RESEARCH ARTICLE

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Achieving Equity and Quality in Japanese Elementary Schools: Balancing the Roles of State, Teachers, and Students

Abstract The aim of this paper is to explore perspectives on equity, quality, motivation, and resilience by focusing in depth on the perspectives of educators in one small, semi-rural school in Japan. The paper is intended to provide rich, in-depth data and discussion as a way of providing insights from different perspectives into findings from large-scale international assessments. The two key questions addressed in the paper are, (1) How are equity and quality achieved and maintained in Japanese elementary schools? and (2) How are student motivation and resilience perceived and fostered in Japanese elementary schools? These questions are addressed through analysis of key official documents related to the questions, together with analysis of semi-structured interviews conducted with education professionals working in an elementary school. The paper will contribute to understanding the perspectives of teachers in a particular school context in Japan on the roles of state, teachers, and children themselves in the task of achieving and maintaining equity and quality in a high performing education system.

Keywords education quality, elementary school, equity, Japan, teacher perspectives

Introduction

The aim of this paper is to explore perspectives on equity, quality, motivation, and student resilience in Japanese elementary schools. Japan has always scored high on PISA rankings, coming out seventh in mathematics, and fourth in science

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and reading in the 2012 PISA results (OECD, 2013). In addition to high achievement, Japan is noted for equity in performance, with 9.8 % of variation in student performance in mathematics in 2012 attributed to differences in students' socioeconomic status, compared to the OECD average of 15 % (p. 4). The same OECD report goes on to note that Japanese students are also more resilient than the OECD average, with 11.4 % classified as resilient in Japan, where resilience is defined as achieving scores in the top quartile in spite of coming from the bottom quartile in terms of socioeconomic status, compared to the OECD 6.5 % average (p. 4). At the same time, there is considerable concern in Japan that the basic principle of equity is being threatened and eroded through recent educational reforms and societal changes.

As in any other country, the achievements of 15-year olds have their roots in elementary school education, where the foundations of literacy, numeracy, and scientific literacy are formed. This paper examines this stage of elementary school education, focusing on the following two questions: (1) How are equity and quality achieved and maintained in Japanese elementary schools? and (2) How are student motivation and resilience perceived and fostered in Japanese elementary schools? The paper begins with a brief overview of the literature and policy documents related to equity and quality in the Japanese education system, and academic achievement in Japanese schools. It then discusses teacher education and teacher culture, followed by issues related to cultures of learning. After describing the methodology used to address the questions, namely, semi-structured interviews conducted with education professionals working in one semi-rural elementary school, there is a thematic discussion of findings. In this section, teachers' perspectives on the roles of the state, of elementary schools, of teachers, and of students themselves are discussed. The reason for choosing to focus on the perspectives of elementary school educators in one school is to obtain rich and detailed data concerning the actual perspectives of teachers and the situation in one elementary school located, as most elementary schools in Japan are, outside the major urban areas. As Schleicher (2009) has noted, international assessments such as PISA cannot identify exactly what is happening in the classroom and how this impacts educational outcomes (p. 253). Neither do they tap fully into the beliefs and perspectives of teachers, who spend day after day engaged in education with children in their classrooms. One important step to complement and understand the findings of large-scale assessment data is to

focus on specific cases, listening to the voices and experiences of those engaged in the process of education, thereby obtaining rich, qualitative data that large-scale quantitative studies cannot provide. Within this context, the purpose of the paper is to explore the perspectives of elementary school educators on the roles of state, schools, teachers, and children themselves in relation to the task of achieving and maintaining equity and quality in a high performing education system.

Literature and Context Overview

Equity and Quality in Education in Japan

Since the Meiji Restoration of 1868, which marks the transition of Japan from being a closed, feudal country to being a modern nation state, Japan has consistently provided strong governmental support for education, in the form of finance and resources, systems and structures, and policies. One of the first actions of the Meiji government was to send prominent figures abroad to research best practices in education and other fields in order to modernize Japan (Tipton, 2002). Strategic use of information gathered abroad, together with the establishment of the Ministry of Education in 1871, employment of large numbers of foreign advisors and teachers (Henshall, 2004, p. 82), and the creation of normal schools for teacher education in each prefecture, were elements of huge investments in the creation of a national education system and the expansion of educational opportunities. The result was a rise in the number of children enrolled in elementary schools, from under 30 % in 1873, to almost 50 % in 1885, and over 95 % in 1905 (Ministry of Education, Science and Culture, 1980, Table 2-4, Table 2-7, Chapter 2.3.2.a). From here, it was a short step to universal elementary school education, the first step to equity in education.

A century and a half later, government control over education in Japan is still strong in many respects. The degree of central control over education and level of concern over equity and quality may seem strange in a strongly neo-liberal state where other public services are less controlled. However, as Takayama (2008) argues, the careful maintenance of equality and quality in the education system is necessary to the Japanese state's legitimacy, particularly as "the

centrality of education to the people's belief in meritocracy is particularly strong in Japan" (p. 136). This contradiction in policy often results in "mixed messages" in policy discourses of education (Rear, 2011), but is maintained by focusing the equality discourse on the compulsory education stage (elementary school and junior high school, age 6–15), while allowing a highly stratified and competitive senior high school (age 15–18) stage of education. This is an important point to bear in mind in relation to this paper, which deals with the six years of elementary school, seen as the crucible of equality and equity, but does not address the socialization into competitiveness that occurs in junior high school, or the stratification of post-compulsory senior high school education (Kariya, 2011; Knipprath, 2005; Matsuoka, 2015).

In terms of curriculum, detailed Courses of Study published by the Ministry of Education, Culture, Sports, Science and Technology, Japan (MEXT) are the national curriculum documents published to ensure that children across Japan are learning the same content in roughly the same order. A textbook authorization system ensures that textbooks, which are still the main and often the only resources used in classrooms, comply closely with the official Courses of Study. These measures are effective in assuring uniformity of curriculum provision, or input. While uniformity or equality of content provision is one contributing factor to equity, in the sense that all children have access to the same curriculum content through the medium of free textbooks, it obviously does not assure equity of outcomes. The standardized curriculum and mechanism of textbook authorization with heavy reliance on textbooks as teaching resources (equality of input) places teachers in the role of mediators of equity, as it becomes their responsibility to be the interface at the point where standardized content input which does not allow for differentiation meets the naturally diverse, individual children learning in their class 6–7 hours a day, 197 days a year.

Outcomes have become more prominent in education policy discourse over the past decade, and as in many other countries, large-scale international assessments are often used as a point of reference in policy reform. It is telling that the rationale given for the latest reforms of the Courses of Study, which occur approximately once a decade, refer extensively to PISA scores and OECD reports. For example, page 1 of the guidelines on the Course of Study which are produced for every subject states:

From various surveys such as the OECD's PISA survey, it is apparent that for children in our country, for example:

- (1) There are issues with reading comprehension and writing questions that require skills of judgment or expression, or questions using knowledge and skills;
- (2) There is a wide distribution of scores on reading comprehension, the context of which is issues with learning motivation, learning habits and daily life habits, such as the amount of time spent studying at home;
- (3) There are issues with lack of self-confidence, anxiety about the future, and diminishing physical strength. (MEXT, 2008, p. 1)

The interesting fact here is not the observations themselves, but the way in which this international assessment was used as a means of justification for government agendas, as has happened in other countries such as Finland (Rautalin & Alasuutari, 2009). In this case, this was used to bolster the government's line that quality of education should be attained through a "back to basics" reform, after a period of *yutori* (pressure-free) education (Knipprath, 2010, p. 402).

In line with this agenda, the National Academic Achievement Test was introduced in 2007 as a large-scale assessment to measure achievement of elementary school students in 6th Grade in Japanese and mathematics. Such national testing has a history in Japan, but was abolished in 1964 due to excessive competition between schools and regions. MEXT conducts the test annually, and releases results broken down to prefectural level (MEXT, n.d.), but does allow Boards of Education to release results at local or school level, thus opening up potential for school rankings competition even at elementary school level. It also acts as a control mechanism over schools, teachers, and individuals (Takayama, 2013, p. 76).

At the same time, MEXT is gradually encouraging competition among public schools to promote quality, based on the market economy principle. Supported by MEXT, an increasing number of municipal Boards of Education are introducing school choice for public elementary and junior high schools to replace the traditional method of allocation by zoning. According to a survey conducted in 2012, 15 % of municipal Boards of Education with responsibility for more than one elementary school had introduced school selection systems (MEXT, 2013b, p. 3). Media attention on this issue has been intense in Japan, as

it highlights issues of quality and equity, within the context of growing social disparity mentioned earlier.

In summary, while the right-wing government is gradually introducing measures that are perceived by many to threaten and erode equality of education as it has traditionally been perceived, supposedly in order to improve quality, central control over education is still strict, and the core principles of equity of opportunity and of access to quality education still remain intact. This is particularly true at the elementary school level.

Teacher Education, Teacher Culture, and Teacher Allocation in Japan

Strong systems and structures are important in achieving quality and equity in education, but neither can be achieved in schools without the commitment of highly professional teachers.

Teacher education systems in Japan have undergone significant reform in recent years, with increased emphasis on practical experience during initial teacher education, and the new requirement for recertification after 10 years, rather than a teacher license for life (Suzuki, 2014; Yoshida, 2016). In order to renew the license, teachers are required to take set numbers of hours of professional development courses. In addition, newly qualified teachers undergo an induction year, where they are mentored by an experienced colleague in their school. Concurrently, the number of newly recruited teachers has increased in recent years, due to demographics and smaller class sizes, while the number of people taking the teacher license exam has not increased in proportion (Yoshida, 2016, p. 412). This indicates that teaching has become a less attractive profession than it used to be. Perhaps this is not surprising, given the fact that teachers in Japan work longer hours than in most other countries, and that the prevalence of psychological distress among school teachers is just over 50 % (Bannai, Ukawa, & Tamakoshi, 2015).

Some of the reasons for such long hours can be found in teacher culture in Japan. Teachers in Japanese elementary and junior high schools all have their own desks in a shared teachers' room, and if they are not teaching or supervising student activities, they can generally be found in the teachers' room. Teachers usually stay at school long after children have finished classes, and this is particularly true in larger urban schools, where it is not uncommon for teachers

to still be working at 8 pm or 9 pm. Peer pressure plays a significant role in this phenomenon, and there are significant differences between schools in work hours depending on the policy of the principal and vice-principal of the school.

While such long work hours have obvious drawbacks, the fact that teachers spend so much time working in the same room after children have gone home facilitates the development of a strong collaborative culture, with many informal discussions about classes, materials, and students. It can be supposed that such repeated informal interaction and collaboration contribute to the development of higher quality teaching, although there does not seem to be any empirical research on this issue yet. Better known and researched are the numerous opportunities Japanese teachers have to observe and discuss each other's classes for the purpose of improvement of teaching, through practices such as Lesson Study (Fernandez & Yoshida, 2004; Lewis, Perry, & Murata, 2006), which have now been exported to other countries as forms of teacher professional development.

Finally, one other way in which equity and quality are assured in Japan is through teacher allocation systems. In general, once teachers have a license from a prefectural or city Board of Education, they can then be allocated to any school within the jurisdiction of that Board of Education. While teachers can express preferences about when and where to move, especially later in their careers, there is regular rotation of teachers among schools in a particular area. This means that the teacher body of any school changes every year, so no school becomes too fixed in its ways, and each school has a distribution of experienced and inexperienced, male and female teachers with different experiences and strengths. It also means that all teachers know other teachers in other schools, facilitating cross-school networks and collaboration.

Cultures of Learning in Japan

Like other East Asian countries, one important factor in achieving and maintaining educational quality and achievement in Japan is the culture of learning and high status of education. In contrast to some school contexts in Europe or Northern America, teachers in Japanese schools are able to assume that most children and families subscribe to the belief that education is important, and are willing to commit time, effort, and resources to education in and out of

school, to a greater or lesser extent. Promotion and maintenance of this commitment to education is actually extremely important for the Japanese government, given that the proportion of public spending on education is very low by international standards, whereas total educational expenditure is relatively high, due to private (usually parental) expenditure (Yano, 2013). It is commitment to the value of education, together with belief in the efficacy of effort, that drive motivation to learn to a considerable extent.

Methodology

Primary data for this paper were drawn from semi-structured interviews with six educators in a small semi-rural school in the Kanto region, including the principal. Participants comprised four males and two females, with length of teaching experience ranging from two years to over 40 years. A preliminary visit was conducted to explain the study and request permission to do interviews. Permission was granted, and participants, comprising over half the teaching staff of the school, were teachers who were available on the days of interviews, and consented to take part in an interview. Interviews took place in the school at a time and place convenient to participants, and were conducted in Japanese. As is normal in Japan, where there is a system of teacher rotation, participating teachers had been allocated to this school after periods of teaching in other schools in the prefecture, and most had experience of teaching in larger schools as well.

The number of children enrolled in the school is just over 80 in total, from 1st to 6th Grade, with one class in each grade level (class size ranging between 12 and 16 students). Due to the size of the school and frequent opportunities for cross-grade interaction, children know everybody in the school, and there is a strong sense of community. Even after school and at weekends, children commonly return to school to meet and play with friends and anyone else who is there. The school is almost 125 years old, and is situated in an old farming village, which was merged with another village and then a new housing area to form a town approximately 40 years ago. The majority of families in the school's catchment area grew up in the area, and many have lived there for generations, although a few new houses have been built in the past five years. There are no public transport links to the area the school is in, although buses do serve other

parts of the town. The town as a whole has three elementary schools and a population of just over 14,000 people. Almost all children from the participating elementary school progress automatically to the town's only junior high school, which has shrunk from about 800 students at its peak to its present population of about 300 students.

The school was purposefully selected in order to obtain insights into rural and small town elementary schools, where pressure on individuals to achieve academically and prepare for private junior high school entrance examinations is less prevalent than in major urban centres, but national government pressure on local government and school leaders is significant. This town is typical of many areas in Japan, experiencing a fall in birth rate, with an increasingly ageing population and outward migration to the cities. With the declining population in non-urban areas, over 3,000 schools in Japan have merged over the past decade, including two schools in this particular small town, but almost half of Japan's elementary schools remain smaller than MEXT's "standard size" of 12 to 18 classes per school (MEXT, 2015, p. 3), and these small schools are open to government criticism and pressure, as is apparent in the Handbook on Appropriate Scale and Appropriate Measures for Public Elementary and Junior High Schools: Aiming for Dynamic School Creation to Deal with the Declining Youth Population¹. Most research published in English on Japanese elementary schools has been done in urban areas, and the perspectives of teachers in a small semi-rural school with a long history may provide fresh perspectives on issues of equity and quality. While the school is typical of many such schools in Japan, no claim is made to generalize the findings from this particular study to all semi-rural small elementary schools in Japan. Rather, the aim is to provide rich data on teachers' insights into one small school, as a basis for comparison and a counterbalance to the predominance of urban-focused research.

Data from the semi-structured interviews were analyzed using a grounded theory approach (Charmaz, 2006). Audio recordings were transcribed in Japanese, and open coding and theoretical coding were conducted, resulting in 11 main

¹ MEXT. (2015). 公立小学校、中学校の適正規模、適正配置等に関する手引 ~少子化に対応した活力ある学校づくりに向けて~ [Handbook on appropriate scale and appropriate measures for public elementary and junior high schools: Aiming for dynamic school creation to deal with the declining youth population]. Retrieved July 8, 2015, from http://www.mext.go.jp/component/a_menu/education/micro_detail/icsFiles/afieldfile/2015/01/29/1354768_1.pdf

categories. These categories, grouped into the four themes of role of the state, role of the elementary school, role of teachers, and role of children and their families, are used to structure the findings and discussion section below. The coding and categorization process was done in Japanese, and quotes were translated by the author into English.

Findings and Discussion

In this section, the key questions of how equity and quality are achieved and maintained in Japanese elementary schools, and how motivation and resilience are perceived and fostered, are addressed from the viewpoint of teachers' perspectives. Interview data from the elementary school educators who participated in this study provide rich, in-depth insights into teachers' perspectives on the role of the state, the role of elementary schools, the role of teachers, and the role of children and their families in achieving equity and quality and fostering motivation and resilience. Each role will be discussed in turn.

Role of the State

As in any country, the state plays a major role in ensuring equity and quality in education in Japan. In relation to elementary school education, three major roles of the state, through MEXT, are to provide basic legal structures and frameworks to ensure equity of opportunity, to encourage the maintenance and improvement of quality, and to lead on provision of teacher professional development. Each of these roles will be discussed in turn below.

To Provide Basic Legal Structures and Frameworks to Ensure Equity

The first and fundamental role of the state in Japan is to provide legal structures and frameworks to ensure equity of opportunity. Article 26 of the Constitution of Japan states that all people have a right to equal education, all parents/guardians have a duty to have children in their care educated, and compulsory education (currently nine years of elementary school and junior high school) should be free. This is reiterated in the *Second Basic Plan for the Promotion of Education*, in

which it is stated that: "It is the duty of the state to ensure that all citizens can equally receive high-quality education, by guaranteeing the core of compulsory education through equal opportunities, securing of standards, and free education" (MEXT, 2013a, p. 8).

This is the inviolable minimum, and it is also recognized by teachers as such, as evidenced in the comment by this teacher: "The minimum is in the Constitution, that all parents should have their children educated. That's the minimum, but now the gap between rich and poor is getting bigger, and it's hard for families who can't pay for school lunch" (Teacher A, personal communication, May 28, 2015).

In fact, there are provisions for families who cannot afford to pay for school lunch, which is provided to all children every day, and children are never denied lunch when it is served at school because their parents have not paid. However, the school lunch issue is symbolic of the widening disparities in society, as it is one of the cornerstones of equality in school, with all children eating the same food with their classmates every day. Having parents who cannot afford to pay for their children's school lunch in Japanese society is seen as a reflection of the growing gaps between rich and poor. The disparities are acknowledged in the Second Basic Plan (MEXT, 2013a), where one of the four basic policy directions is the establishment of learning safety nets. The role of the state in this respect is described as follows:

In an era of rapid changes, including globalization, declining birth rate and aging of the population, compulsory education as the basis of human resource development must ensure that disparities are not reproduced and do not become fixed, serving the functions of a strong learning safety net even more than in previous generations, and then needs to develop... international top-level academic achievement. (p. 8)

The most basic role of the state, therefore, is to provide structures, legal frameworks, and mechanisms to ensure that the safety net intended to minimize inequity and facilitate quality education is in place. As well as provisions aimed at reducing the impact of financial disparities, one of the major ways of doing this is through the specification of the national curriculum, in the form of Courses of Study. As this educator notes: "The curriculum, the Courses of Study also provide the foundations for quality, because everyone has to teach this and

this, it's specified" (Teacher D, personal communication, May 29, 2015).

In Japan, the Courses of Study are provided with detailed content information and pedagogical suggestions. For example, they list the *kanji* (Chinese characters) that children should learn at each grade level, the mathematical functions they should be able to accomplish, and even titles of songs that should be taught in music classes at each grade level. The level of detail, together with the textbook authorization system and reliance on textbooks in the classroom, has been a major factor in standardizing the experience of compulsory education across Japan over the past decades, as pointed out in an interview:

Post-war education, so most people under 65, they have all had this kind of education, they have all studied in the same kind of way, so until quite recently, everyone would say that they were in the middle ranks of society, that kind of thing. (Teacher D, personal communication, May 29, 2015)

A major role of the state in Japan is thus ensuring equality of access, opportunity and input (in the form of curriculum content) in compulsory education through legal structures and frameworks.

To Encourage the Maintenance and Improvement of Quality

Another role of the state in Japan is to encourage the maintenance and improvement of quality. Until quite recently, the general discourse was that equality of opportunity and input (the same carefully designed and controlled curriculum for every child) would lead to quality of outcomes. Recently, although the discourse of equality of opportunity and input has not changed, the emphasis has turned to outcomes, in discussions of academic achievement as measures of quality at national and international levels, and in initiatives designed to promote quality.

The first way which is evident is through the closer attention being paid to large-scale assessment, as discussed earlier in this paper. For the teachers who participated in interviews in this study, opinions about the National Academic Achievement Test were ambivalent, as represented by this teacher: "The Academic Achievement Test is good in that it makes you think that you want to work even harder, but once that starts to be used to discriminate, it's not good"

(Teacher B, personal communication, May 28, 2015).

There is similar ambivalence concerning competition between schools, within the context of growing social disparity mentioned earlier. One teacher affirms the traditional principle of equality: "Competition is OK for the private schools, but the public schools are the schools of the community, and they should be similar, so that children get the same education wherever they live" (Teacher C, personal communication, May 29, 2015).

None of the interview respondents had any experience of working in schools where school selection is employed, and they tended to play down the issue, as in the following comment:

Competition and disparity between schools are on the news, Tokyo, Osaka. But that's only one part of the whole. For compulsory education, the education children receive in other areas is just as good as in the big cities. It's not as big a problem as it's made out to be. (Teacher E, personal communication, May 29, 2015)

Another interview participant reflects in greater depth on the issue:

There's definitely more competition now among Tokyo schools. Until now, if you live in this school zone, you go to this school. Recently, the school zoning system has been changed to free choice in Tokyo, and so I heard from acquaintances in Tokyo, because it's free choice, each school has to make clear its sales point, for example, doing lots of experiential activities or something. It's not just academic achievement—the content of learning doesn't really change much because of the Courses of Study, but schools have to find something more, a special feature.... So I think the competition and the disparities between schools—they exist, but only in part of Japan, they are localized to where there is school choice, where schools are forced to create features that distinguish them from other schools. (Teacher D, personal communication, May 29, 2015)

It is interesting here to note that competition is not perceived as purposeful for increasing quality of academic achievement, but is perceived as pressure for schools to emphasize their difference, which is diametrically opposed to the traditional value of equality voiced above by Teacher C, as the sense of sameness of educational provision.

To Provide Systems of Teacher Education and Professional Development

A third role of the state in achieving and maintaining quality and equity in education is to provide robust systems of initial teacher education and continuing professional development. As discussed earlier in the article, teacher quality is the key to quality of education, and this is a point echoed by teachers themselves: "At elementary school, especially, it is the teacher who is important. Teachers are all educated and trained in the same way, to the same standard, so there is little regional difference." (Teacher E, personal communication, May 29, 2015)

However, there are concerns about the declining quality of teachers and declining attractiveness of the teaching profession, as this reflection shows:

Monkasho decides the Course of Study, but it is teachers who actually teach it, and some teachers are better than others. What we really need is a system that educates high-quality teachers. Many teachers are now in their 50s. There are very few teachers in certain age brackets, such as 40s, because there was little employment at that time. And now, as more teachers enter, the quality has dropped. The ratio has gone down from 10:1 to 3:1, and that means that the quality is declining. It can't be helped, because we need the teachers, but the quality—that needs to be addressed at national or prefectural level. They need to make it more attractive—salary, mission and purpose or something. Get high-quality people in and then train them. (Teacher D, personal communication, May 29, 2015)

In Japan, teaching is still a relatively attractive and well-paid profession, but as this quote shows, there is no room for complacency in this regard, and taking measures to ensure the quality of teachers is one responsibility of the state and of prefectural level government.

Role of Elementary Schools

Having looked at the role of the state in terms of providing legal structures and foundations, encouraging the maintenance and improvement of quality, and providing effective systems of teacher education and quality for compulsory education, the next issue to discuss is the specific role of the elementary school.

To Lay the Foundations

Teachers who participated in interviews for this study were all adamant that the role of elementary schools is to lay the foundations for every child to achieve: "Elementary school puts everyone on the same start line, so that everyone has the same minimum abilities." (Teacher A, personal communication, May 28, 2015)

However, it is not only academic achievement that is important, and the wider role of elementary school in educating the whole child that is referred to in the following quote was a refrain throughout all the interviews: "Elementary school is the foundation. It's where hearts and minds are formed. Equity is embedded throughout the school, as a basis."

The sense that equity is not something that is taught in school or something to be attained, but rather is the basis for everything else that happens in school education, was predominant:

Schools in Japan have a very big role in contributing to equity in society. Everyone in society, they acquire the sense that everyone is equal in elementary school. Everyone is equal, that's repeated all through elementary school. At least, opportunities are given equally. It's more equality than equity, but it's very important. (Teacher F, personal communication, May 29, 2015)

To Model Equity as Lived Experience

Following on from this, there was an emphasis on the role of the school in modeling equity as lived experience, or doing equity rather than teaching equity. As this teacher says: "Compulsory education nurtures equity through doing things together, working in groups, learning how to be in society, that's how the foundations are developed. Children learn equity by living it." (Teacher E, personal communication, May 29, 2015)

Elementary schools in Japan provide a multitude of opportunities for working in various roles in groups, from class activities and monitor rotas through school committees to school cleaning. By placing children in many different roles in different groups, children learn how it feels to be a leader, how to work with younger and older peers, how each person should contribute to achieve a goal, and how to be fair so that everyone has chances. Teachers provided specific

examples of equity as practiced in the school:

The role of school is to provide equity of opportunity. So for example, we have the class representative. Usually, they are elected, so the student with leadership skills gets elected. But we decided to do it by lottery. And it was very successful; some of the students who are not obvious leaders become very good leaders when they are put in that position. (Teacher E, personal communication, May 29, 2015)

Another example comes from this teacher, describing school lunch. In Japanese public elementary schools, all children eat the same lunch in their classroom, with children taking turns on a rota basis to be in charge of serving lunch from large containers to their classmates. How to divide the big container of rice into equal portions so that there is enough for everybody is one of the first lessons of equity the six-year old first-graders learn at elementary school!

I don't actually teach equity or fairness as such. But the class I have now, they are 6th graders, and they have such a strong sense of equity (laughs). Even when it comes to school lunch, maybe some schools and some classes, it's first come, first served for second helpings, but this class, it's strictly in register name order, if the first person that day doesn't want seconds, the next person gets the chance, and so on! And it's not just because they are 6th graders, they have always done it like this. I didn't teach them, and I don't know who did, but they always ask each other and keep things fair. (Teacher C, personal communication, May 29, 2015)

This example emphasizes the agency of children themselves in developing systems of equity within the school society, and children in Japanese elementary schools are given considerable responsibility in this regard, both at classroom level and at school level, where they take the lead (with teachers' guidance) in organizing and coordinating the activities of school committees, school events, and so on.

To Ensure Quality of Education Whether Rural or Urban

Turning the focus to quality, teachers who participated in the interviews all agreed that being located in a rural area had no negative impact on quality of

education. While they recognized that children in the community of the school generally had less access to extra-curricular learning and activities compared to children in Tokyo, they also emphasized the advantages of a small school: "Teachers can do a huge amount more in terms of teaching children because the numbers are small" (Teacher A, personal communication, May 28, 2015).

All teachers agreed that the difference between rural and city was not the quality of education, but the education environment:

Compared to Tokyo, the big difference is environment. The children don't have less opportunities, and even technology, there's an even more rural school near here where all the children have iPads. There is no big gap in the quality of education, it's just different experiences, like the children here have so much more experience of nature, even though some of them have never been on a train. (Teacher C, personal communication, May 29, 2015)

These observations are supported by the results of the National Academic Achievement Test, where the prefectures that score highest are actually predominantly rural prefectures (MEXT/NIER, 2014). In this respect, Japan is quite different to some other countries where the rural-urban divide is more marked, and this is probably due in no small part to the decades of strict enforcement of nationwide standardization of opportunity, curriculum, and teacher training.

Role of Teachers

Moving specifically to the role of teachers, the two major themes that emerged were the classroom practices used by teachers and the role of teachers in the holistic development of the child.

To Ensure the Academic Achievement and Development of All Children

At the level of classroom practice, teachers work hard to make sure that all children have the opportunities to learn and present their learning, as this teacher explains: "As far as possible, I make sure that everyone participates equally, so that everyone presents their work or opinion, and so on. In a school this size,

that's easy to do." (Teacher A, personal communication, May 28, 2015)

However, teachers are fully cognizant of the fact that equal opportunities and equal input do not translate automatically to equal outcomes, and they incorporate this into their teaching practices:

Each child has things that they are good at and things they find difficult. So I think of that when I am asking them to do things. So maybe I will ask someone who is not so good at maths to present the first part of a solution, and then someone who is very good at maths to do the more difficult part. But if they are not good at something, they need chances to get better. (Teacher B, personal communication, May 28, 2015)

The challenge facing teachers in Japanese elementary school classrooms is that they are the interface between the standardized Course of Study, which is supposed to be mastered by all children in a particular grade level in order to ensure high-quality academic achievement, and the children themselves in the classroom, who learn at different speeds, in different ways, as individuals. This can be frustrating at times, as this teacher explains:

In an ideal world, what I would change is not having to follow the timetable, not being constrained by the timetable. We have to teach this now, and we have to finish when the bell goes because the class is 45 minutes long, but sometimes I want to keep teaching until the children really understand, not stop just because the timetable says we have to stop. And we use textbooks because that's what we use, but I would like have more time to study and think about what to teach and how to teach it and look for my own materials, because maybe there are materials that are better than the textbook to help the children understand. If I could do that, maybe the teaching I do would be of higher quality. (Teacher C, personal communication, May 29, 2015)

Highly aware of the individual needs of several children in the class who find it difficult to cope with the 6th Grade curriculum, the same teacher explains how she approaches this:

[This town] is good because they allocate us a support teacher to help children who are struggling. That teacher helps children who are struggling to understand the class, but as far as possible, we say that the teacher is there for everyone, so as not to single children

out in front of everyone, and when it is an open class for parents, the support teacher is not there. As the class teacher, I am everyone's teacher, so I can't give too much individual support to one child, even if they need it, because it's not fair for the others, so when the support teacher isn't there, I help the children who need it a little at a time, and if that isn't enough, then I use the free time between classes to help them. (Teacher C, personal communication, May 29, 2015)

Basically, the onus is on the teacher to do whatever possible to scaffold the gap between the prescribed curriculum and the children's current stage of understanding, through the help of the support teacher or through extra individual help out of class. The willingness of teachers to put in the extra effort and time to bridge the gaps between input and individual child help to mitigate gaps in outcomes and maintain equity and quality in the classroom, but the question of what happens if the teacher is less committed or what happens in a class of 35 children rather than 15 children needs to be asked. In this case, it is the professionalism and commitment of individual teachers, in spite of rather than because of the system, that is contributing to the maintenance of equity and quality.

As suggested above in the reference to saying the support teacher is there for everyone even if s/he is actually there to support specific children, the dominant discourse in Japanese elementary schools is that everyone can succeed. This teacher presents this argument clearly:

I know it's not always true but, ideally, I want children to feel that they want to do everything. So they don't think, "Oh, I'm not good at maths but it can't be helped," but they keep trying even if it's difficult and they achieve and manage to do it. And the teacher's role is as a leader to the children, giving them strength to do everything. (Teacher B, personal communication, May 28, 2015)

This idea of giving children strength and encouraging them to keep trying until they manage to do something difficult is a constant discourse in elementary schools, crystallized in the word *gambaru*, which means "to persevere, to try hard," and can be found somewhere on the wall of almost every Japanese elementary school classroom. The belief that it is possible to succeed if your *gambaru* is closely connected to motivation and resilience, and students have

many opportunities to practice, through academic work, but also through sports events such as long-distance running and skipping events, or daily activities such as resolving to eat food they do not like in the school lunch, or practicing for a music performance. While being able to succeed if you keep trying is the dominant discourse, teachers recognize that some children need more help to succeed than others. The same teacher gives an example:

Last year, for example, there was a child in my class who could not write the parent-teacher notebook [daily notebook including homework, things to bring to school the next day, messages etc.], and couldn't do homework, so I helped that child write in the notebook and worked closely with the parents on homework. Maybe everyone else wondered why I only helped that child in that way, but it was... it was just to give that child the same chance, to be involved. (Teacher B, personal communication, May 28, 2015)

Again, it falls on the teacher to resolve the dilemma between equity and quality in the traditional dominant sense in Japan of equality of input, and equity and quality in the sense of ensuring that each child benefits to the maximum from learning, through embedded practice. The system does not provide the support or help that teachers need to be able to differentiate teaching and learning for individual children.

To See Children as Holistic Individuals

All teachers who participated in interviews agreed that academic achievement was not and should not be the only measure of quality in elementary school education. When asked about the role of the teacher in achieving quality in elementary school education, this teacher was clear where the priorities lie:

I think children are different at different ages, but I want to help children grow up. I first got my teacher license for junior and senior high school, but it was too specialized and compartmentalized, and I wanted to be a teacher who could develop children's hearts and their lives, so I changed to be an elementary school teacher. When I had the interview to become a teacher, I said that the most important role of a teacher was to nurture children's hearts, and the interviewer told me I was wrong and the most important thing

was academic achievement.... but [after 11 years] I still believe there are many more things than academic achievement to do at elementary school. Elementary school is the place for experiences of creating things together.... (Teacher C, personal communication, May 29, 2015)

As shown in this section, the teacher's role in achieving and maintaining quality and equity involves a constant balancing between academic achievement and holistic development, between different interpretations of equity and quality, and between a standardized curriculum and the individual child.

Role of Children and Families

Children themselves and their families obviously have an important role to play in education, and it is only with their commitment that quality and equity in education can be achieved. In Japan, the role of the family is highlighted in the 2006 *Basic Act on Education*, where Article 10 states that:

Mothers, fathers, and other guardians, having the primary responsibility for their children's education, shall endeavor to teach them the habits necessary for life, encourage a spirit of independence, and nurture the balanced development of their bodies and minds. (MEXT, 2006)

Commitment to Academic Achievement and Keeping Up

As well as teaching children life habits and nurturing balanced development, parents have an important role in contributing to their children's academic development, especially in cases where children find it difficult to keep up with the curriculum. The efforts made by teachers to help all children keep up with the curriculum were noted in the last section, but children and parents also need to play their role:

Apart from special schools and special classes, every child is given the same material, the same input. But how much children actually take from the class is not the same. So study at home and morning study are important so that children can all achieve. The aim is for all children to achieve 100 %, but that's not necessarily possible. (Teacher D,

personal communication, May 29, 2015)

In most elementary schools, parents are expected to listen to children read every day and check that they have completed homework, and confirm that both are done by signing (stamping) the allocated space. Children also have substantial holiday work schedules, which are supervised by parents, with instructions from teachers. In such ways, parents and children are expected to show the same commitment to education that teachers do. In this particular school, most children did not attend supplementary classes (shadow education), and so the issue of gaps between children who attend extra classes after school and those who do not was not considered to be a significant issue.

Enjoying Learning

In addition to the core curriculum, children are encouraged to actively engage in studying topics that interest them, and "free study" is often part of homework, especially in upper grades of elementary school. There is some tension here between encouraging children to enjoy learning and pursue their own interests and not wanting to overload children, as the most recent Course of Study is more demanding in terms of time and content than the previous Course of Study:

In the new Course of Study, it's difficult to cover everything, it would be good to be able to focus on things that children are interested in in addition to the curriculum, but there is not much latitude. We try to encourage children to study what they are interested in at home, through "free study," but it is difficult in the current situation. (Teacher D, personal communication, May 29, 2015)

In spite of the tension, this experienced school leader is clear on the importance of enjoyment of learning, as explained here:

Elementary school is the introduction to learning. Children have to enjoy it. We cannot let children think that they are not good at learning, or they can't do it. So motivation is the most important thing. Children need to acquire the basic level of academic ability, but they also need to think that they understand, think that learning is good, and then they will get better at it. It's like sports, if you enjoy it and think you're good at it, you

practice, and then you will get better at it. (Teacher D, personal communication, May 29, 2015)

The children's role, then, is to become self-motivated and develop confidence, so that they can enjoy learning and become better learners.

Effort and Self-Efficacy

Motivation and confidence are closely linked to self-efficacy, and this is another important aspect of the children's role in learning, as this teacher states:

Children need to learn that studying isn't about ability, and if they spend time on something, can do it. They can do it if they try. That's important in elementary school, to learn that they can do things if they face them. (Teacher F, personal communication, May 29, 2015)

As mentioned earlier, this is the notion of *gambaru*, which forms the basis of resilience, in the widest sense of the term. This teacher goes on further to express his view on the importance of effort, self-efficacy and motivation:

Recently, people talk about disparity, but I think school education plays a big role in addressing that. Children can go from [this school and local junior high school] to a prefectural senior high school and to Tokyo University from there—that's individual effort; it's down to how hard they work. I think that a lot of people talk about disparity, disparity—yes, it might exist, but that doesn't mean that someone from a less privileged background or a rural area can't succeed. It's not that big a thing. In Japan, still, if you make enough effort, you can still succeed, even if your family isn't that well off. (Teacher F, personal communication, May 29, 2015)

This is still the genuine belief of many educators in Japan. Whether the belief still holds true, and whether it will continue to hold true by the time these children reach university age, is an open question, but for the time being, this is the belief being transmitted to children through the words and practices of their teachers, day after day, in elementary schools.

Conclusion

In an article on factors contributing to quality and equity in education, Schleicher (2009) claims that:

PISA indicates that students and schools perform better in a climate characterized by high expectations and the enjoyment of learning, along with readiness to invest effort, a strong disciplinary climate, and good teacher-students relations. (p. 255)

As the interview data presented in this article demonstrate, all of these factors except the disciplinary climate are very much in evidence and uppermost in the minds of teachers at the earlier stage of elementary school in Japan, four to nine years before students are eligible to take PISA tests. The issue of disciplinary climate was the only one on this list that did not emerge in interviews, perhaps because classroom management is not an issue in this school, and students are fully engaged in classes and learning.

All these factors help to answer the first question posed in the introduction, (1) "How are equity and quality achieved and maintained in Japanese elementary schools?" but this is not the whole answer. From the interviews, it was evident that equity and quality are achieved and maintained in Japanese elementary schools largely through the embedded practices of school life, including both academic and non-academic, and through teachers' commitment to principles of equity and equality, attention to individual children's needs, and expressed beliefs that all children can and should succeed. Structures and frameworks provided by the state form the basic skeleton of an education system that facilitates equity and high quality learning, but the same system also obstructs equity, insofar as it does not allow for diversity or differentiation. In this situation, it is teachers who are at the interface, mediating equity and quality, and it is teachers with children themselves who live equity on a daily basis, rather than teaching or learning equity. Similarly, in answer to question (2) "How are student motivation and resilience perceived and fostered in Japanese elementary schools?" teachers again play a key role through encouraging children to enjoy learning and believe that they are capable of learning if they try, and through investing extra effort to help children who are struggling, including working with their families. In these ways, it is clear from the rich data obtained from the

teachers in this study that in this small, semi-rural school, all stakeholders—state, school, teachers, children and their families—have a role in helping to maintain equity and quality, while fostering motivation and resilience. Above all, however, the message from the teachers of this particular school was that quality of education in Japanese elementary schools is measured not primarily by test scores, but by the development of the hearts and minds of each individual child in the school. One teacher jokingly made a serious point,

Academic work is important, of course, but worrying about academic grades can come later. Our job as elementary school teachers is to make sure the children grow with good hearts. If we do that, that is high-quality education, and I will leave the grades to the junior high school and senior high school teachers! (Teacher C, personal communication, May 29, 2015)

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