ministry of Education, Culture, Sports, Science and Technology in Japan). (2015c). *The system to allow schools to provide education not on the basis of the course of study* [in Japanese]. Tokyo: MEXT. Retrieved September 30, 2015, from http://www.mext.go.jp/a_menu/shotou/tokureikou/1284969.htm
- Ministry of Justice. (2009). *The constitution of Japan*. Tokyo: Ministry of Justice. Retrieved September 30, 2015, from http://www.japaneselawtranslation.go.jp/law/detail/?id=174
- MOE (Ministry of Education, Science and Culture in Japan). (1977). 1977 course of study for primary schools [in Japanese]. Tokyo: Meijitosho Shuppan Corporation.
- MOE (Ministry of Education, Science and Culture in Japan). (1998a). *The course of study for primary schools (revised in 1998)* [in Japanese]. Tokyo: MOE. Retrieved September 30, 2015, from http://www.mext.go.jp/a_menu/shotou/cs/1319941.htm. Accessed the 30th September 2015. [in Japanese].
- MOE (Ministry of Education, Science and Culture in Japan). (1998b). *The course of study for lower secondary schools (revised in 1998)* [in Japanese]. Tokyo: MOE. Retrieved September 30, 2015, from http://www.mext.go.jp/a_menu/shotou/cs/1320061.htm
- MOE (Ministry of Education, Science and Culture in Japan). (1998c). *The main points of the course of study revised in 1998* [in Japanese]. Tokyo: MOE. Retrieved September 30, 2015, from http://www.mext.go.jp/a_menu/shotou/cs/1320944.htm



- MOE (Ministry of Education, Science and Culture in Japan). (1999). *Educational policy in our nation* 1999 [in Japanese]. Tokyo: Printing Bureau, Ministry of Finance.
- OECD (Organisation for Economic Co-operation and Development). (2004). *Learning for tomorrow's world: First results from PISA 2003*. Paris: OECD Publishing.
- OECD (Organisation for Economic Co-operation and Development). (2007). PISA 2006 science competencies for tomorrow's world: Volume 1: Analysis. Paris: OECD Publishing.
- Saito, Y. (2011a). 'Education in Japan: Past and Present', in NIER (National Institute for Educational Policy Research). Education in Japan (Report). Retrieved from http://www.nier.go.jp/English/educationjapan/
- Saito, Y. (2011b). 'Distinctive Features of Education in Japan', in NIER (National Institute for Educational Policy Research). Education in Japan (Report). Retrieved from http://www.nier.go.jp/English/educationjapan/
- Saito, Y. (2012). 'Educational Administration in Japan', in NIER (National Institute for Educational Policy Research). Education in Japan (Report). Retrieved from http://www.nier.go.jp/English/educationjapan/pdf/201203EAJ.pdf
- Statistic Bureau, Ministry of Internal Affairs and Communications. (2015). [in Japanese]. Summary of preliminary figures of the 2014 Labour Force Survey. Retrieved from http://www.stat.go.jp/data/roudou/rireki/nen/ft/pdf/2014.pdf
- Yashiro, N. (2005). Japan's new special zones for regulatory reform. *International Tax and Public Finance*, 12, 561–574.
- Yonezawa, K. (2013). The right to be educated and the right to educate. In K. Hasebe, K. Ishilawa, & T. Shishido (eds.), *The 100 Legal Precedent Regarding to the Constitution II* (6th ed.) (pp. 300–301) [in Japanese]. Tokyo: Yuikaku.