

Part 3 Overall Discussion

The collaborative research with scholars in Korea, China, Vietnam, and Mongolia has shed light on differences reflecting the cultural differences of the respective societies. At the same time, the research also yielded results common to all five countries. Based on these findings, I will examine the various environments in which children are raised, the nature of interactions between parents or caregivers and children, and the manner in which parents or caregivers provide developmental assistance to children.

Results and Discussion

I. Parental Survey Results

In all five countries, many parents reported that they spend every day with their children. Furthermore, among the parents reporting talking with their children every day, 100% of Japanese parents reported doing so, indicating the high value placed on developing an emotional relationship with their children.

(1) Reading picture books with children

Among the five countries, the highest percentage of parents in Japan and Korea read picture books with their children, followed in order by China and Mongolia. Approximately 20% of parents in Vietnam did not read picture books with their children. Given the significant impact of reading to children on the development of reading and writing skills as well as expansion of vocabulary, it is recommended that, in countries where fewer parents read to their children, parents make an effort to read to their children as part of their interactions with their children. In Japan, it is estimated that, on average, 23.6 books per child are published annually targeting children between the ages of zero to six years of age, reflecting Japan's rich reading environment. Given that the number of books targeting children in early childhood is also low in countries such as Vietnam and Mongolia, where the practice of reading picture books with children is less common, increasing the number of books aimed at children is another issue that should be addressed.

(2) Parents' contact with written language

Many parents in China and Korea reported frequently reading books for themselves, while many parents in Vietnam did not habitually read books. The digital revolution, which is

sweeping across all countries, is taking away opportunities for both children and adults to read and write handwriting. At present, extremely few adults continue to write letters or journals by hand. Among the five countries surveyed, Japan still retains a culture that esteems the art of writing by hand. Perhaps for this reason, some Japanese parents responded that they hand write “one letter a month.”

In all five countries, it has become the norm to use digital media for reading and writing. Usage of cellphone text-messaging or personal computers have increased significantly, particularly in China. In Vietnam, there are both people who rely on such digital media every day and those who do not use such media at all, reflecting disparities related to household income.

(3) Children’s favorite books

While 70 to 80% of parents in Japan, Korea, China, and Mongolia responded that their children had favorite books; the same figure was somewhat lower in Vietnam, at approximately 50%, which is believed to be related to the lower rates of reading to children.

In Japan, children tend to like picture books, whereas, in Korea and China, children tend to like fairy tales. Children in Mongolia like both fairy-tales and picture books. Children in Japan and China, followed by Korea, also tend to like illustrated reference books.

(4) Numbers of books in the home

The number of picture books in the home was high in Japan and Korea and low in Vietnam and Mongolia. The number of story books in the home was high in Korea and low in Vietnam and Mongolia. The number of illustrated reference books in the home was slightly higher in Japan and China. A certain proportion of households (slightly less than 10%) in Korea reported having more than 40 illustrated reference books at home. The number of educational magazines was slightly higher in China than in other countries. A certain percentage of households (approximately 5%) in Korea reported having more than 40 educational magazines at home.

In Japan, the scene of a family reading the morning newspaper as they eat breakfast would have been quite typical in the past. Recently, however, increasing numbers of families have stopped subscribing to newspapers and, instead, read the news online. With the continuing progress of the digital revolution in all five countries, it is likely that household collections of printed media will decline in the future. While this may result in time- and cost-savings, there are, undoubtedly, other things that will be lost. We cannot judge at this point whether these trends are beneficial or harmful to humankind’s intellectual wealth, but they must be carefully monitored.

(5) Teaching letters

In Japan, Korea, and China, it is generally believed that it is good to teach children letters when they express interest in doing so. In reality, Korean parents are likely to teach children letters through the use of workbooks or at cram schools. Such literacy education gives an indication of the great emphasis placed on early education in Korea. In Japan and China, the majority of parents are of the opinion that children should be taught letters when they are interested. Meanwhile, most parents in Vietnam and Mongolia are of the view that it is not necessary to teach letters at home.

(6) Children's interest in letters

It seems that children's interest in reading and writing is lower in Vietnam relative to the other countries. The percentage of Vietnamese and Mongolia children who are able to read and write is low.

Children's interest in letters is highest in Japan, and many Japanese children are also able to read and write. In Japan, children begin to read letters around the ages of three or four. Children begin reading at a slightly lower age in Japan and China and at a slightly higher age in Korea. In Japan and China, children begin writing letters around the age of four. Comparing the three countries, Japanese children begin writing *hiragana* alphabet slightly earlier than children in China and Korea. It appears that there are two reasons for this difference between countries in age at which children begin writing. The first has to do with differences in the type of letters. With Japanese children learning *hiragana*, Chinese children learning Chinese characters, and Korean children learning Hangul, it is believed that the differences in timing are related to differences in difficulty in learning the respective letters. Second, given that children universally develop fingertip control at around age five and a half regardless of culture, it is believed that the delay in learning to write Korean Hangul and Chinese characters is due to differences in the degree of difficulty in the actual writing of letters resulting from differences in letter type.

In Japan, girls, who generally develop good fingertip control earlier than boys, tend to become interested in and begin writing letters earlier. However, even precocious children are unable to write all of the *hiragana* letters at four years of age. Some children, especially boys, do not write any *hiragana* at all and, even if they do, often write "mirror letters" (letters where right and left or top and bottom are reversed) until they are around five and half (Uchida 1989). Forcing children to write stresses motor areas of the brain responsible for regulating fingertip control and may cause children to stutter or develop other adverse conditions. The teaching of writing to children should be approached with this in mind (Uchida 1999; 2007).

(7) Parent's views on the value of language as a tool and the utility of learning letters

In all five countries, parents believe that learning letters will enhance their children's intellectual curiosity. In Japan and Korea, parents cite being able to read books as a benefit of learning to read and write. In other words, they believe that children, by acquiring the ability to read and write letters, will become able to read on their own. Meanwhile, parents in China, Vietnam, and Mongolia cite the fact that children will have less difficulty in elementary school as a benefit of learning to read and write.

(8) Parents' views on the impact of meaning of enjoying books

Japanese parents cited increasing children's enjoyment and imagination, while Korean parents cited children's emotional development, as impacts of learning to read and write. Chinese parents believed that learning to enjoy reading will enhance children's intellectual curiosity.

(9) Relationship between views on learning to read and write and household income

Japan, Korea, China, and Vietnam

- Low-income parents emphasized the educational benefits such as "it will be useful in learning letters" and "it will prepare children for elementary school."

Korea and Mongolia

- Low-income parents cited "children will be able spend time by themselves" as a benefit of learning to enjoy books, placing value on the separation of children from their parents.

Japan, China, and Vietnam

- High-income parents emphasized "children's emotional development" as a benefit of learning to enjoy books.

Korea, China, and Mongolia

- High-income parents place importance on emotional aspects such as "increasing children's imagination."

(10) Hopes for children's advancement in education

- Many Korean parents responded that they want their children to advance to the level that the children themselves wish to attain. Many Japanese and Mongolian parents wanted their children to go to university. While many Chinese and Vietnamese parents wanted their children to go to university, the percentage of parents wanting their children to go on to graduate school was higher than in other countries. This result is perhaps related to the fact that high educational level is seen as vehicle for moving to a higher social class and the smaller number of universities or graduate schools relative to the population with a high school education in China and Vietnam.

(11) Children's extracurricular activities

Vietnamese and Mongolian children engaged in few extracurricular activities. The parents were of the opinion that preschool provides enough activity for their children. In Japan, many children were engaged in sports-related extracurricular activities, while in Korea and China, they were engaged in art-related and language-related extracurricular activities. These results indicate the substantial emphasis placed on early education by Korean and Chinese parents hoping to give their children a competitive advantage in school.

II. Parental Survey Results: Relationship between Discipline Style and Children's Social Ability

(1) Classification of discipline styles

Based on factor analysis, the following discipline styles were identified in each of the five countries.

Japan: authoritarian, sharing, and self-sacrificing.

Korea: sharing, directive, self-sacrificing, and controlling.

China: gently accepting, strictly coercive, child-centered.

Vietnam: sharing, controlling, and directive.

Mongolia: authoritarian, sharing, controlling.

“Sharing-style discipline” refers to the discipline style in which children are views as individuals on equal footing with adults, and parents value interactions, hope to share enjoyable experiences, and emphasize conversation with their children. This discipline style is common in high income households and also in low-income households where there are a large numbers of books at home.

“Authoritarian-style discipline,” on the other hand, refers to the discipline style in which children are controlled by authoritarian rule, are disciplined harshly if they do something wrong, and are told repeatedly, and in detail, to do as their parents say, and in which parents autocratically and forcibly decide how their children should live and behave. This discipline style is characteristic of low-income parents. However, it is also practiced by many high-income parents, who typically also invest a lot of money in early education.

It is a notable result that both sharing and authoritarian (controlling) discipline styles are observed in all five countries.

Child-centered discipline, in which parents watch over and provide guidance to their children (child-centered parenting in China), is observed in both Japan and Korea, whereas the opposite

style of discipline, self-sacrificing discipline, in which parents deny themselves and do everything for their children, is also observed. Such self-sacrificing discipline is seen in both high- and low-income households, with some parents developing a victim mentality that their lives are superseded by the lives of their children. In high-income households, parents that practice self-sacrificing discipline often suffer from parental anxiety. Some low-income parents tend to end up being neglecting their children.

Controlling discipline, in which children are punished (physically and verbally) for doing something wrong, is seen in Korea, Vietnam, and Mongolia. Furthermore, directive discipline, in which children are trained to act a certain way, is observed in Vietnam.

(2) Relationship between discipline style and the Strengths and Difficulties Questionnaire (SDQ)

In all five countries, sharing discipline was observed to be correlated with prosocial behavior and negatively correlated with maladjustment tendencies, and, as such, shown to reduce maladjustment tendencies. In Japan, this discipline style was negatively correlated with conduct problems and hyperactivity; in China, with hyperactivity and peer relationship problems; in Vietnam, with conduct problems, emotional symptoms, and peer relationship problems; and in Mongolia, with hyperactivity and peer relationship problems.

Authoritarian discipline was observed to be correlated, albeit weakly, to both prosocial behavior and maladjustment tendencies. Controlling discipline, in which children are physically or verbally punished, was observed to be correlated with maladjustment tendencies including negative behaviors, acting spiteful toward others, and frequently talking back to adults.

Correlations were observed between discipline style and children's prosocial behavior. It could be that, when children are calm and thoughtful, parents interact with them in a sharing manner. Or, the opposite may be true that children whose parents interact with them in a sharing manner end up being more stable.

Parents may resort to an authoritative discipline style in which children are frequently physically or verbally punished in an attempt to control maladjustment tendencies. Or, it could be that children who are frequently reprimanded or physically punished exhibit greater maladjustment tendencies, rebellious behavior and inattentiveness.

No clear causal relationship between child temperament and discipline style can be seen in the cross-sectional data. In order to be able to establish a causal relationship between discipline style and prosocial behavior, temperament, and academic performance, it is necessary to examine both cross-sectional and longitudinal data.

III. Teacher Survey Results

(1) Forms of child care

Free childcare, or child-centered child care, is most common in Japan and Korea, whereas childcare emphasizing group activities is most common in Vietnam and Mongolia. The childcare in China can be categorized in between these two forms.

(2) Children's letter-learning environment

In China and Korea, many childcare professionals take the view that letters should be introduced as necessary in the course of play. In China and Korea, childcare facilities are well-stocked with books and often have dedicated library rooms. In Vietnam, many childcare professionals provide children opportunities to see and interact with letters and actively teach letters using workbooks. There is a strong tendency for parents to rely on childcare facilities to teach letters. Childcare facilities often have posters with letters as well as workbooks. In Japan, childcare facilities are not equipped with computers or DVD players. The environment of such facilities designed so that children naturally come across letters in the form of birthday calendars and children's job lists. In Mongolia, childcare facilities are designed so that children come across letters on their name tags, children's newspapers, etc. There is often a book corner in classrooms but no dedicated library space.

(3) Teachers' views of parents

Teachers in Japan and Korea are similar in their view of parents as being "adult-centered" and "excessively reactive." Korean and Mongolian teachers also see parents as being "eager towards their children's education." In China and Vietnam, teachers view parents positively as "being very thoughtful about their children."

(4) The role of kindergartens, nurseries, and other educational facilities for young children

Teachers view kindergartens and nurseries as important places for children to learn basic life skills, learn to interact with others, and learn social rules.

In Vietnam, teachers also view such kindergartens and nurseries as important places to prepare children for school. In Japan, kindergartens and nurseries are seen as places for children to achieve various developmental milestones in early childhood and are designed to provide an environment that supports children's age-appropriate development while kindergarten and nursery life is not considered preparation for life in elementary school. Furthermore, in all five countries, teachers do not believe that such facilities serve an important role in freeing parents from the burdens of child rearing.

Overall Discussion

In addition to the above findings of the five country study, I will discuss the results of clinical interviews conducted with children from three of the five countries surveyed (Japan, Korea, and China) which included, among other items, an assessment of their reading and writing ability, vocabulary, and letter reading and writing. The same children were re-assessed after completing their first year of elementary school and given a Program of International Student Assessment (PISA)-style reading comprehension test designed for first graders. Based on the results of this short-term longitudinal study focusing on children, I attempted to identify the influence of parents' and teachers' interactions with children on the nature of parent-child communication and children's academic performance, in order to provide recommendations for parents and for policy makers.

1. Effect of economic disparity on children's acquisition of reading and writing skills

The acquisition of literacy (reading and writing) skills during early childhood strongly correlates with children's cognitive development. In addition, it has been demonstrated that vocabulary skills can serve as an indicator of intellectual development and academic fitness (Uchida 1989 and 2008; Higashi, et al. 1995).

In 2007, a comparative international study of literacy acquisition (Japan, Korea, China, Vietnam, and Mongolia) was conducted by the International Inequality Research Group of the Science of Human Development for Restructuring the Gap-Widening Society Global COE program at Ochanomizu University, with the objective of clarifying how socio-cultural factors influence the acquisition of literacy skills.

Results demonstrating that economic disparities affect student academic achievement have been reported by numerous researchers. Literacy and vocabulary skills, which begin to be acquired in early childhood, serve as the foundation for academic achievement. How, specifically, is acquisition of literacy and vocabulary skills related to children's academic performance in elementary school? Does the influence of economic disparity on development of children's fundamental academic skills begin in early childhood? Is the acquisition of literacy and vocabulary skills (fundamental academic skills) affected by economic disparity-related factors? Individual interviews with children and a survey of parents and teachers were conducted with the goal of answering these questions. A follow-up study was also carried out to determine the effect of early childhood literacy and vocabulary skills on children's reading ability after the first year of elementary school, as measured by a PISA-style reading comprehension test (which, in the PISA, assesses "literacy").

I would first like to summarize the results from the five-country study and the three-country longitudinal follow-up study regarding the influence of household income and/or factors such as discipline style and preschool childcare type on academic performance.

The following represent the main findings regarding the relationship between household and childcare environment and infants' acquisition of literacy and vocabulary skills.

(1) Compared to a study conducted in 1995, literacy acquisition was found to occur at an earlier age (with acquisition at age five increasing from 48 to 80%).

(2) Although a gender difference in literacy was observed for three- and four-year-olds (females > males; $p < .0001$), this difference disappeared by age five. A gender difference in vocabulary skill (males > females; $p < .0001$) was observed in four- and five-year-olds.

(3) Economic disparity influenced literacy ($p < .0001$), especially in children up to the age of four. The impact of economic disparity on vocabulary skills increased with age, with the widest gap in vocabulary skills being observed among five-year-olds ($p < .0001$).

(4) Vocabulary skills were observed to differ by nursery care type (group-based or child-centered child care) ($p < .0001$), with children experiencing child-centered care possessing higher vocabulary skill.

(5) Covariance structural analysis revealed that while the literacy acquisition of three- and four-year-olds was influenced by economic disparity-related factors (disparities in household income, investment in education), parents' education level, number of books in the home, and discipline style, no such influence of economic disparity-related factors was observed in five-year-olds.

(6) While phonological awareness of unvoiced letters (internal factor) peaks at five years of age, the impact of teaching (external factors: group lessons, early-stage learning with workbooks, etc.) on literacy acquisition becomes increasingly evident at this age.

(7) Three primary factors determining discipline styles were identified: sharing, authoritarian, and self-sacrificing. It was found that authoritarian-style discipline is commonly practiced by low-income parents, whereas sharing-style discipline is most commonly practiced by high income parents.

(8) Sharing-style discipline was correlated with children's vocabulary skill. Children experiencing sharing-style discipline—in which parents stand on equal footing with their children, place great value on parent-child interactions and spending time together as a family, and try to enjoy and share in their children's experiences—were found to develop rich vocabularies.

(9) It was demonstrated that sharing-style discipline was strongly correlated to the development of prosocial behaviors as measured by SDQ scores (a measure of the development of a child's sociality). It is hoped that such interaction by parents, the sharing of enjoyable

experiences with their children, will positively impact the children's future interpersonal relationships and communication skills. Meanwhile, it was also shown that authoritarian-style discipline was strongly correlated to children's problem behaviors (impulsive or hyperactive behaviors, high aggression, difficulties playing with peers, etc.). Given that the results of this study represent a snapshot at a single point in time, it is not possible to establish a causal relationship. However, when children exhibit problem behaviors, parents often adopt a "top-down," authoritarian discipline style; this, in turn, is experienced by the children as pressure and leads to increasing problematic behavior, suggesting that there may be a cyclical relationship between authoritarian-style discipline and children's sociality.

2. Do economic disparities really impact children's fundamental academic skills?

Cross tabulation indicated that literacy (reading and writing) and vocabulary (fundamental academic skills) skills were influenced by both economic disparity-related factors and discipline style; as such, more detailed analysis was conducted to determine which factors enhanced (or if both factors interacted to enhance) literacy and vocabulary skills and which factors impeded these skills.

[Classification of discipline styles]

Factor analysis of discipline styles identified three factors, i.e. sharing-style (interaction-focused, parents enjoy and share in the experiences of their children), authoritarian (parent-centered, top-down and authority-based discipline), self-sacrificing (child-centered, childrearing seen as burdensome, resulting from either parental anxiety or neglect).

Classification of individual parent's discipline style based on the highest standard score resulted in assignment of almost equal numbers of parents to each of the three discipline types, with 573 individuals (33.4%) being designated as "sharing," 612 (35.6%) as "authoritarian," and 532 (31.0%) as "self-sacrificing."

[Relationship between discipline style and literacy (reading and writing) and vocabulary skills]

Conducting an analysis of variance on each score, no difference attributable to discipline style was observed for reading and writing; however, discipline style was found to have a main effect on vocabulary ($F [2,1708] = 11.16, p < .0001$), with higher vocabulary scores being associated with sharing-style discipline than authoritarian-style discipline (Tukey method: $p < .01$).

[Factors determining literacy and vocabulary skills]

Multiple linear regression analysis indicated that child's age, child's gender, mother's education level, and household income significantly influenced each of reading, writing, and vocabulary skills. Authoritarian and sharing discipline styles were only observed to influence vocabulary skill (Table 1). Further analysis revealed a significant interactive effect of income x authoritarian-style discipline on vocabulary score ($\beta = .05, p < .05$). While authoritarian-style discipline was observed to have an effect in low-income households ($\beta = -.10, p < .05$), no corresponding effect was observed in high-income households ($\beta = .01, p < .70$). No interaction of income x sharing-style discipline was not found to be significant ($\beta = .01, p < .63$).

To summarize the above findings, while the influences of economic disparity- and gender-related factors on literacy skills disappear by the age of five, impacts of economic disparity-related factors on vocabulary skills (an indicator of fundamental academic skill) become increasingly evident with increasing age. In addition, discipline style and number of books in the home are found to be strongly positively correlated with vocabulary skill.

It was confirmed that, in the low-income group, where the tendency towards authoritarian-style discipline remains high, such discipline style results in lowered vocabulary scores. When we controlled for income, it was found that vocabulary scores of children in low-income households experiencing authoritarian-style discipline was actually high. However, when we first control for discipline style, the impact of economic disparity-related factors on vocabulary skill became insignificant. In other words, the correlation between economic disparity and children's vocabulary skill is spurious, and the true factor influencing vocabulary skills is the nature of parent-child interactions (Uchida et al. 2010 and 2011; Uchida & Ishida 2011).

Particularly worth noting is the fact that, when low-income parents adopt sharing-style discipline, children's vocabulary skill is not impeded. In so far as discipline style changes the manner in which parents interact with their children, it is a controllable factor. It is suggested that if these parents would relate to their children as equals and share in the enjoyment of their children's experiences, their children would develop rich vocabulary skills. Children raised in households where families spend time together and enjoy conversation are more likely to express their intrinsic curiosity, explore, and proactively learn about the world around them. The above findings lead us, then, to the following recommendations for parents and policy makers.

3. Excessive zeal for education and academic expectations in early childhood

In Korea and China, many parents push the academic advancement of their children at an early age by sending them to cram schools or by practicing letter reading and writing at home using

workbooks. Zeal for early childhood education stands out, particularly in Korea and China, where such efforts are perceived as preparation for future academic competition.

In countries such as China and Vietnam, education functions as means of advancing one's social status. China's existing higher education system (universities and graduate schools) is hardly sufficient to accommodate the numbers of students wishing to advance to university. As a result, the desired educational level in China is the highest among the five countries surveyed, with 100% of parents hoping that their children to go on to graduate school. Academic expectations are similarly high in Korea. However, given that the country's higher education system is able to accommodate the population of students wishing to advance to university, the majority of parents report that they want their children to "advance to the level that they themselves wish to attain." Similarly, in Japan, many parents want their children to "advance to the level that they themselves wish to attain."

Japanese parents' academic expectations for their children likely stem from different underlying reasons than Korean parents. Namely, it is suggested that Japan's standard score-driven education system, which has been in place for 65 years since the end of the Second World War, has focused too much on convergent thinking (memorization) and not enough of divergent thinking (imagination, problem solving/writing). The poor logical thinking and writing skills of Japanese high school students have been pointed out every year since the OECD Program for International Student Assessment (PISA) was first conducted in 2000. High schools students accustomed to "achievement tests" comprising questions with a single answer do not know how to deal with written problems with many possible answers or essays in which a student's ability to construct logical arguments is evaluated and, as a result, end up turning in blank answer sheets. Japan ranks last among all OECD countries on PISA-style reading comprehension tests. Among all OECD countries, Korea has consistently ranked second only to Finland in PISA test results. Recently, Shanghai, participating in PISA for the first time in 2009, leaped into the number one position, announcing to the world the success of its educational reform. Noting the low academic desire of Japanese high school students, Andreas Schleicher, head of PISA's Indicators and Analysis Division, has identified "improvement of Japanese students' motivation" as an issue needing to be addressed. Underlying this low academic performance may be the increasing inability of parents to control their children in the context in which almost all children go to high school and in the context of Japan's declining birth rate.

4. Education creates a country's future

Discipline style can be controlled and adjusted by parents based on their perceptions. In households with children, it is desirable for both fathers and mothers to engage in enjoyable

conversation with their children and to value time spent together as a family. Furthermore, there is an urgent need for change in awareness with regard to systems and society to enable women and men to establish a healthy work-life balance so that families can spend time together and to guarantee time for fathers, and not only mothers, to engage in child-raising.

[Recommendations to Parents] (Japan)

It has been demonstrated that children who are raised in households in which their interactions with adults as equals and sharing in the enjoyment of their experiences are emphasized develop rich vocabulary skills. Children raised in households where the parents read with their children on a regular basis, where families value time spent together, and parents and children enjoy conversation with each other will fully express their intrinsic curiosity and explore and proactively learn about the world around them. In so far as “discipline style” changes the manner in which parents perceive and interact with their children, it is a controllable factor. There is no such thing as “too late to change” in child rearing. Based on the above findings of this study, we developed the following ten child-rearing principles for parents.

[The Ten Principles for Child-Rearing]

1. Develop parent-child relationships in which both parties are of equal standing.
2. Become your child’s safe zone.
3. Do not use the language of “winners or losers” with your child.
4. Accept your child’s words and actions with empathy.
5. Do not compare your child to other children; affirm and praise them when they make progress.
6. Rather than announcing prohibitions or orders like a judge, put these in the form of suggestions using language such as “why don’t you ~.”
7. Do not deliver comprehensive, detailed explanations and definitions that leave no room for thinking.
8. Provide opportunities and leave room for children to think for themselves.
9. When your child experiences difficulties, “wait,” “assess,” “don’t rush,” and “don’t pressure” your child; rather, think about how to support and provide a foothold for your child to move forward, and otherwise help your child from the sidelines.
10. Enjoy your life together with your child.

[Policy Recommendations] (Japan)

The following are recommendations for policy based on issues identified in the literacy survey.

1. Nature of the child subsidy: Distributing child subsidies to all children only serves to increase economic disparity. Systems should be established to provide sliding-scale support for single-mother and orphan households or to enable high-income households to donate their child subsidies.

2. Planning and establishment of nursery schools: In urban areas, there are 25,000 zero-year-old infants on waiting lists for nursery schools. We call for the immediate establishment of new nursery schools to increase capacity.

3. Improving the quality of nursery care providers and pre-school teachers: Initiative should be taken at the national level to cultivate nursery care providers and pre-school teachers with the skills to provide nursery care and preschool instruction that is child-centered and takes each individual child into consideration.

4. Re-evaluation of class size: Unless class sizes are limited to 15 students for three-year-olds children, 20 students for four-year-olds, and 25 students for five-year-olds and in elementary school grades one to three, it will be impossible to provide sufficient attention to each individual child. In order to be able to accomplish child-centered nursery care and education, it is necessary to re-evaluate the issue of class size.

5. Guaranteeing time for professional development of nursery care providers and pre-school teachers: Nursery care providers and pre-school teachers are too busy to engage in professional development activities. It is recommended that systems be put in place to allow time for professional development, funds be provided for curriculum development and research, and support staff be hired to assist with the management and operation of nursery care facilities.

6. Improving the working conditions of nursery care providers and pre-school teachers: The standard wage for nursery care providers and pre-school teachers should be raised, and travel allowances should be provided to enable care providers and teachers to take advantage of professional development opportunities.

7. Reinstatement of the student loan forgiveness system for designated employment types: In order to encourage students to become pre-school teachers, which requires substantial financial investment, the program for forgiving the loans of students entering employment as teachers or welfare workers should be reinstated.