

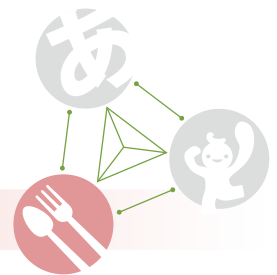
Development of Learning from Early Childhood to the First Grade of Elementary School

How do the children develop during the four years from early childhood to the first year of elementary school? Here we examined the three stem areas of the development process which represent the preparation for school education required in early childhood: daily habits, hiragana/numeracy/logical thinking and attitudes of learning to learn.

* Areas of preparation for school education required during early childhood: Areas that constitute an important foundation for learning from elementary school onwards are self-independent daily habits, the ability to concentrate, and the ability to cooperate with others. For the purpose of this survey, we have established three key areas or attitudes which are considered necessary to adapt to the learning environment from elementary school onwards, and which should be acquired during early childhood.

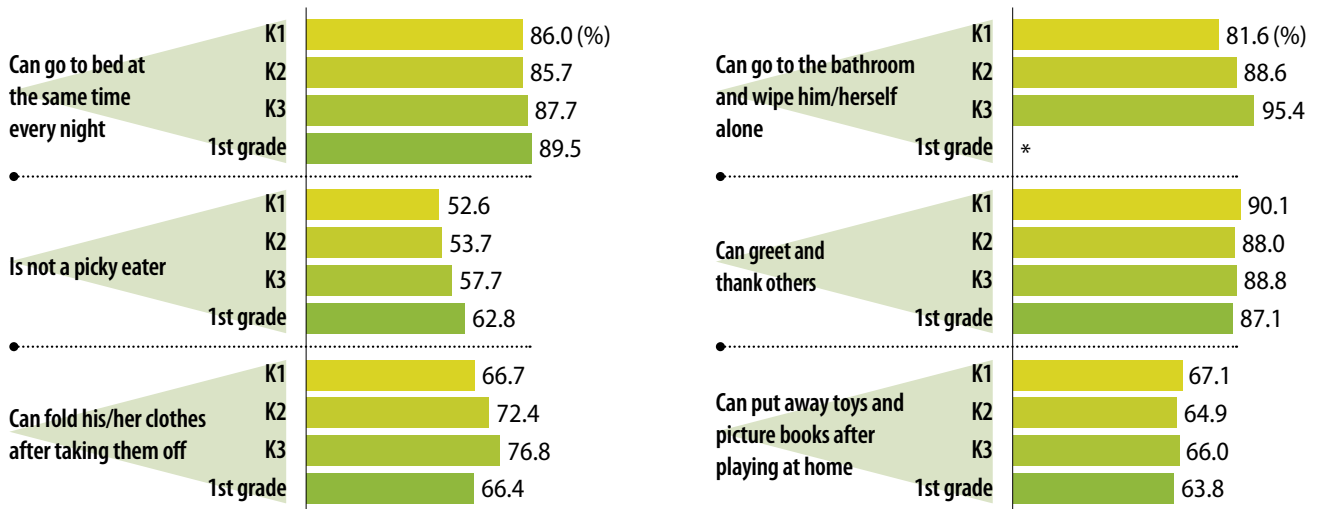
Q Are the following statements true for your child?

Daily Habits



Daily Habits

Fig. 1-1 Very true + Somewhat true



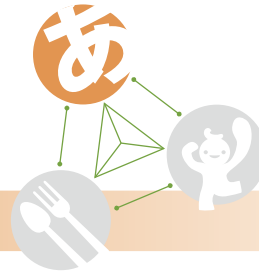
* Items for K1 through to K3.



As for their “daily habits,” more than 80% of children were able to go to bed at the same time every night. Between 50-60% of children are not picky eaters, and can put away toys and picture books.

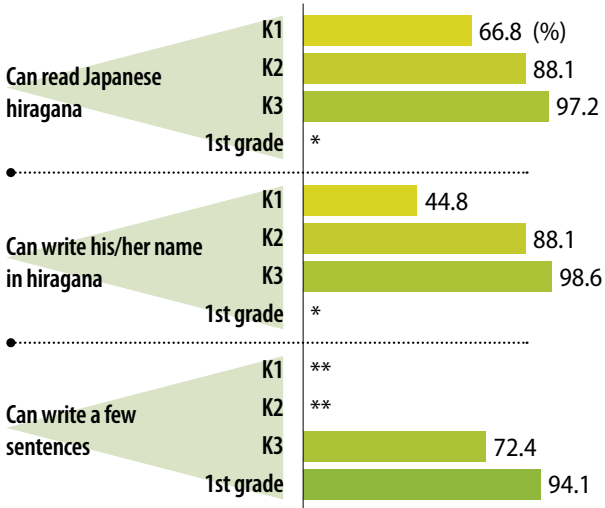
Fig. 1-1 indicates that 86.0% of respondents answered “very true” or “somewhat true” to the item “can go to bed at the same time every night” by the period of K1. On the other hand, only 62.8% were not picky eaters at the stage of first grade in elementary school. Once children enter elementary school, they have to commute to school at a fixed hour and get dressed according to their class schedule on a daily basis. The results indicate that there are a certain number of children who are picky eaters or, considerably unorganized and fail to meet required levels of expectation.

Hiragana/Numeracy/Logical Thinking



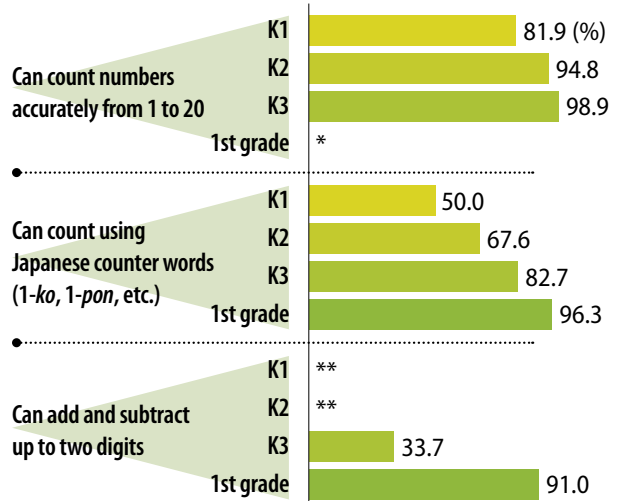
Hiragana

Fig. 1-2 Very true + Somewhat true



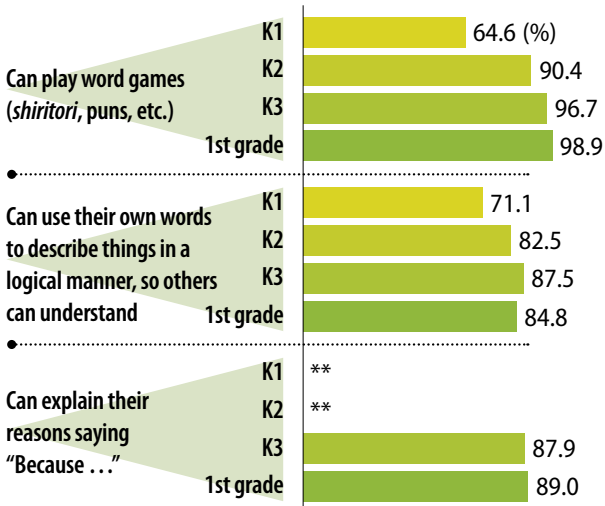
Numeracy

Fig. 1-3 Very true + Somewhat true



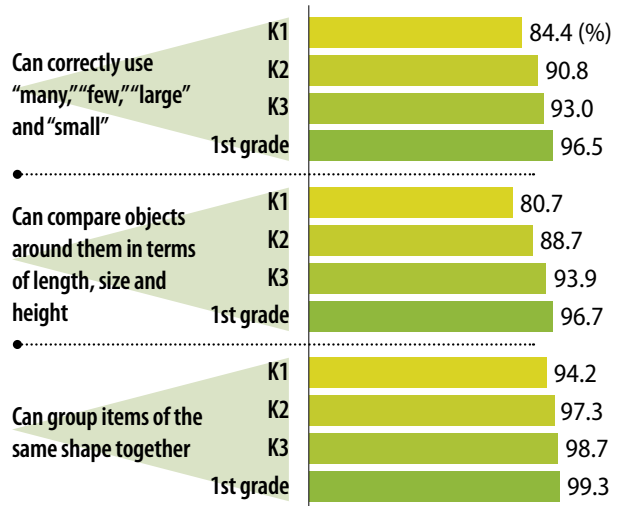
Language

Fig. 1-4 Very true + Somewhat true



Classification Skills

Fig. 1-5 Very true + Somewhat true

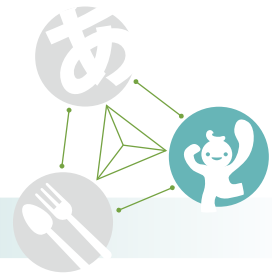


* Items for K1 through to K3.
** Items for K3 and 1st grade.



"Hiragana/numeracy/logical thinking" are important for developing literacy (hiragana) and arithmetic skills.

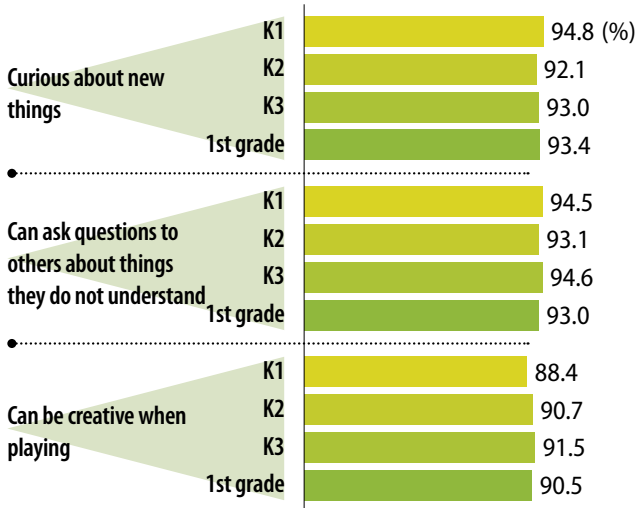
Fig. 1-3 shows a 57.3 percentage points increase between K3 children (33.7%) and first grade children (91.0%) who "can add and subtract up to two digits," a huge development in "hiragana" and "numeracy" skills. The data also indicates that in "language" and "classification skills," 80-90% of the respondents were able to formulate sentences and make themselves understood and to classify items of the same shape together, etc. during the period of K2 to first grade.



Attitudes of Learning to Learn

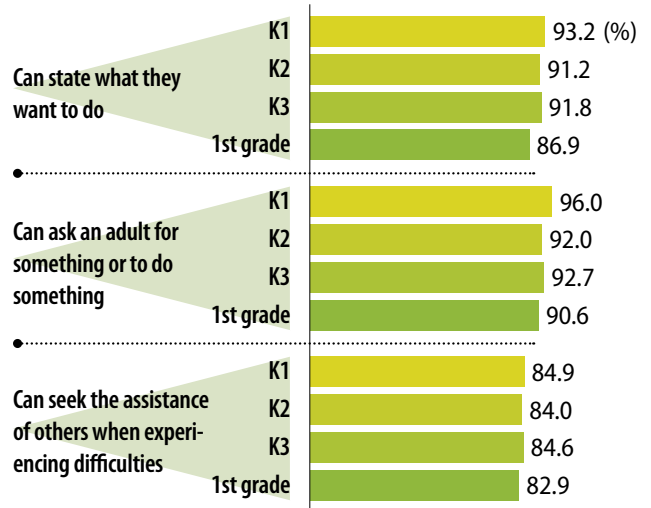
Curiosity

Fig. 1-6 Very true + Somewhat true



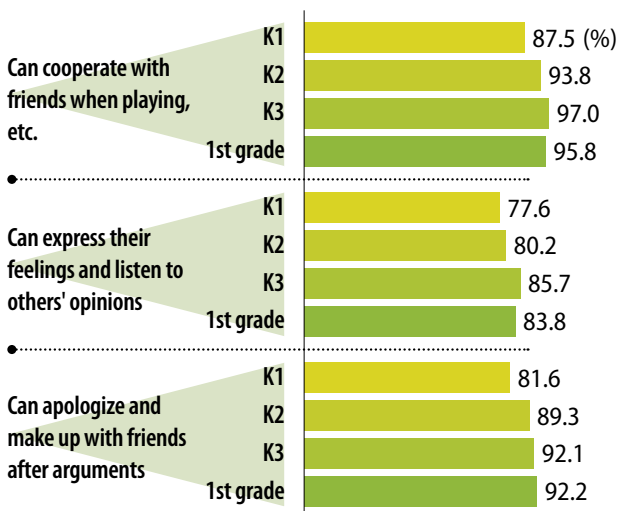
Self-assertion

Fig. 1-7 Very true + Somewhat true



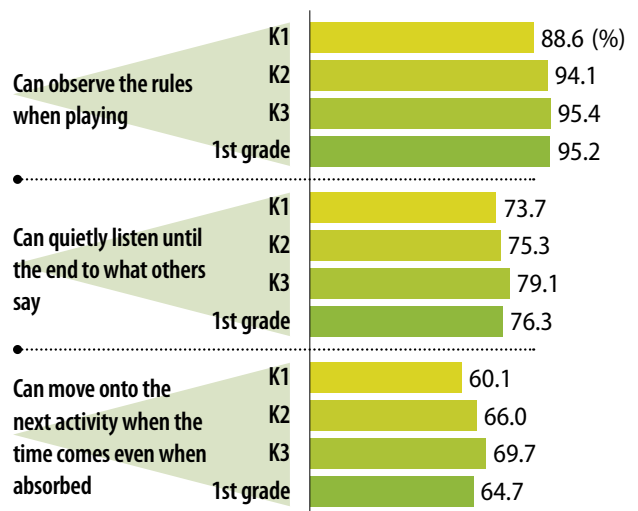
Collaborative Skills

Fig. 1-8 Very true + Somewhat true



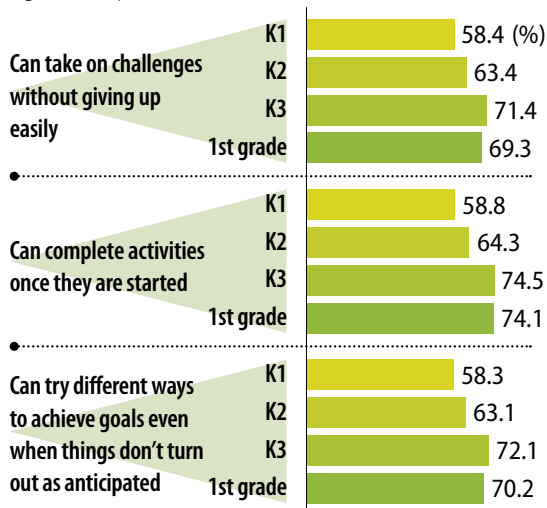
Self-restraint

Fig. 1-9 Very true + Somewhat true



Perseverance

Fig. 1-10 Very true + Somewhat true



Description



“Attitudes of learning to learn” develop steadily until children are in K3, while some attitudes slightly decrease by the time they reach the first grade of elementary school.

A look at the transitions involved over the course of four years indicates that “curiosity” is enhanced, as is shown in Fig. 1-6. Despite the fact that “self-assertion” decreases slightly in Fig. 1-7, “collaborative skills” in Fig. 1-8, “self-restraint” in Fig. 1-9, and “perseverance” in Fig. 1-10 show a tendency to increase up until the K3 period of preschool, and then decrease slightly in the first year of elementary school.

This seems to indicate that children in early childhood are able to restrain self-assertion as they grow older, and interacting with others enhances their collaborative skills, self-restraint and perseverance. The slight decrease after children have entered elementary school may be due to the effect of changes in the lifestyle environment.

Comments from the Research Group

What relationship exists between the skills required in the 21st century and the “attitudes of learning to learn”?

Currently, even in the education curriculum from elementary and upwards, much discussion is underway emphasizing the importance of “generic skills” in addition to “knowledge and skills,” so that children can adapt flexibly to globalization and informatization and other changes in the social environment. Generic skills encompass skills of problem-solving, critical-thinking, communication, information utilization, planning and execution and such that exceed the frameworks of conventional subjects, and are collectively called “21st century skills” or “21st century abilities.” “Attitudes of learning to learn” is considered to be the basis for these skills.